

**AN EVALUATION OF THE FINANCIAL PERFORMANCE OF AKROFUOM  
TEACHERS COOPERATIVE CREDIT UNION (ATCCU)**

**By**

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**B.Ed Accounting Studies (Hons)**

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**School of Business**

**College of Art and Social Sciences**

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DECLARATION

I hereby declare that I have personally, under the supervision of Mr. J.M. Frimpong of the KNUST, school of business, undertaken this study. 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 acknowledge has been made in the text.

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Student Name and ID number



Signature



Date

“I declare that I have supervised the student in undertaken the study submitted herein and approve it for assessment.”




Mr. J.M. Frimpong

Supervisor

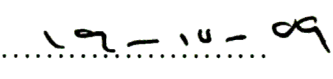


Date



Certified by.....

Dean of KNUST School of business



Date

## DEDICATION

I dedicate this write up to my Mother Umul-Kulsoum Dauda and my late Father Dauda Saeed Badeo for been impregnable cornerstone in my life.

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## ABSTRACT

The study sought to evaluate the financial performance of credit unions in Ghana taking Akrofuom Teachers Co-operative Credit Union in Akrofuom as a case study. Specifically, the study investigated the performance of ATCCU in terms of effective financial structure; assets quality; rates and returns; liquidity; and signs of growth. A content analysis of the audited financial statements of ATCCU from 2005 to 2008 financial years using the adapted version of PEARLS financial ratios recommended by World Council of Credit Unions was done. Bar charts and line graphs have been used to demonstrate trends of performance of the union. Some of the findings of the study are that, the union experienced a fluctuating performance during the four year period in all the five performance indicators; the annual growth rate in loans of ATCCU between 2005 and 2008 was 30%; that annual assets growth rate was 31%; that annual growth in members' deposits was 29%; that annual growth in members' shares was 33%; and the annual growth in members capital was 35%. The conclusion from the results are; that ATCCU has maintained an effective financial structure although most of the indicators has shown a depreciating performance; that in signs of growth, ATCCU has operated mostly within WOCCU standards even though they has been a downward trend in most of the indicators. Prominent among the recommendation of the study are that credit unions in Adansi South District and Obuasi Municipal should reduce their lending rates and that management of the community base unions should intensify their educational (promotional) campaigns to facilitate the rapid growth of the unions.



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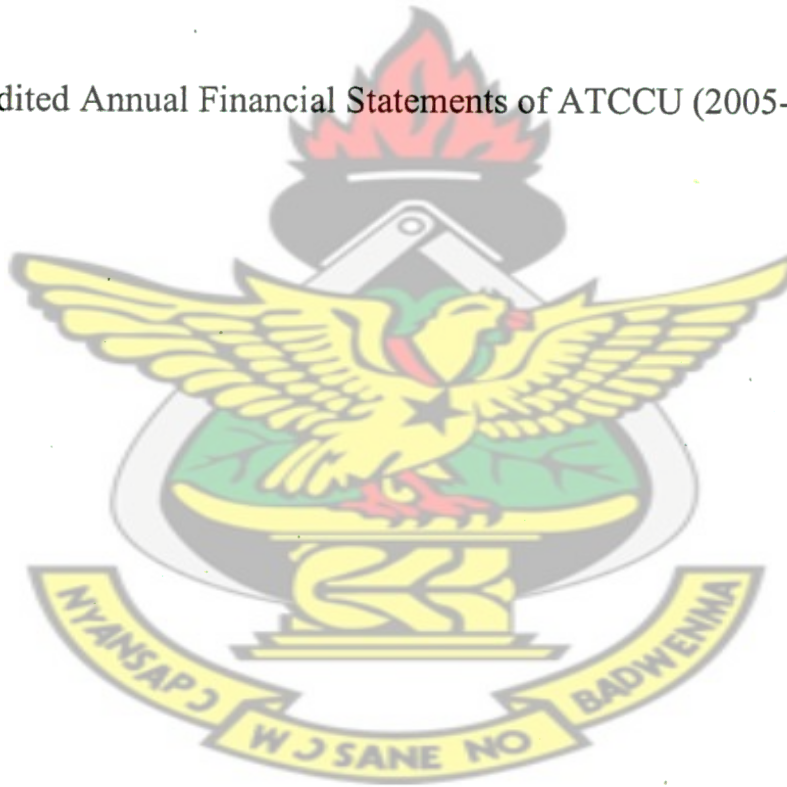
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## LIST OF ABBREVIATIONS

WOCCU = World Council of Credit Unions

ATCCU = Akrofuom Teacher's Co-operative Credit Union

CUA = Credit Unions Association

CU = Credit Union

ST = Short Term

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## CHAPTER ONE

### INTRODUCTION TO THE STUDY

#### 1.0 Background/Introduction

The role of financial institutions is crucial in the economic growth of any country. They serve as avenues for wealth creation and instruments for economic interventions in every country. In Ghana, the Bank of Ghana (BoG) acting as an agent for the government, pursues key fiscal and monetary interventions. The goal of economic growth is impeded among other things due to lack of financial system capable of not only meeting the financial requirements of households, informal enterprises, the self-employed and the poor, but also providing them the necessary support and sustenance in the economic activity.

Steel (2006) cited in Aryeetey (2008) identifies four segments of the financial systems in sub-Saharan Africa as:

- ✓ Formal banks (Licensed by Central Banks);
- ✓ Specialized non-bank financial institutions (Licensed by Central Banks);
- ✓ Semi-formal financial institutions (Legally registered but not licensed as a financial institution by Central Banks); and
- ✓ Informal financial institutions (Not registered at national level but may belong to a registered association).

Credit union belongs to the semi-formal financial institution. In some places, credit unions are called by other names; for example, in many African countries they are called “savings and credit cooperative organizations” (SACCOs) (<http://en.wikipedia.org/wiki/creditunion>, 2009). Credit union has been defined as a cooperative society that offers its member’s loans out of a pool of savings built up

by the members themselves; (Berthoud and Hinton, 1989). A credit union is owned and controlled by its members, and operated for the purpose of promoting thrift, providing credit at reasonable rates, and providing other financial services to its members. Members expect the union to provide them continuous and embellish service into the future. Members join the union because they might not be able to manage their wealth if it is left in their hands. In view of this, they put their hopes and aspiration into the union to provide the following:

- ✓ The advantage of professional management of their money;
- ✓ The potential savings in commissions, as the investment company buys and sells in large blocks;
- ✓ Custodial service; and
- ✓ Provision of loans at low interest rate

### 1.1 Statement of the problem

Microfinance perceived as a financial sustainable instrument meant to reach significant number of poor people of which most are not able to access financial services because of the lack of strong retailing financial intermediaries. Access to financial service is imperative for the development of the informal sector and also helps to mop up excess liquidity through savings that can be made available as investment capital for national development (World Bank African Region, 1999) ([www.arbapexbank.com](http://www.arbapexbank.com)).

As a microfinance institution, credit unions contribute a lot to every economy. Through their flexible loans, their savings mobilization drives credit unions play significant role in the development of every economy. Credit union has the potential to reduce poverty by bringing a significant improvement in the lives of the active poor and the vulnerable



in the society who are largely women. Ward and Mckillop (2005), opines that, the unique characteristics of credit unions reduce the information asymmetry that is prevalent in credit-making decisions, enabling them to provide loans where other financial institutions venture not.

McDonald (2000) states how strengthened credit unions in Latin America are outperforming banks and other microfinance institutions as efficient and profitable organizations. The concept of credit unions is now a household name in the Ghanaian economy that, they are now competing among themselves depending on the nature of that particular union. The performance of some of the credit union paints a favourable picture for the sector and the need to sustain it for the development of the Ghanaian economy.

Studies has been done in Ghana on MFIs especially on their responses to the competitive market environment brought by the economic recovery program and the financial sector liberalization program introduced in 1985 by Ghana Government (Ofei 2002). Apart from the work of Ofei (2002) little attempt has been made to determine whether credit unions in Ghana are meeting international performance standards.

The research intends to evaluate the performance of credit unions in Ghana with Akrofuom Teachers Co-operative Credit Union (ATCCU) as the case study. The study intends to establish whether the credit unions in Ghana are meeting the international standards of performance such as those recommended by WOCCU.



## 1.2 Relevance of the study

Credit union as an aspect of microfinance exist to further community development or sustainable international development on a local level and also to promote the growth of the private sector which is a key policy of the past government and the current government. The appraisal of the credit union's financial performance is of interest to the members who have invested and are directly affected by the union's performance. Evaluation of past performance helps to develop expectations concerning future performance. An appraisal of financial performance of a union will enable management to take corrective measures early enough to prevent the union from total collapse.

The country has experience failures in some credit unions and rural banks. The early collapse of Obuasi Teacher's Credit Union and Atobiase Area Rural Bank and a lot of small institution which cannot be counted. Thus, the proposed study is also significant for the following reasons:

- ✓ It will add to the scarce knowledge in credit union in Ghana.
- ✓ It will provide insight as to whether or not credit unions in Ghana are meeting international standards.

In recent times, the Bank for Housing and construction, the cooperative Bank failed due to credit issues and more importantly the credit crunch which has engulfed business in the United States in particular and the world at large. The findings from this study will provide greater understanding of the symptoms and causes of financial distress among microfinance firms and will assist the development of strategies to combat this phenomenon. It will also assist in the enhancement of the overall performance of Akrofuom Teacher's Credit Union.

Lastly, the study satisfies the requirements for the award of Master of Business Administration degree.

### **1.3 Research Objectives**

The general objective of the study is to evaluate the financial performance of ATCCU using financial performance measures.

#### **1.3.1 Specific Objectives**

The study seeks to accomplish the following specific objectives

- ✓To evaluate the financial structure of ATCCU
- ✓To examine the assets quality ATCCU
- ✓To evaluate the rates and cost of ATCCU
- ✓To evaluate the liquidity of ATCCU
- ✓To examine the growth of ATCCU
- ✓To make recommendations to assist policy makers on the forward march of ATCCU in particular and credit unions in Ghana in general.

### **1.4 The Scope of the study**

The project focuses on the appraisal of the financial performance of AKROFUOM TEACHER'S CREDIT UNION in order to assess the effectiveness of its financial structure, assets quality, rate of return and cost, liquidity and the signs of growth of the union. The project will cover a period of four (4) years.

### **1.5 Limitations**

A project of this nature requires an extensive study of all credit unions in the country. However, this requirement is constrained due to lack of time and funding. This study is

carried out basically through the use of performance standard indicators to evaluate the financial statements of AKROFUOM TEACHER'S CREDIT UNION over a four (4) year period. While most of these indicators can be used to appraise a union in the Ghanaian context, there are some limitations which prevent the use of some of them.

In view of these limitations, generalized conclusions may not be made out of the findings. However, it can serve as a useful proposal, for the decision making and improvement.

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### 1.6 Organization of the study

This study is organized into five (5) chapters. Chapter one (1) gives the background to the study, problem statement, relevance of the study, objective of the study; scope, limitation and the organization of the study. Chapter two (2) covers the review of the available literature.

Chapter three (3) looks at the methodology and process through which the research is carried out. It also gives the profile of AKROFUOM TEACHER'S CREDIT UNION.

Chapter four (4) seeks to analyse the data and discuss findings from the financial statements of the credit union.

Chapter five (5) is the last chapter which summarizes the study, draws conclusions from the study and makes recommendations in terms of improving the performance of AKROFUOM TEACHER'S CREDIT UNION.

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## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

This chapter presents the state of literature on credit unions. It has been categorized into the follow sections: Section one deals with the background. Section two talks about the concept of microfinance (MF). The third and fourth sections gives the definition and explains the unique characteristics of credit union. The next section traces the history of credit union in the world followed by the history of credit union movement in Ghana. The seventh section presents the overview of credit union in Ghana. This is followed by the structure and organization of credit unions in Ghana. The ninth section delves into the financial performance evaluation of credit unions in Ghana. The final section of the chapter is the conclusion which tries to summarize the key issues discussed in the chapter.

#### 2.1 Background

In an economy such as ours requires facilities that will propel the country towards the path of economic growth and prosperity. Such facilities must be ones geared towards poverty alleviation. Poverty alleviation efforts involve enabling measures that increase the capacity of the active poor to engage in gainful activities (farming, petty trade, micro and small enterprises, etc) so as to enhance their earnings and or reduce variability of earnings (i.e. smoothing). Creating enabling measures for the poor and vulnerable in society to engage in the gainful activities is to extend affordable credit to the poor. This activity is under the purview of financial institutions with the commercial banks playing the leading role. However, this role over the years has been overlooked by the commercial banks. They have failed to serve the lower end of the

economic spectrum micro and small enterprises and working class households (Westley and Shaffer, 1999). The main reasons often cited by the commercial banks are high cost of small loans, information problems, lack of appropriate collateral, and the informal nature of their businesses. Hollis and Sweetman (1998) opines that, it has been long argued that commercial banks have not provided for the credit needs of relatively poor people and the vulnerable who are not in a condition to offer loan guarantees but who have feasible and promising investment ideas that can result in profitable ventures. The complex features and bureaucratic nature of formal financial institutions in the delivery of credit and lending have led to the development and growth of a considerable number of microfinance institutions.

## 2.2 The Concept of Microfinance (MF)

Microfinance evolved in the 1980s as a development approach that intends to benefit the poor largely as response to the failure of commercial banks to extend credit to the poor and vulnerable in society. Microfinance the provision of small size loans and other financial services to low income household, is often seen as the key innovation of the last 25 years in terms of means of reaching out to the poor and the vulnerable (Montgomery and Weis, 2006). The Microcredit summit defines microfinance as programmes that extend small loans to very poor for self-employment projects that generate income; allowing them to care for themselves and their families. (Microcredit summit, quoted by the virtual library on Microcredit, 2007). It is an extension of small loans to entrepreneurs too poor to qualify for traditional bank loans. It enables those without access to lending institutions to borrow at bank rates, and start small businesses. (The Virtual Library on Microcredit).



According to Webster (1996) and Steel (1998) cited in Ofei (2002) Microfinance institutions may be defined as institutions which act as intermediaries between micro savers and borrows as well as institutions which provide assistance to such intermediaries. While early attempts by financial practitioners, policy-makers, and even among academics always raised considerable difficulty, there is a growing consensus today that the expression refers to the “small but growing number of specialized financial institutions that use innovative delivery methods to extend the financial services market” (Berenbach et al 1998 cited in Aryeetey, 2008).

Kyereboah-Coleman (2007) opines that, the microfinance sub-sector has evolved as a development tool intended to provide credit and financial services to the productive poor who do not have access to formal financial intermediaries and are engaged in small and micro enterprises. This is corroborated by Bowman (2006) that, there is no doubt that microfinance is an effective tool for development and one that has been remarkably successful. He emphasized that the potency of microfinance improving the wellbeing of the poor and the vulnerable in the developing economics such as Ghana has been established. Microfinance- both credit and saving has potential to improve the well-being of poor women in developing countries (Vonderlack and Schreiner, 2001)

### 2.3 The Concept of Credit Union

According to Montgomery and Weis (2006) credit unions are probably best characterized as “semi-formal”. They are registered entities subject to commercial law, but are not usually regulated or supervised under banking law, although in some countries specific regulations for credit unions have been developed. These institutions are member owned and provide financial services to members, usually savings and

loans services, in some cases insurance. They are non-profit institutions and have no external shareholders. Credit union is organized by people who share a common bond for example, employees working for the same employer, members of a fraternal order or labour union or residents of the same community (Cole, 1992). Montgomery and Weis (2006) explained that closed bond credit unions are usually organized at the workplace and membership is open to only employees. Open bond credit unions however operate in a given community and membership is open to any member of the community. WOCCU reports that there are now 40421 credit unions enabling 123 million members in 84 countries to gain access to affordable financial services (Montgomery and Weis ,2006).

It is estimated that credit unions make up 16% of the German banking market, 29% of the Italian market, 32% of the Austrian market, 40% of the Canadian French market province of Quebec banking market (McKillop, 2005). The membership of credit unions in the U. S. A. stood at 86million members, which is 43.47% of the economically active population. USA credit unions are not for profit, cooperative, tax-exempt organizations (<http://en.wikipedia.org/wiki/creditunion>, 2009). Canada has the highest per capital use of credit unions in North America, with more than a third of the population enrolled in one. These credit unions are concentrated in Quebec where they are referred to as *caisses populaires* (people's banks) and also in the Western provinces (<http://en.wikipedia.org/wiki/creditunion>,2009).

Credit unions in the United Kingdom (U.K.) are regulated by the Financial Services Authority (FSA). Credit unions in the UK are classified into two types: type 1 unions are the smaller credit unions while type 2 is larger. Since November 2006 many type 2

credit unions started offering their members debit card accounts which enabled union members to obtain funds from any link ATM. UK credit unions do not offer cheques as these are generally being phased out in UK financial transactions. Credit unions in the UK now offer a wide range of services to their members from direct debits to payroll deductions, from being able to sending orders from their accounts to paying members bills to providing cheaper insurance facilities. In the UK one of the benefits of joining a credit union is the life insurance. Credit unions provide their members free of charge. Another benefit is that in case of death of a member any loan outstanding in his name is written off. In many cases the savings of a deceased member are doubled and passed to the next of kin (<http://en.wikipedia.org/wiki/creditunion>, 2009).

#### 2.4 Definition of Credit Union

A credit union is an association of people who decide to save their money and make loans to each other at relatively low interest rates. In other words, it is a cooperative financial institution. A credit union is organized by people who share a cooperative financial institution that is owned and controlled by its members and operated for the purpose of promoting thrift, providing credit at reasonable rates and providing other financial services to its members (<http://www.ncua.gov/RegulationsOpinionsLaws/fcu-actpdf>, 2009). According to WOCCU, credit union is a “not-for-profit” cooperative institutions (<http://www.woccu.org/about/creditunion>, 2009). Davis (2007) defines credit union as a mutual organizations owned by their members who are also their (principal) customers. It is also defined as a “cooperative society that offers its members loans out of a pool of savings built up by the members themselves” (Berthoud and Hinton, 1989).



From the above definitions, this definition would be considered in the course of the study; a credit union is a not- for-profit cooperative financial institution owned and controlled by its members who have a common bond with the aim of promoting thrift, providing credit at relatively low interest rate and providing other financial services to its members. Some of the terms in the definition need to be explained further. These terms cut across all the definitions postulated by the various experts.

One, the term “not-for-profit” feature, credit unions should not be misconstrued to mean that they are charities or similar organizations. “Not-for-profit” is different from “non-profit”. Credit unions do not rely on donations and fees of members like organizations that are “non-profit-making”. However credit unions are financial institutions that must turn what is in economic terms, a small profit (i.e “surplus”) to be able to continue to serve their members. The term “not –for-profit” indicates that credit unions are there not to maximize profits but they operate to serve their members in times of financial need. Credit unions are considered to be “not-for-profit” institutions because they are depositor owned. As a result depositors have a claim to income and assets of the credit unions in the event of surplus and bankruptcy respectively (Goddard et al., 2008). Members are only subordinates to general creditors. Credit union’s revenues (from loans and investments) need to exceed its operating expenses and dividends (interest paid on deposits) in order to maintain capital and solvency (<http://www.woccu.org/dev/pearls/pear/ratios> 2009) and “credit unions use excess earnings to offer members more affordable loans, a higher return on savings, lower fees or new products and services”. Fried et al (1993) and Fried et al. (1999) argue that the appropriate objective for credit unions generally is the maximum of service provision that includes quantity, price and variety components.

The term co-operative in the definition needs further explanation. The word co-operative means uniting and working together. Cooperatives are organizations owned and managed by their members. When producers of rice come together to adopt strategies for selling their birds, or teachers form an association to contribute money to help each other then co-operative is at work (Aryertey, 2002). In co-operatives, all members no matter the level of their skills or level of contributions to the resources of the organization have an equal right to participate in decision making and members also form the patrons of the union. The cooperative theory encourages the participation of all members that would lead to the overall control over the affairs of their organization. This would then ensure that they are able to set the goals and determine the direction of its operations in order that the prime objective of co-operatives. In view of this, co-operative institutions have been described as self-managed and democratic organizations (Ofei, 2002). In contrast to what pertains in Limited liability companies where a member's vote is proportionate to his/her in the firm. Credit unions take decisions democratically with each member having one vote irrespective of their contribution to the union. Therefore, for credit union to operate effectively, it needs the support and commitment of all members.

Juxtaposing the phrase “who have a common bond” in the adopted definition and “defined field of membership” stated in Frame et al.(2002), means that the scope of credit union is limited based on certain specified parameters. It is the obligation of credit unions to serve their members only. The common bond may be based on employees working for the same employer (industrial credit union), members of



fraternal order and religion (parish credit unions or residents of the same community (community credit unions)).

## 2.5 Distinctive Features of Credit Unions

McGregor (2005) postulates five characteristics which the U.S.A. Treasury (1997) documents as distinguishing credit unions from other financial forms. They are:

- ✓ Credit unions are not-for-profit financial institutions;
- ✓ Each credit union member has one vote irrespective of his or her membership balance, credit unions are charged with providing basic financial services to individual of modest means; membership is limited to individuals sharing a common bond;
- ✓ And their directors are unpaid volunteers. In throwing more light on the five features of credit unions that distinguish them from other depository institutions as outlined by the U.S.A Treasury (1997), Goddard et al (2008) argues that three of the features taken together can be construed as formulating a public policy rationale for furnishing credit unions' tax subsidy. In summary, they assert that specifically, credit unions (1) do not operate for profit, (2) have a public purpose in that they are charged with providing basic financial services to individuals sharing a common bond of occupation, association, or community. In the opinion of Goddard et al. (2008), there appears to be much evidence, however, that these distinctions have been evolved.

U. S. A. governmental regulatory agencies require that credit unions to restrict their membership to defined segments of the population, such as people who live, work, worship, or attend school in a well-defined geographic area; employees of specific

companies or trades; members of specific non-profit groups (alumni associations, conservation or other advocacy organizations, lodges, churches, or the like); or a particular occupational group (teachers, doctors, etc.). In the U.S.A, this is referred to as a credit unions “field of membership”. Internationally it is referred to as the “common bond” or “bond of association” ([http://en.wikipedia.org/wiki/credit\\_union](http://en.wikipedia.org/wiki/credit_union), 2009)

Writing on the characteristics of credit unions, Cole (1992) opines that credit unions adhere to the basic principles commonly associated with other cooperative ventures. The savings and loan facilities are their main function, and they operate only for the benefit and use of their members. Credit unions acquire capital from membership savings, which are invested in credit union shares. Besides shares, credit union capital consists of reserves and undivided earnings. Turner (1996) contributing to the features of credit union describes a credit union as a self-help co-operative which encourages members to save money together and the pooled resources are then used to provide low-cost loans to members. This link is known as the common bond may be based on all members living in the same locality or all members working for the same employer. The credit union members elect a voluntary board of directors to manage the credit union on their behalf (Turner, 1996). The aims of credit unions are multiple. According to him there is a mixture of financial and social aims. He summarizes the financial aims as follows: to promote thrift by encouraging members to save regularly; to provide loans to members at a reasonable rate of interest; and to assist members to make more effective use of their financial resources.

According to Cole (1992) individuals borrow money from credit unions for essentially the same reasons they borrow money from other sources: for cars, home repairs, debt consolidation, taxes, medical expenses, vacations, and education and to take advantage of various financial opportunities. Turner (1996) also put it that, there are various reasons why people join credit unions. These include opportunity for obtaining cheap loans; convenience, accessibility and friendliness of credit unions; ability of credit unions to meet special needs and altruism. The strength of each of the factors in percentage has been presented in the table below:

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**Table 2.1: Reasons for joining a credit union**

Reasons for joining	Percentage (%)
Cheap loans	47
Place to save and borrow	29
Convenient, accessible and friendly	24
Meet specials needs (e.g. small savings)	23
Altruism (e.g. good for area)	18

**Source: Turner, W. J. (1996) Credit Unions and Banks: Turning Problems into Opportunities in Personal Bank, *International Journal for Bank Marketing*,**

14/1 pp. 30- 40



Evidence from other research studies has shown that people patronize microfinance institutions and for that matter credit unions for a number of reasons which are in tandem with findings of Turner (1996). Among these reasons: flexibility and adaptability of their services to the needs and work patterns of the rural and urban poor; lack of access to institutionalized banking because of small deposits and lack of collateral normally compels people to patronize microfinance institution. Additionally, the desire for confidentiality in financial transactions motivates people to patronize microfinance institutions since person to person contact between susu collectors and clients which is a major feature of microfinance operations ensure confidentiality. Not all, microfinance institutions are seen as providing opportunities for individuals to save small amounts which can be accumulated as start up capital (Ofei, 2002).

## 2.6 History of Credit Unions

Modern credit union history dates to 1852, when Franz Hermann Schulze-Delitzsch consolidated the learning from two pilot projects, one in Eilenburg and the other in Delitzsch in Germany into what are generally recognized as the first credit unions in the world. He went on to develop a highly successful urban credit union system. The credit union concept was highly accepted by Germans which led to the founding of the first rural credit union in Heddesdorf (now part of Nuweid) in German in 1864 by another German by name Wilhelm Raiffeisen. Although Schulze-Delitzsch can claim chronologic-precedence, Raiffeisen is often viewed as more important today. Rural communities in Germany faced a far more severe shortage of financial institutions than the cities. They were viewed as unbankable because of very small, seasonal flows of cash and very limited human resources. The organizational methods Raiffeisen refined



there, which levered what is today called social capital, have become a hallmark of the global credit union identity ([http://en.wikipedia.org/wiki/credit\\_union](http://en.wikipedia.org/wiki/credit_union), 2009)

According to Cole (1992) the idea of credit union spread rapidly, and by 1888 more than 425 credit unions had been formed. By the time of Raiffeisen's death in 1888 credit unions had spread to Italy, France, the Netherlands, English and Austria, among other nations. The Raiffeisen name is still used by Raiffeisen banks, the largest banking group in Austria (with subsidiaries through out central and Eastern Europe), Rabobank (Netherlands) and similarly-named agricultural credit unions in Germany. According to Cole (1992) Alphonse Desjardins founded the first credit union in North America in Levis, Quebec in 1900. It was founded by a reporter in the Canadian parliament which began operations on 23<sup>rd</sup> January, 1901 with a ten cent deposit. Alphonse Desjardins was moved to take up his mission in 1877 when he learned of a Montrealer who had been ordered by the court to pay nearly \$5,000 in interest on a loan of \$150 from a money lender. Drawing extensively on European precedents, Desjardins developed a unique parish-based model for Quebec: the *Caisse populaire*.

In the U.S.A, St. Mary's Bank credit union of Manchester, New Hampshire holds the distinction as the first credit union. Assisted by a personal visit from Desjardins, St. Mary's was founded by French-speaking immigrants to Manchester from Quebec on November 24, 1908 ([http://enwikipedia.org/wiki/credit\\_union](http://enwikipedia.org/wiki/credit_union), 2009). America's credit union Museum now occupies the location of the home from which St. Mary's Bank credit union first operated.

## 2.7 History of the Credit Union Movement in Ghana

The concept of credit union arrived in Ghana almost 103 years after its introduction in Germany in 1852. The first credit union in Ghana was established in 1955 at Jirapa in the Upper West Region of Ghana. It was founded in a parish community and promoted by missionaries. Subsequently, teachers and trade unionists took on the role of promoters and spread the credit union concept to other communities and work places in the Southern regions of Ghana. It is evidence however that, the membership structure changed from parish members to wage earners, as the credit unions expanded from the north towards the south.

At the time of Kirsch and Goricke's (1977) study as cited by Ofei,(2002), credit unions in Ghana as at 1974 numbered 417 with more than 53,000 members. The different types of credit unions were divided up as follows: community type: 32 percent; workplace: 60 percent; and Parish type: 6.6 percent. From statistics available at CUA (see CUA, 1999), the total number of credit union societies by 1999 was 149 with a total membership of 63,379 (Ofei, 2002). By the end of 2007 financial year there were 405 credit unions in Ghana with total membership of 242,607. Total liquid investments stood at GH¢17,703,419 with total shares of GH¢5,883,400. Total reserves, loans and assets stood at GH¢10,394,173, GH¢7,270,855 and GH¢109,636,629 respectively (CUA 2008).

Statistics available indicate that the community and Parish credit unions are predominant in the northern part of the country. A greater percentage of the workplace credit unions are found in the Southern and Coastal regions of Ghana, mainly Greater

Accra, Eastern, Western and Central Regions. Credit unions in the country are still dominated by the workplace type.

## 2.8 Overview of Credit Unions in Ghana

In Ghana, a credit union is described by the Credit Unions Association (CUA) as a free association of people with a common bond who save and lend money to one another through cooperative principles for productive and provident purposes. The concept received a booster from the passage of cooperative society decree (National Liberation Council Decree, NLCD 252) in 1968. Between the period 1969 to 1989 there was a remarkable growth in credit unions both in terms of membership and savings. Asante (1995) reports that savings mobilization by credit unions saw a steady rise from ₵5.4 million in 1969 to a level of ₵20.34 million in 1975. According to Aryeetey (1995) cited in Opoku (1999), reveals that, in 1988 there were 300 credit unions in Ghana with a total membership of almost 70,000. Thus, average size of a credit union was 230 persons. The summary of credit unions annual performance from 2001 to 2006 is tabulated below

### 2.8.1 Summary of Credit Unions Annual Performance

DETAILS	2001	2002	2003	2004	2005	2006
Members	96,052	125,000	132,000	163,860	174,026	202,390
Deposits	84.6B	150.2B	206.B	354.7B	425.3B	584.2B
Loans	59.4B	88.3B	142.6B	216.6B	315.2B	396.5B
Total assets	₵98.6B	₵200.0B	₵250.0B	₵423.8B	₵50.7B	702.1B

Source: Ministry of finance and economic planning.



Contribution of credit unions to the growth of the economy as indicated earlier is enormous and cannot be over emphasized. Besides the provision of low interest rate loans to members, CUA has conducted business plan development training for 100 credit unions. The credit unions in turn will impart this knowledge down to its members. Under the linkages collaborations with the Ghana Cooperatives Council, CUA received 5 Economic Cooperatives groups from Ghana cooperatives Council and is working to convert them into credit unions. CUA organized capacity building workshops for its Board of Directors, managers, bookkeepers, supervisory committee members as well as its primary members (CUA, 2006).

Expansion into the rural areas through promotional talks and dissemination of information to the general public were also carried out. They again embarked on field monitoring to verify and assist credit unions to complete their accounting and auditing and to check whether business plans were being implemented (CUA, 2006).

Nevertheless, credit unions in Ghana face a lot of problems. Mercier (1989) has identified one of the problems as poor management which he attributes to several factors including election of officers to positions they cannot perform; lack of knowledge; lack of hard work because of non-permanent nature of jobs. He reports that there were no minutes of formal meetings at the credit unions he studied partly due to illiteracy of members. He discovered in his study that 26% of elected officers had primary education; 61% had secondary and 13% had qualifications beyond secondary education.



Another issue of concern is the cry for the replacement of the current out-dated co-operative law to reflect the realities of the modern times CUA for the past 9 years has made relentless efforts at getting credit union bill enacted by Parliament to serve as the law that would effectively and efficiently govern the operations of movement as a separate entity to reflect the current global business reality (CUA, 2008).

Again, recession in the economy is one of the problems stifling the progress of credit unions in Ghana. Asante and Danso-Manu (1994) report that, of the 76% of the former members of credit unions who became inactive because they could not afford to make regular contributions to the savings fund of the credit unions because of financial constraints as a result of the economic downturn. Lack of trust among cooperative officers resulting from frequent embezzlement of cooperative treasuries is a major setback to cooperative success (Opoku, 1999).

Asante, (1995) argues that, though there is a future for credit unions in Ghana, it is contingent on the upgrading of loan appraisal process so as to stem the tide on loan delinquency. He emphasized that, this may involve institutional strengthening such as employing professional staff or upgrading the existing staff. Also, equipping its offices with modern equipment to meet the challenges of modern financial transactions. Staff motivation should be tackled in order to attract best hands to its fold.

## 2.9 Structure and Organization of the Credit Unions in Ghana

Credit unions are affiliated through an extensive system of national credit union service organization. According to Cole (1992) this means that credit unions, too, work together for the benefit of credit union members. Members of affiliated credit unions

govern this service structure through their democratically elected representatives. Credit unions in a community or specific geographic area may join or form a chapter. Credit unions in Ghana come under the umbrella of Ghana co-operative Credit Unions Association (CUA) Ltd. It was established in 1968 as the apex body of the credit union movement in Ghana. CUA has branches in all the regions of the country. It does not represent the interest of only the movement at the local level but international too. The aim of its establishment was to develop itself into a sustainable financial institution and to create an enabling environment for credit unions operations.

CUA as a credit union leader has a responsibility of promoting, educating and training at all levels of the movement. In order to ensure the viability and sustainability of credit unions, CUA offers both technical and financial services to its members including education and training, auditing, bookkeeping, computer services, general supervision and risk management and insurance service. CUA has over the last five years received support from the Rural Financial Services Project. These include assistance in building the capacity of its affiliates through numerous training programs, provision of means of transport like motorbikes, a pickup and a cross country vehicle and computers, printers and accessories to help in the Data Management of CUA both at the head office and regional levels.

CUA is also affiliated to Ghana co-operatives council. It serves as a Supra Apex body of all cooperatives in Ghana. It is an independent apex organization that promotes and develops co-operatives and other self-help organizations on a sustainable basis. Ghana co-operatives council was registered in 1957 by the Department of cooperation as a non-trading, non-governmental organization. Specifically it was formed to take over the

function of co-operative education from the Department of co-operation. On January 22, 1973, the alliance was registered by the Department of co-operatives as the Ghana co-operatives council (GCC) as it is known today. It operates in four (4) sectors of the economy: agriculture, industry, finance and service.

There are currently thirteen national apex Co-operatives Associations that are affiliated to the council and all national co-operatives associations are listed in the council. The council is run by Board of Directors drawn from the National Associations. GCC has over the years has been able to organize capacity development programme for staff of the council including Regional Co-operative Development Officers (RCDOs).

#### **2.10 Measuring Financial Performance of Credit Union**

Evaluation of all the financial statements, not just the balance sheet, is crucial to a complete, well balanced analysis of a business's health. The operating statement should be scrutinized (Cole, 1992). There are a number of specific devices for testing managerial efficiency. Over the years, the financial performance of banks and other financial institutions has been measured using a combination of conventional accounting measures and risk and return (Duncan and Elliot, 2004). According to Cole (1992), four commonly accepted methods of analyzing financial statements to determine a firm's liquidity, solvency, and management efficiency are: the simple evaluation method, the percentage comparison method, the statement of changes in financial position method. Avkiran (1995) cited in Duncan and Elliot (2004), used methodologies such as financial ratios analysis, bench marking, measuring performance against budget or a combination of these methods. Yu and Park (2006) postulate that



return on assets (ROA) and asset turnover represent some of the most frequently used financial measures in both accounting literature and downsizing literature.

Gyasi, (1992) emphasized that general financial statement information should be able to meet the user's information needs in: evaluating the performance of the entity; assessing the effectiveness of the entity in achieving objectives established previously by its management members or owners or by society; assessing the liquidity of the entity; estimating the future prospectus of the entity, including its capacity to pay dividends, and other cash outflows; attesting to compliance with the company law and other legal obligations; and ascertaining the ownership and control of the entity.

Measures of performance that have been used over the years include financial ratios (Demstz and Lehn, 1985; Gorton and Rosen, 1995; Mehran, 1995), stock market return and their volatility (Saunders et al, 1990; Cole and Mehran, 1998) also, Tobin's q (Morck et al, 1988; McConnell and Servaes, 1990, McConnell and Servaes, 1995; Mehran, 1995; Himmelberg et al, 1999; Zhou, 2001 cited in Kyereboah-Coleman, 2007). Yaron (1994) has suggested a framework based on the dual concepts of outreach and sustainability that has become popular in the assessment of microfinance institutions' (MFIs) performance. Outreach accounts for the number of clients serviced and the quality of the products provided. Sustainability implies that the institution generates enough income to at least repay the opportunity cost of all inputs and assets Chaves and Gonzalez-Vega (1996). White et al, (1990) indicated that traditional ratio analysis is primarily designed to meet the informational needs of equity investors and creditors. The objective of ratio analysis they said is the comparative measurement of risk and return facilitating investment and credit decisions.



Duncan and Elliot (2004) used interest margin, capital adequacy, expense/income ratio and return on assets (ROA) in their study of Australian credit unions. Financial ratios designed to capture the basic risks of financial intermediation include measures of capital adequacy (Clair, 1984; Karels and McClatchey, 1999; and Hannafin and Mckillop, 2007). According to Duncan and Elliot (2004) capital adequacy otherwise referred to as capital risk, is a risk measure commonly used in the banking sector, while interest margin and return on assets are return measures also commonly used in the banking sector. All these measures have wide acceptance and are recognized as industry measures. Expense/income ratio, while not specifically classified as either a risk or return measure in the literature, is a generally accepted measure of financial performance in business (Duncan and Elliot, 2004).

Both outreach and default rates are essential variables that capture the success and sustainability of microfinance institutions (Aryeetey, 1995 cited in Kyereboah-Coleman, 2007). In microfinance, performance is measured by accounting-based indicators of outreach and sustainability (Hartarska, 2005). Outreach is measured in two dimensions: breadth and depth. Breadth outreach is measured by logarithm of the number of active borrowers. Depth is measured by the average outstanding loan divided by the annual GDP per capita in Ghana cedis. The higher the depth the less poor clients are served. From the poverty alleviation perspective a smaller value of this is preferable. Sustainability is measured by return on assets and operational self-sufficiency (OSS). OSS measures how well the MFI is covering its cost through operating revenues. It is given as:  $\text{Operational self-sufficiency} = \text{operating revenue} /$

financial expense + loan loss provision + operating expense). It measures how well the MFI can cover its costs through operating revenues.

Operational efficiency has been used as an indicator to assess the performance of microfinance institutions. Studies such as Cox and Whighan (1984) and Kohers and Mullis (1988) used operational efficiency to examine credit union performance in the United States of America (USA). McKillop et al (1995) and McKillop and Ferguson (1998) also used it to examine the impact of size economies and borrower orientation on the performance of United Kingdom (UK) credit unions (Ward and McKillop, 2005). Operational efficiency is represented by the ratio of 'administration expenses to interest and entrance fee income' (ibid).

A set of performance indicators has arisen, and many of them have become standardized, but there is by no means general agreement on how to define and calculate them (Gutierrez-Nicto et al, 2007). A consensus group composed of microfinance rating agencies, donors, multilateral banks and private voluntary organizations agreed in 2003 to some guidelines on definitions of financial terms, ratios and adjustments for microfinance (CGAP, 2003 cited in Gutierrez-Nieto et al, 2007). The ratios fall into four categories: sustainability/profitability, asset/ability management, portfolio quality, and efficiency/productivity. These measures are derived from the financial ratio analysis implemented in conventional financial institutions. These are grouped in terms of portfolio quality, efficiency and productivity, financial management, profitability and others. The efficiency/productivity ratios reflect "how efficiently are MFI is using its resources, particularly its assets and personnel" (CGAP, 2003 Gutierrez Nieto et al, 2007). Thus, efficiency ratios compare a measure of

personnel employed with a measure of assets. Institutions can choose as assets either average gross loan portfolio, or average total assets, or average performing assets.

Performing assets are “loans, investments and other assets expected to produce income (CGAP, 2003). Personnel may be defined as the total number of staff employed or the number of loan officers (Gutierrez-Nieto et al, 2007)

White et al, (1990) stressed that ratios, in general, involve a process of standardization and are there to standardize reporting methods, financial statements and other relevant variable allowing for comparisons overtime and cross sectional between firms. Also, ratios they say measure a firm’s crucial relationships by relating inputs (cost) with outputs (benefits) and facilitate comparisons of these relationships overtime and across firms.

White et al, (1990) enumerated four (4) broad categories of analysis that measure such relationships. They are activity analysis; liquidity analysis; long-term debt and solvency analysis; and profitability analysis.

In measuring these relationships ratios provide a profile of firms and their management’s operating, financial and investment decisions. Thus, an intelligent analysis of the firm’s ratios can provide insight into a firm’s economic characteristics and competitive strategies.

Micro Rate,(2003) in their performance indicators for microfinance institutions presented in the technical guide the major industrial microfinance average. See appendix 1.



WOCCU the world governing body evaluating the financial performance of credit unions, introduced a unique monitoring and rating system called PEARLS which has a set of six basic indicators for measuring financial performance. It is an effective tool for monitoring the progress of credit unions (Ofei, 2002). Ofei, (2002) use the framework to assess the performance of Credit Unions Association (CUA). However, since CUA is the mother body of all credit unions in Ghana it is believed that findings of the study were not representative of the performance of the individual credit unions. This study, therefore attempts to fill the vacuum by applying the adapted version of the framework to study ATCCU. The six performance measures in WOCCU's credit union performance assessment framework are:

- ✓ **Protection:** Indicators of protection measures the adequacy of the credit union's provision for delinquent loans;
- ✓ **Effective financial structure:** Effective financial structure measure assets, liabilities and capital and recommends an "ideal" structure for savings and loans. It determines the debt/equity ratio in the capital structure. This is the most important factor in determining growth potential, earnings capacity and overall financial strength;
- ✓ **Asset quality:** Asset quality indicators measures the impact of assets, which do not generate income e.g. delinquency loan rates, non-earning assets, and the financing of non-earning assets;
- ✓ **Rates of return and costs:** The indicators help one to measure average income yield for each of the most productive assets of the balance sheet of a credit union. In addition, they measure the average cost yield for each of the most important liability and capital accounts. The results indicate whether the credit



union is earning and paying entrepreneurial rates on its assets, liabilities and capital;

- ✓ **Liquidity:** Liquidity ratios indicate whether the credit union is administering its cash so that it can meet deposit withdrawal requests and liquidity reserve requirements, while at the same time, minimizing the amount of idle funds that earn no economic returns; and
- ✓ **Signs of growth:** Growth is measured by the percentage change between current and previous year performances for total assets loans, deposits, external credit shares, institutional capital and the members. The details of the ratios are provided in appendix II.

#### 2.10.1 Conceptual Framework

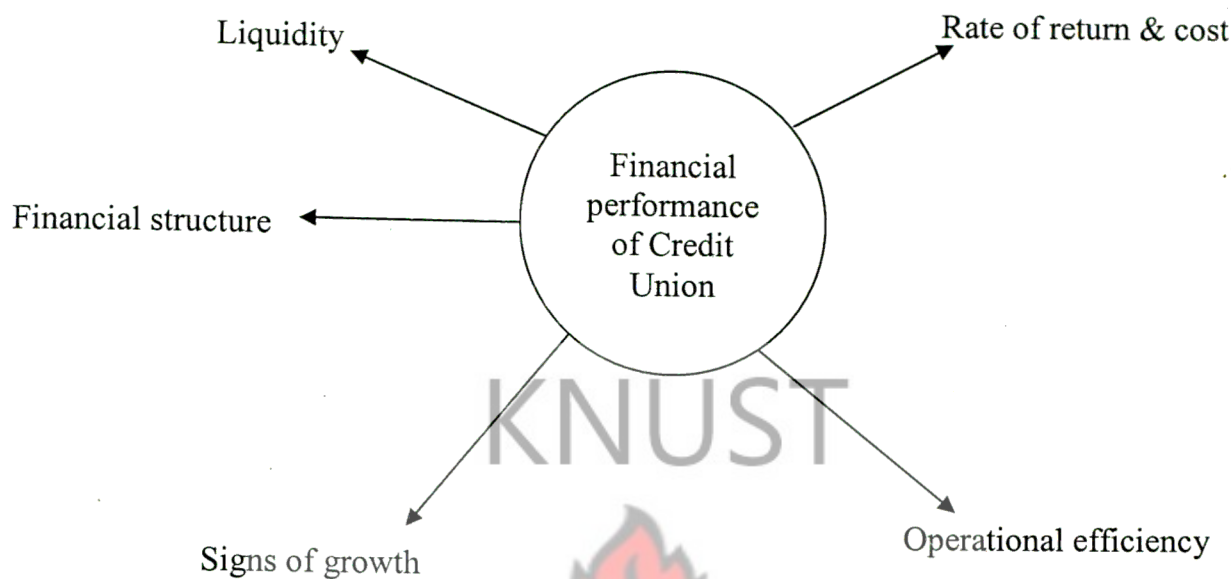
From the discussions above, the research proposes the following conceptual framework for evaluating the finance performance of ATCCU: the dependent variable is financial performance which is to be measured using five parameters: financial structure; rates of return and cost; signs of growth; operational efficiency and liquidity.

- ✓ Effective financial structure shall be measured by the following ratios. Net loans to total assets ratio; financial investment to total assets ratio; member savings to total assets ratio; and institutional capital to total assets ratio. WOCCU targets for these ratios are: Net loans/Total assets is 70%-80%; financial investments to total assets is 2% maximum; member savings Deposits to total assets is between 70-80%; and institutional capital to total assets should be greater than or equal to 10%. Details in appendix II.

- ✓ Asset quality: This shall be measured by the following indicators total loan delinquency to total loan portfolio, non-earning assets to total assets and zero cost funds to non-earning assets.
- ✓ Rates of return and cost: This indicator shall be measured by the following ratios: Net loans to average net loan portfolio; interest paid on member savings to average member savings ratio; and net income to average assets  
WOCCU targets for these indicators are: Net Loan Income / Average Net Loan Portfolio should be at least 10%; Financial Cost: Member Deposits/Average Member Deposits is competitive rates greater than inflation; Net income to Average Assets (RA) should be minimum of 10%.
- ✓ Signs of growth: It shall be measured by growth in total assets; growth in loans; growth in member deposits; growth in member shares; and growth in institutional capital. WOCCU targets for there indicators are growth in total assets is inflation rate plus 10%; Growth in Net Loans should be greater than 70-80%; growth in member deposits should be greater than 70-80%; and growth in institutional capital should be a minimum of 10%.
- ✓ Liquidity: Shall be assessed by liquid assets-accounts payable to total member savings deposits ratio. WOCCU's minimum standard of 15-20% shall be used as the assessment bench mark.

**Conceptual Framework**

Below is the diagram of the conceptual framework



Source: Author’s construct (2008)

**2.10.2 Limitations of Financial Ratios**

Financial statement analysis divulge trends in the business and helps management in decision making (Cole, 1992). Trend analysis is about computing the financial ratios of a firm at various points in time to determine if it is improving or deteriorating (Anderson, 2005). However, as with the case of any method of analysis designed to measure business performance, there are limitations and imperfections associated with the use of financial ratios, particularly the use of very few ratios in isolation (Avkiran, 1995 cited in Duncan and Elliot, 2004).

Brigham et al (1999) and Pandey (2004) opines that ratios provide useful insight into a company’s operations and financial health. They, however, warn that ratios have to be

used with intelligence and good judgment. This is because ratios have the following limitations:

- ✓ It is difficult to find a proper basis of comparison between companies;
- ✓ Company differences make it to make comparison;
- ✓ Different accounting practices can distort comparisons;
- ✓ Inflation may distort a firm's balance sheet causing reported values to be substantially different from true "values"; and
- ✓ The differences in the definition of items in the balance sheet and the profit and loss statement make the interpretation of ratios difficult. Athanassopoulos and Ballantine, (1995) argue that the use of ratio analysis in itself is insufficient for assessing performance, and that more advanced tools like data development analysis should be used to complement ratio analysis. The use of financial indicators to measure success does not encapsulate forms of social success, such as, for example, the recruitment of low-income members (Kelly, 1999), volunteer and staff training, or the education of members (some of the larger credit unions undertake seminars to improve the financial awareness of their members) (Ward and McKillop, 2005).

Watson and Head (2007) argue that, the reliability of ratio analysis in the analysis of financial performance naturally depends on the reliability of the accounting information on which it is based. Financial statements have become increasingly complex and it is not easy to determine if creative accounting has taken place. Company accounting has been described as a jungle with many species of animal – some benign, some carnivorous – and its own rules (Smith, 1996 as cited in Watson and Head, 2007) care



must be taken to identify off-balance-sheet financing or any complex financial instruments which may distort a company's true financial position.

There is considerable subjectivity involved in ratio analysis as there is no theory as to what should be the "right" number for the various ratios (Russel, 2004). He argues that ratios may not be strictly comparable for different forms due to a variety of factors such as different accounting practices and different fiscal years. He further opines that, just because a specific ratio is better than the average does not necessarily mean that the company is doing well (it is quite possible that the rest of the industry is doing very poor).

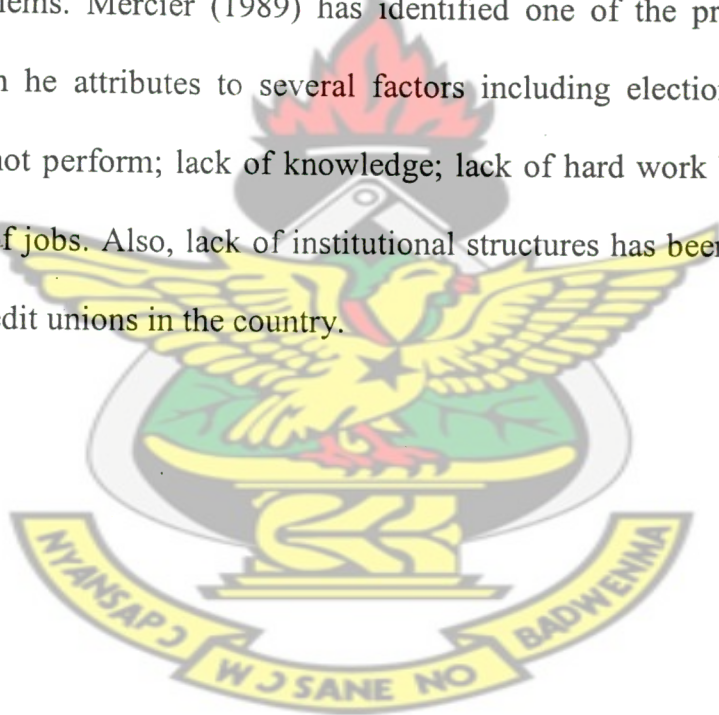
Ratio analysis must be regarded as only the beginning of the analysis of financial performance, serving mainly to raise questions which require deeper investigation before understanding begins to appear. Shareholders, investors and company managers use ratio analysis as only one of the many sources of information to assist them in making decisions (ibid).

CUA and WOCCU have been using ratios in the periodic assessment of their members. The study has therefore adopted it because its use has support in the performance literature, despite the shortfalls in the use of the ratios approach for performance evaluation.

## 2.11 Conclusion

The study has made an attempt to review the literature that exists on credit union. The essence of credit union and its usefulness to the development of the country has been

made bare. Again, it is an institution that seeks to bridge the gap between the poor and access to credit. The study delineates the concept of microfinance and credit union. It also defines credit union as a co-operative, not for-profit depository financial institution owned and controlled by its members who have a common bond, and operated for the benefit of promoting thrift, providing credit at reasonable rates, and providing other financial services to its members. The study revealed the evolution of credit union concept. The concept began in Germany in 1852. It however, found itself in Ghana in 1995 in Jirapa. Most prominent among the points raised about credit unions in Ghana is that the credit union concept has a good future. Nevertheless, credit unions in Ghana face a lot of problems. Mercier (1989) has identified one of the problems as poor management which he attributes to several factors including election of officers to positions they cannot perform; lack of knowledge; lack of hard work because of non-permanent nature of jobs. Also, lack of institutional structures has been hampering the growth of many credit unions in the country.



## CHAPTER THREE

### METHODOLOGY OF THE STUDY AND UNION'S PROFILE

#### 3.0 Introduction

This chapter presents the approach for conducting the study. The chapter begins with the sources of data followed by how data were collected and analyzed. The next in the chapter is the profile of Akrofuom Teachers Co-operative Credit Union (ATCCU) and ends with a conclusion.

#### 3.1 Sources of Data

Two main sources were used in gathering data for this project: primary and secondary sources. Interviews was used in gathering the primary data. Secondary data were also gathered through sources such as the internet, academic journals and annual financial reports of ATCCU.

##### 3.1.1 Primary Data

Interviews were conducted with the manager, auxiliary staff, and other executive members of ATCCU to gather primary data. Initially the manager was interviewed. The questions were related to the overview of the union. The auxiliary staff interviewed as well as other executive members of the union. The questions related to the accounting system of the union and the definition of some of the items in the financial statement. The responses from them corroborated with that of the manager.

##### 3.1.2 Secondary Data

Secondary data were gathered from the audited annual financial reports of ATCCU for 2004-2008. In addition, some of the editions of the union's newsletter were consulted

and useful data extracted from them. In addition, a thorough examination of the topic on the internet, periodicals, books, business journals and magazines and other relevant secondary data sources was done.

### 3.2 Population

The population of the study comprised all credit unions in Ghana. Most especially, the open-ended unions in the country. However, due to dispersed nature of credit unions, time and other resource constraints, simple stratified sampling technique was used to select ATCCU. The stratification criteria were based on the following;

1. The union must be an open-ended.
2. The union must be a registered member of the Credit Union Association (CUA) of Ghana.
3. The union must be engaged in the business of microfinance.
4. The union must be located or has it branch in Obuasi Municipal.
5. It must be easily accessible in terms of distance and relevant data.
6. Majority of members must be teachers.

In consideration, Akrofuom Teachers Co-operative Credit Union (ATCCU) satisfied the above criteria hence its selection. Significantly, the fact that it is dominated by teachers. This has been informed by the fact that Ofei (2002) opines that credit unions started in Jirapa in a parish community and promoted by missionaries and was later promoted by teachers and trade unionists.

### 3.3 Method of Data Collection

As part of the primary data collection unstructured interview was used as tool to collect data from the management of ATCCU. The manager, auxiliary staff and other



executive members of ATCCU, were interviewed. They were interviewed on separate dates and venues. Audited financial statements of ATCCU for the past four (4) years lodged with Credit Union Association (CUA) were obtained.

### 3.4 Method of Analysis

The financial statements of ATCCU for the four-year period (2005-2008) were analyzed using the ratios that had been adopted as the conceptual frame work of the study. The average of an item in the financial statements was determined by adding the value of the item in the immediately preceding year's financial statements to the current year's and dividing the total by two. Where the average at an item is involved year 2005 is omitted from the analysis because 2004 data were not collected.

#### Definition of Key Variables

- ✓ Liquid assets value was obtained by adding liquid funds and liquid investment.
- ✓ Total financial investments value was obtained by summing up liquid investments and other investments in the balance sheets.
- ✓ Financial cost on member deposits was defined as interest on member's savings which was extracted from the cost of funds in the notes attached to the financial statements.
- ✓ Total member deposits were defined as member savings.
- ✓ Institutional capital was defined as the sum of capital and reserves in the balance sheet.
- ✓ Net income was defined as net surplus.
- ✓ Operating expenses value was defined as total expenses less provision for loan loss cost of funds, interest on members' savings, and interest on borrowed funds.

- ✓ Credit union liquidity was the total liquid funds plus liquid investments
- ✓ Annual growth rate of any item in the financial statements was measured by exponential function constant growth rate model. This model is used to predict population growth in which a constant growth rate is assumed. It has been adopted to ascertain the average annual constant growth rates of the signs of growth variable in the conceptual framework stated in chapter two of this report. The model is stated below:

$$F(t) = ab^t$$

Where  $f(t)$  = population after  $t$  years.

$a$  = initial value

$b$  = time in years

in this report  $f(t)$  = the current year value of the signs of growth variable in the balance sheet.

$a$  = the base year 2005 value of the signs of growth variable in the balance sheet.

$b$  = base or growth factor ( $1 + g$ ;  $1$  is constant)

$t$  = time years (4years).

The results of the effective financial structure, rates of return and cost and signs of growth and liquidity ratios were interpreted using standards. The results were used to ascertain whether the credit union was meeting international standards.

The interpretation involved the use of average inflation rates from 2004 to 2008 which were obtained from the official website of Bank of Ghana.

The most suitable diagram for exploring the trend is a line graph (Henry, 1995 cited in Saunders, et al, 2007). You can also use histogram to show trends over continuous time periods and bar charts to show trends between discrete time periods (Saunders et al,

2007). Thus, line graphs and a bar chart have been used to do trend analysis at the performance of the credit union.

### 3.5 Profile of ATCCU

Akrofuom Teachers Co-operative Credit Union (ATCCU) was formed by, and exclusively for, teachers in Akrofuom in the former Adansi, Adansi West and currently Adansi South Districts. The union has maintained its name ever since it was formed in 1987, though it was initially zonal institution hoping to serve the interest of teachers in Akrofuom zone.

In 1990 the union decided to expand its operations to cover teachers in the then Adansi West now Obuasi Municipal who are willing to be part of the union. The Obuasi office is an off-shoot of the Akrofuom office which is the headquarters of the union. Currently, the union is now open to all sound minded interested persons who are eighteen years old or above, irrespective of their religious, tribal and political affiliations.

Membership of the union in 1987 was 50 active members. However, membership has increased to 1273 as at 31<sup>st</sup> December 2008 (Source: Manager). Of this number, 732 were declared active members whilst 541 were declared dormant members. Of the active members 327 were males, 405 were females and 18 were groups. Of the dormant members, 246 were males, 273 were females and 4 were groups. It is the policy of the union that each member should have at least forty Ghana cedis (GH¢40.00) worth of shares (source: Manager).



As a co-operative non-bank financial institution, ATCCU has three main aims; to promote savings among members; to provide credit facilities to members at a lower interest rate; and to work to uplift the community in which it operates. At the moment the union has the following main products: savings, shares and loans. In terms of savings the union only pays interest on a minimum savings balance of GH¢50 for the financial year and has the following categories:

- ✓ **Normal savings scheme:** which enables members to save on daily or weekly or monthly basis with the minimum balance of GH¢10;
- ✓ **Micro savings in Metallic Box Scheme:** is an innovation that helps persons to save in small amounts of work or home. The union has a metallic box with two keys. Member key and master key – which are kept by the contributor and the union respectively. The box is opened at the end of each month by the holders of the key and monies so saved in it would be used for savings, repayment of loans or other pressing financial commitments. Monthly fee payable for the use of box is GH¢3.

ATCCU is unique in its operations, members make savings themselves. Members who are on Accountant Generals payroll savings are not deducted directly from their monthly salaries at source.

ATCCU has a welfare facility. This facility seeks to provide relief for members in times of hardship. More importantly, during the death of one's parents. An annual premium of GH¢10 is payable by a member to access the welfare facility. The notable project of ATCCU since its inception is an office complex which has a conference hall facility. The hall will be available for hiring to the general public.



The control of ATCCU is in its members which they exercise through voting at special and Annual General Meetings. Members elect and entrust the control of the union to board of directors. The board has the mandate to authorize all actions necessary for the achievement of the union's aims and goals. Apart from the board of directors the bye-laws of the union stipulate the formation of a three-member supervisory committee with members elected at an Annual General Member of the union. The committee serves as watch-dog internal auditors of the union, with oversight responsibility over the entire operations of the union. Loan committee is responsible for assessing loan applications which the manager of the union has no power to grant. Education committee is responsible for promoting the union by explaining to the public the rules and regulations and the products of the union. Currently, the day-to-day administration of the union is in the hands of seven (7) member committee headed by the manager.

### 3.6 Conclusion

The chapter has presented the methodology for the study. It has given the time frame for the analysis: (2005-2008): In chapter four presentations of data, analysis and discussion is presented.

## CHAPTER FOUR

### PRESENTATION OF DATA, ANALYSIS AND DISCUSSION

#### 4.0 Introduction

The chapter presents, analyses and discusses data gathered from the field. This is done in line with the objectives of the study.

#### 4.1 Financial Performance of ATCCU (2005-2008)

The general objective of the study is to evaluate the financial performance of ATCCU using the adapted version of PEARLS financial ratio indicators recommended by WOCCU. They are in five categories. These are: Effective financial structure; assets quality, rates of return and cost, liquidity and signs of growth

##### 4.1.1 Effective Financial Structure

Effective financial structure measures assets liabilities and capital and recommends 'ideal' structure for savings and loans (capital). This is the most important factor in determining growth potential earning capacity and over all financial strength (Ofei 2002)

The results are presented below:

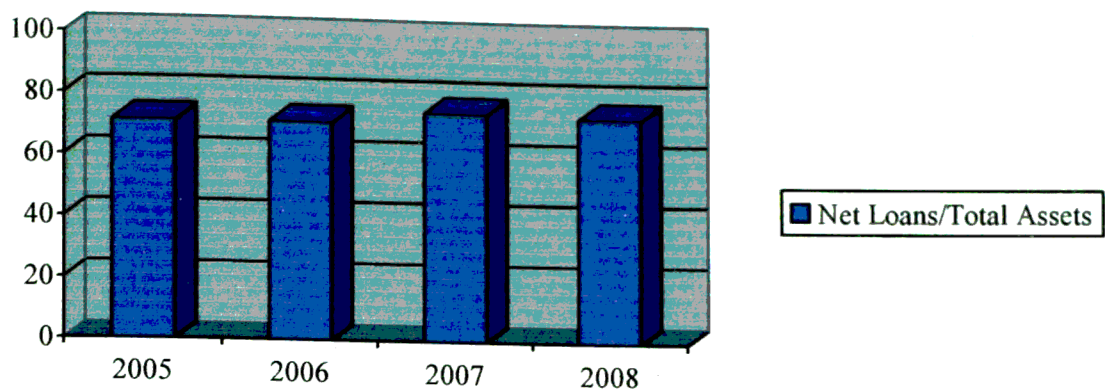
**Table 4.1: Effective Financial Structure of ATCCU**

EFFECTIVE FINANCIAL STRUCTURE	2005	2006	2007	2008
Net Loans/Total Assets	71.34	71.34	75	73.93
Liquid Assets/Total Assets	8.33	14.32	8.82	4.15
Financial Investment/Total Assets	10.86	11.95	7.3	3.1
Member Saving/Total Assets	76.8	74.71	75.34	75.22
Member Shares/Total Assets	6.07	9.08	9.43	6.86
Institutional Capital/Total Assets	13.51	17.43	16.99	16.07

Loan portfolio is the most profitable asset of Credit Unions. WOCCU recommended a range of 70-80% of total assets in the loan portfolio. Table 4.1 shows that percentage of total assets which ATCCU invested in loans in 2005 and 2006 was 71.34%. This increase to 75% in 2007 and finally declined to 73.93 in 2008. The figure indicate that ATCCU was able managed to meet WOCCU standard of 70-80% in all the years under study.

The essence of the credit union concept is to alleviate poverty through promotion of thrift and provision of easier and affordable loans. It is for this reason that WOCCU recommends that for a credit excellence, among other things, its loan portfolio should range between 70-80% of its total assets. By this margin, the union will go a long way in the fight against poverty. In view of this, it is clear that the performance of ATCCU in combating poverty is on course according to WOCCU standard. The reason for this performance could be that the lending conditions of the credit union were favourable and it provided members with better borrowing rates which positively affected demand for its loans. It is also possible that the economic condition of its members has deteriorated which made loans necessary. The latter reason has support. The trend of ATCCU's performance is presented in figure 4.1 below.

**Figure 4.1: Net loans to Total Assets of ATCCU**



Liquid assets to total assets percentage in 8.33% in 2005. However, this decline to 14.32. The percentages for 2007 and 2008 were 8.82% and 4.15% respectively. WOCCU requires 20% maximum performance. Thus ATCCU performed creditable within WOCCU standard. As figure 4.2 illustrates, ATCCU investment in liquid assets has been fluctuating within the accepted WOCCU standard. Liquid assets include cash/bank balance, funds in treasury bills, and funds in savings accounts at banks. The objective of a credit union is to provide affordable and easily accessible loans to its members. Therefore, a decreasing investment in liquid assets should be commended provided it has an inverse relationship with investment in loans. Evidence in figure 4.3 indicates an inverse relationship between ATCCU's investment in net loans and investment in liquid assets.



**Figure 4.2: Liquid Assets to Total Assets**

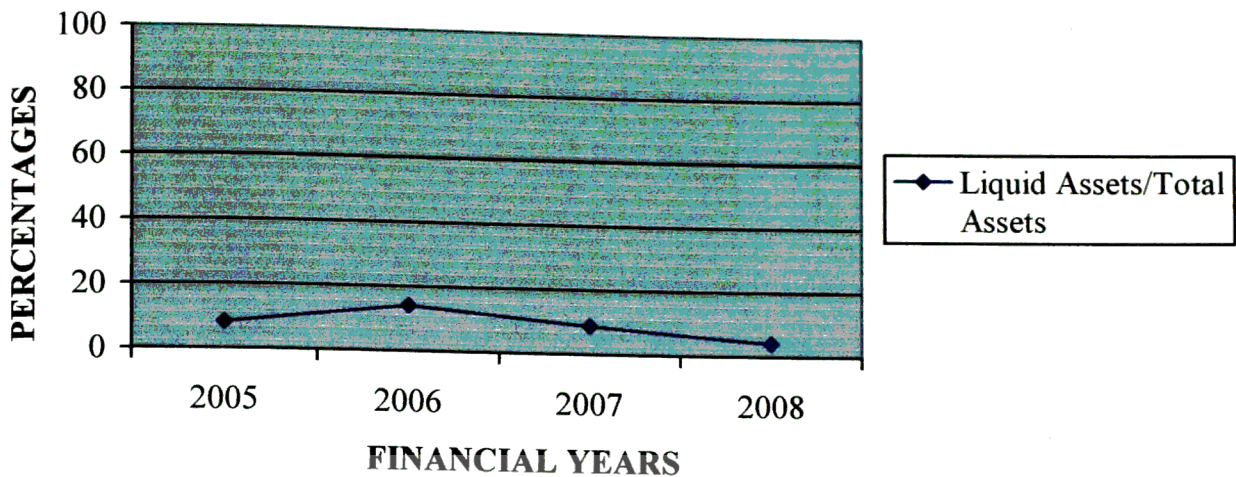
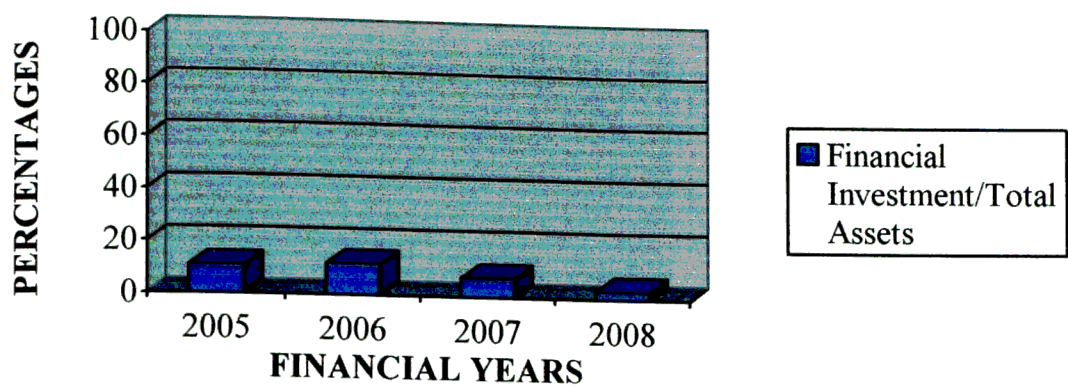


Table 4.1 above indicates that the percentage of total assets invested by ATCCU in financial investments rose from 10.86% in 2005 to 11.95% in 2006. The percentages in 2007 and 2008 were 7.3% and 3.1% respectively. The performance of ATCCU in that area was abysmal. Though the figures for the 2005 and 2006 were above the WOCCU maximum target of 2%. However, as figure 4.3 below shows there was a decreasing trend in the performance of ATCCU.

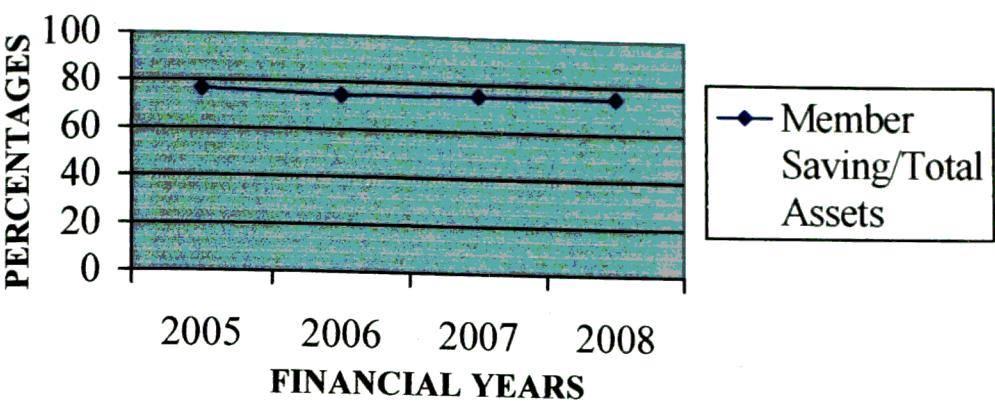
Financial investments consists investment in money market and capital market instruments. It is possible that in the years under study management of ATCCU, guided by the main purpose of the union, decided to decrease the union's commitment in financial assets annually. It is also possible that interest rates and other economic conditions which influence investment in financial assets compelled management of the union to reduce their commitment in financial instruments.

**Figure 4.3: Financial Investment to Total Assets**



The percentages of total assets financed by members' savings deposits was 76.8% in 2005. The percentages in 2006, 2007 and 2008 were 74.71%, 75.34 and 75.22 respectively. The performance fell within 70-80% required by WOCCU. That notwithstanding figure 4.4 depicts that the union recorded a fluctuating performance. It is possible that the savings mobilization drive of the union over the period has not been effective. The education committee's performance is not adequate. It is also possible that interest paid on deposits has not been attractive to motivate members to increase their deposits in the union. The fluctuating performance could also be attributed to fluctuating economic conditions which affected the savings behavior of members of the union.

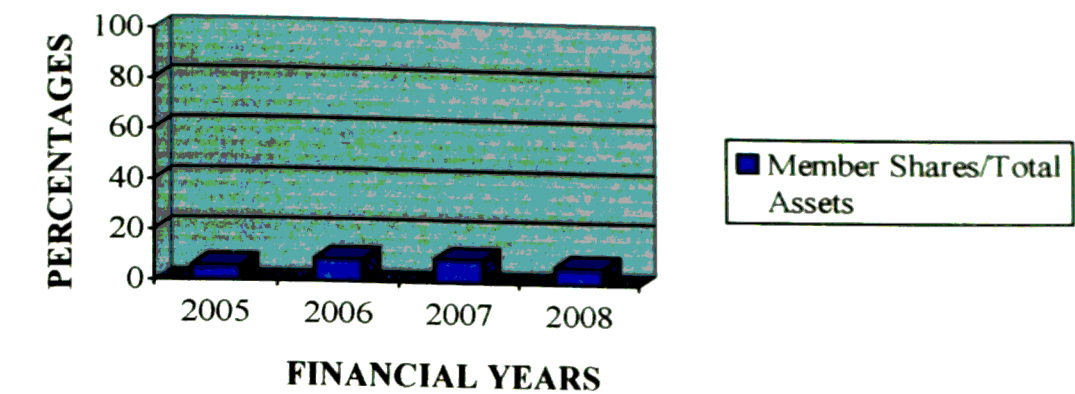
Figure 4.4: Member Savings to Total Assets



The percentages of members' shares to total assets were 6.07% and 6.86 in 2008. The percentages fell below the 10-20% range set by WOCCU. Figure 4.5 suggests that in 2006 the performance of the union rose from 6.07% in 2005 to 9.08% and 9.43% in 2006 and 2007 respectively. However, it declined to 6.86% in 2008. The figures for 2006 and 2007 is an indicative of a rising trend in ownership as more people are acquiring shares in the union. Several reasons account for the acquisition of share in an entity. One of them is attractive dividend. It could be that the union has been paying an attractive dividend on its shares; thus stimulating much interest in it shares. It could also be that the increasing bureaucratic procedures of commercial banks compelled more people to turn to the union for easy banking. Other reasons could be accessibility and friendliness of ATCCU; and ability of ATCCU to meet special needs (Turner, 1996). The inverse of these reasons could be the result of the percentage for 2008 (6.86%).

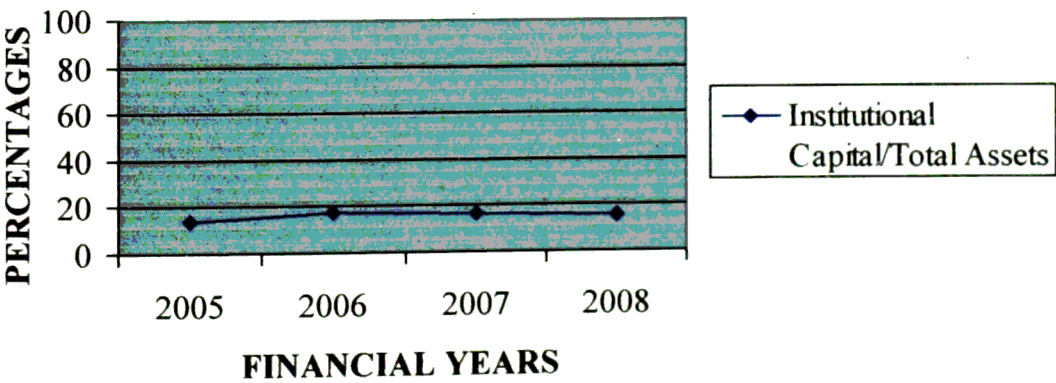


**Figure 4.5: Member Shares to Total Assets**



ATCCU has done well in the percentages of assets financed by institutional capital. The percentages were 13.51% in 2005; 17.43% in 2006; 16.99 in 2007 and 16.07 in 2008. Institutional capital is defined as all legal and non-distributive reserves including that portion of the current year’s surplus that will be retained as reserves. This has an explicit interest costs and its primary function is to finance all non-income generating assets of credit unions. ATCCU’s percentage in each of the years under review was above the minimum ideal target of 10% set by WOCCU. This means that ATCCU has been making profitable use of its reserves. Figure 4.7 shows that the union performed very well in 2006 rising from 13.51% in 2005 to 17.43% in 2006. However, it begin to decline to 16.99%, 16.07% in 2007 and 2008 respectively.

**Figure 4.6: Institutional Capital to Total Assets**





### 4.1.2 Asset Quality

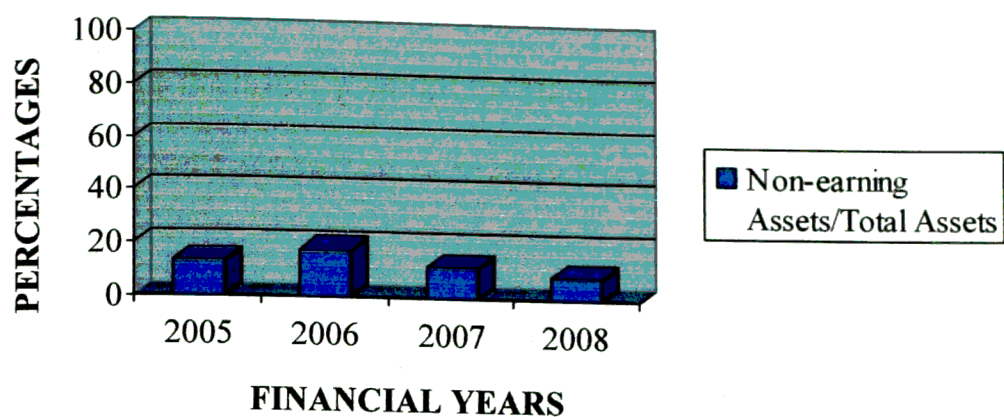
Non productive assets do not generate income. They are assets such as buildings, furniture, and equipment whose contributions are intangible. WOCCU limits credit union to a maximum of 5% of total assets. The higher the ratio the more difficult it is to generate sufficient assets (Ofei 2002)

**Table 4.2: Asset Quality of ATCCU**

ASSET QUALITY	2005	2006	2007	2008
Non-Earning Assets/Total Assets	13.61	18.1	12.04	8.64

From table 4.2 non-earning assets to total assets of ATCCU percentage was 13.61% in 2005. The percentages for 2006, 2007 and 2008 were 18.1%, 12.04% and 8.64% respectively. These figures exceeded the 5% maximum recommended by WOCCU. Illustration in figure 4.7 indicates investments in non-productive assets increased from 13.61% in 2005 to 18.10% in 2006. However, it started declining from 18.10% in 2006 to 12.04% in 2007 and 8.64% in 2008. It suffice that management of the union committed a lot of financial resources into non-productive assets in the year 2006. It implies that management of the union have been finding it difficult to generate sufficient assets over the years. Management of the union needs to reduce commitment of financial resources into non-productive assets in order to facilitate the growth of the union.

**Figure 4.7: Non-earning Assets to Total Assets**



**4.1.3 Rates and Return**

Rate of return and costs aggregates of all essential net earnings to help management of a credit union to calculate investment yields and evaluate operating costs. These indicators help management of the union to measure average income yield for each of the most productive assets of the balance sheet. The also help management to measure the average cost yield for each of the most important liability and capital accounts. The results indicate whether the union is earning and paying reasonable rates on its assets, liabilities and capital.

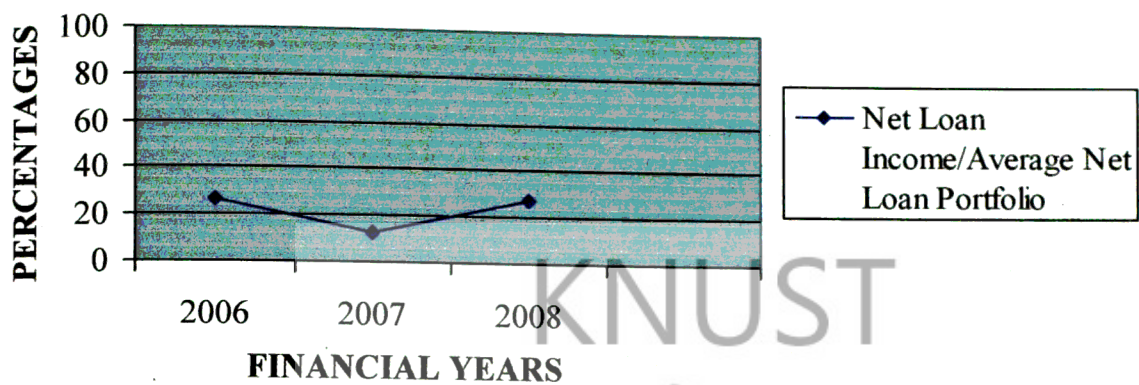
**Table 4.3: Rate of Return and Costs**

RATE OF RETURN AND COSTS	2005	2006	2007	2008
Net Loan Income/Average Net Loan Portfolio	N/A	26.5	12.64	27.36
Financial Investment Income/Average Financial Investment	N/A	6.19	3.38	4.51

The net loan income to average net loan portfolio figures have been fluctuating moving from 26.50% in 2006 to 12.64% in 2007 and skyrocketing to 27.36% in 2008. WOCCU’s recommendation for credit unions is at least 10%. This implies that ATCCU

has performed creditably in the rates it has been charging on its loans. However, evidence presented in figure 4.8 indicates that over the four year periods the union experienced a fluctuating performance. However, it does at a huge margin.

**Figure 4.8: Net Loan Income to Average Net Loan Portfolio**

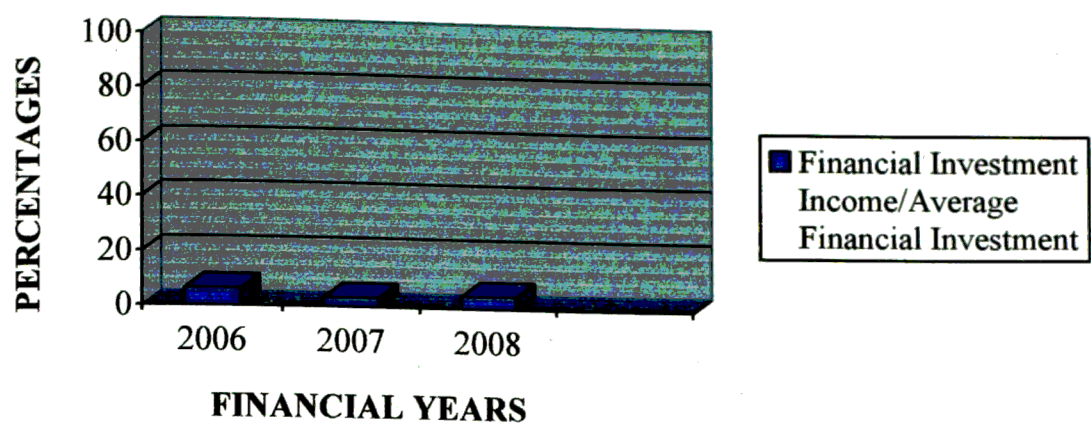


Financial investment income to average financial investment was 6.19% in 2006; 3.30% in 2007; and 4.51% in 2008. WOCCU recommends comparison of the figures with market rates. Thus, comparing the above figures with the average inflation rates of 10.90%, 10.70% and 18.13% in 2006, 2007 and 2008 respectively (see appendix III). ATCCU can be said to have done poorly in its investment decisions in the years under study.

Figure 4.9 indicates that the union experienced a decreasing return on its average financial investment in 2007. This may be due to falling interest rates which made it unattractive to commit more resources to financial investment vehicles. It may also be attributed to the attractiveness of the non-financial investment vehicles such as loans. The return picked up in 2008 when the interest rate rose up to 18.13%.



**Figure 4.9: Financial Investment Income to Average Financial Investment**



**4.1.4 Liquidity**

Liquidity refers to cash needed for withdrawals. WOCCU analyses liquidity from three perspective: total, reserves, and idle liquidity funds.

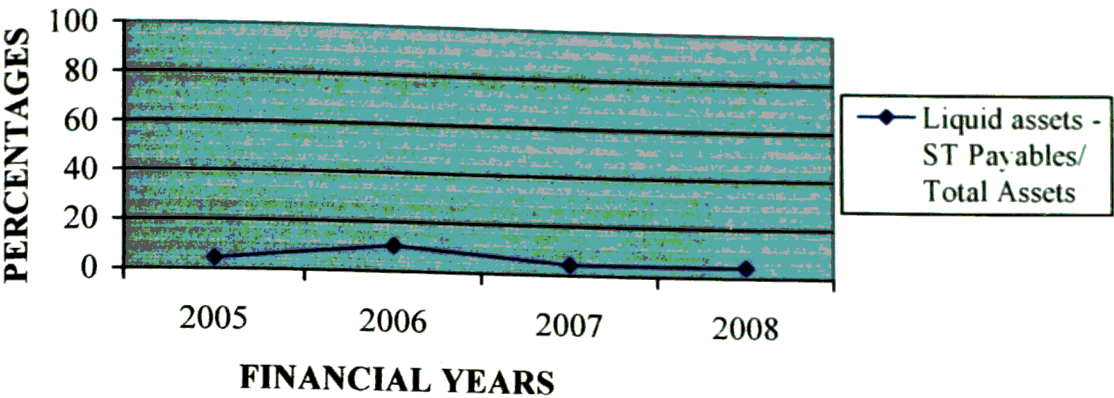
**Table 4.4: Liquidity**

LIQUIDITY	2005	2006	2007	2008
Liquid assets – ST Payables/Total Assets	4.50	10.50	4.34	-4.57
Liquidity Reserves/Total Savings	9.68	12.59	14.08	12.24
Non-earning Liquid Assets/Total Assets	8.33	14.32	11.5	4.15

WOCCU recommends that liquid assets-short term payables to total member deposits ratio should not fall below 150%. As table 4.4 shows, ATCCU recorded 4.50%, 10.50%, 4.34% and 4.97% in 2005, 2006, 2007 and 2008 respectively. This means that in the period under consideration ATCCU failed to meet WOCCU standard. During the four year period liquid assets less short-term payables were not sufficient to cover total members’ deposits. Figure 4.10 indicates that the situation improved in 2006 and started worsening thereof. The management of the union should reverse the trend by investing more in short-term securities in the future.

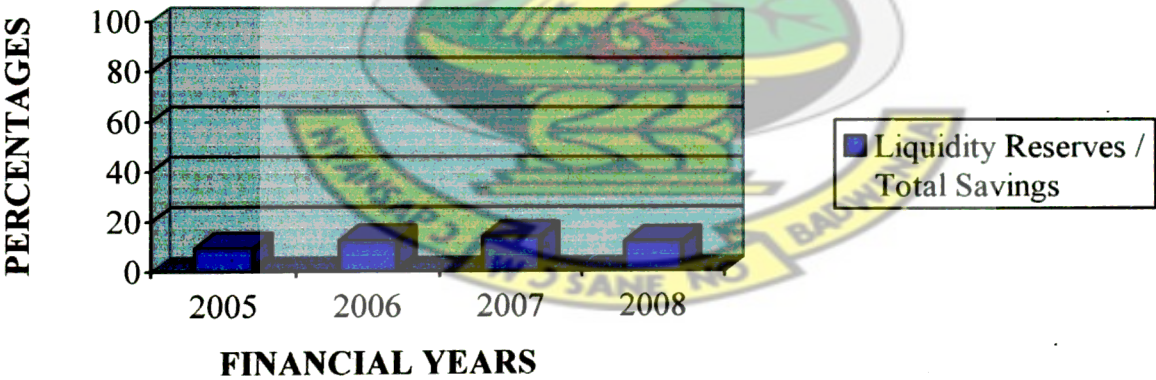


**Figure 4.10: Liquid Assets – Short Term Payables to Total Assets**



In liquidity reserves to total member deposits ratio, ATCCU managed 9.68% in 2005; 12.59% in 2006; 14.08% in 2007; and 12.24% in 2008. WOCCU recommends 10% target for credit union. It is evidence from table 4.4 that ATCCU was able to achieve this target in 2006, 2007 and 2008. However, it could not make it in 2005. Figure 4.11 below indicates that during the four year period the union saw a fluctuating performance in this performance indicator.

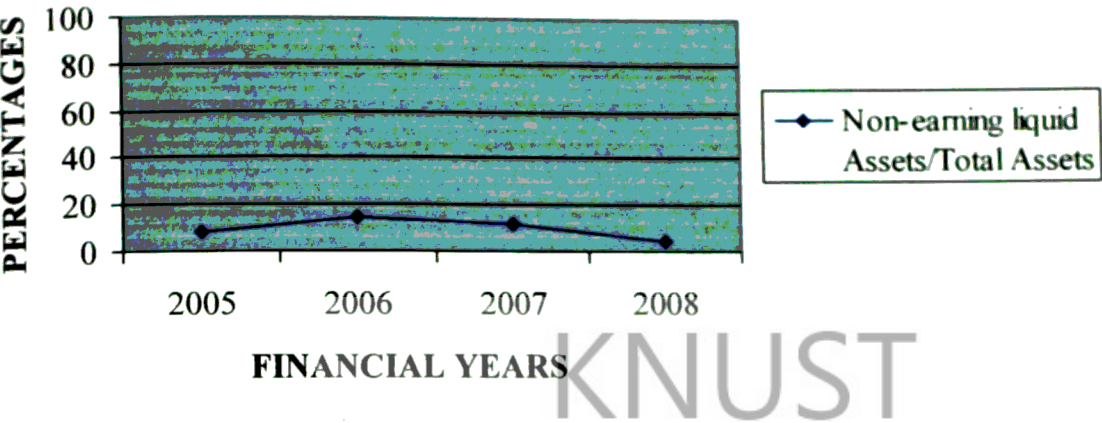
**Figure 4.11: Liquidity Reserves to Total Savings**



Non-earning Liquid Assets to Total Assets of ATCCU stood at 8.33%, 14.32%, 11.50% and 4.15% in 2005, 2006, 2007 and 2008 respectively. ATCCU was only able to meet WOCCU’s target of 10% in 2007 and 2007. As depicted by figure 4.12 over the four year period, investment in non-earning liquid assets of the union fluctuated year after year. The indicator only from 8.33% in 2005 to 14.32% in 2006. It declined in 2007

and 2008. The decrease was good for profitable operations of the union as mere investment in non-earning assets affects the profitability of a financial institution.

Figure 4.12: Non-earning Liquid Assets to Total Assets



4.1.5 Signs of Growth

Growth is measured by the percentage change between current and previous year performances for total assets, loans, deposits, external credits, shares, institutional capital and members. If a credit union is not growing then it is decapitalizing itself, especially when inflation keeps rising (Ofei, 2002).

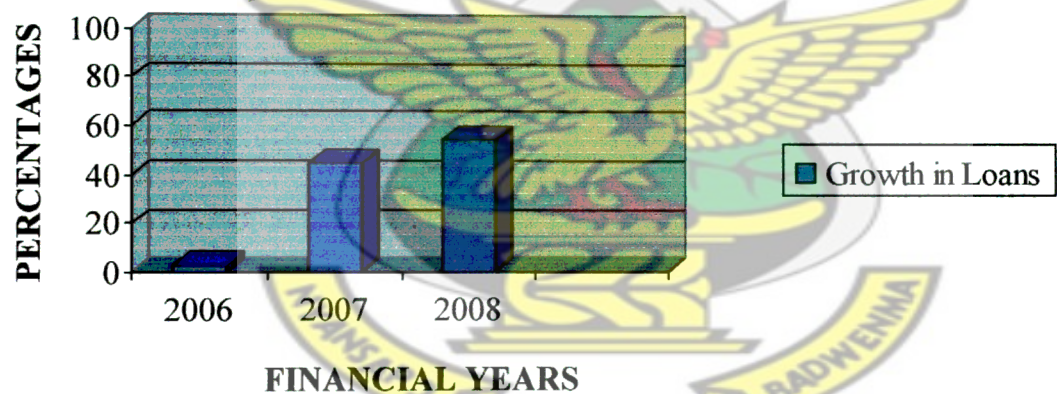
Table 4.5: Signs of Growth

SIGNS OF GROWTH	2005	2006	2007	2008	Annual growth rate
Growth in Loans	N/A	3	44.8	54.46	30%
Growth in Assets	N/A	29.35	34.49	60.64	31%
Growth in members					29%
Deposit	N/A	25.7	31.64	65.24	
Growth in members					33%
Shares	N/A	70.98	52.68	20.96	
Growth in Institutional					35%
Capital	N/A	66.85	49.74	33	

ATCCU recorded only 3% growth over previous year’s net loans in 2006. Table 4.5 indicates a tremendously increase in loan growth rates. ATCCU realized 44.8% and 54.46 in 2007 and 2008 respectively. WOCCU recommends that growth in loans rates

should be greater than growth rates in assets. The result indicate that ATCCU met WOCCU standard in 2007 and 2008 but failed in 2006. People join credit unions with the primary objective of obtaining loans at affordable rates (see for example, Turner, 1996; and Aryeetey et al; 1994 cited in Ofei, 2002). It is, therefore, not surprising that the union saw growth in its loan at an increasing rates. One reason for these growth in loan could be that, because the economic conditions of some of the members deteriorated which compelled them to balance their budgets with a loan from the union. Therefore, the motivation to borrow was there. Again, it is possible that, over the years, the conditions for accessing loans became easier and easier, thus encouraging members to borrow:

**Figure 4.13: Growth in Loans**



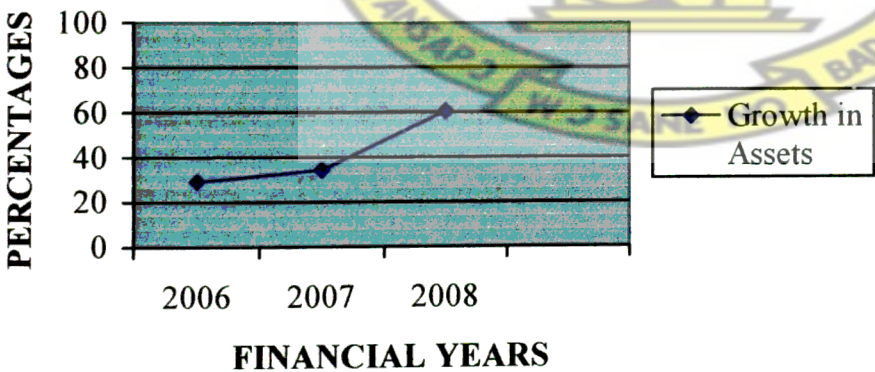
In 2006, ATCCU recorded 29.35% growth over previous year's assets. This may be due to the fact that the union intensified its education campaign in 2006 which yielded an increase in membership thereby enabling it to invest in more assets. It may also be due to favourable economic conditions which enabled the existing members of the union to increase their contributions to the union. There was a tremendous improvement in assets of the union in 2007 and 2008. There was an increase of 34.49% in assets over previous year's assets in 2007 and to 60.64% in 2008.



WOCCU recommends that growth in assets should be greater than inflation rate. Since the growth rate of assets of 29.35%, 34.49% and 60.64% were higher than average inflation rates of 10.90%, 10.70% and 18.13% (<http://www.bog.gov.hg/index1.php?linkked=174>) in 2006, 2007 and 2008 respectively ATCCU met WOCCU standard. The annual assets growth rate of ATCCU within the four years was 31% growing from GH¢142,964.94 in 2005 to GH¢399,521.47 in 2008. This implies that the value of the union has seen some improvement and is an indication of the sustainability of the union. Management needs to intensify their savings mobilization drive and also encourage more people to join the union.

However, the increase was always an improvement over the previous years. The possible narration is that the union never released in its outreach campaigns or that the economic conditions in these years enable members to contribute to the union in the form of shares and savings.

Figure 4.14: Growth in Assets

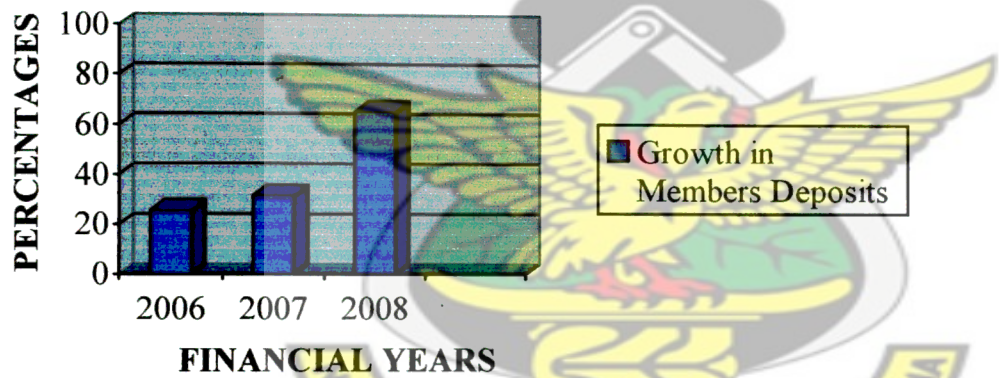


Growth in member deposits saw 25.70%, 31.64% and 65.24% in 2006, 2007 and 2008 respectively. WOCCU recommends that inflation rates and growth in total assets rates. Compared with growth in total assets rates except in 2008 when the rate of 65.24% was

higher than growth in assets rates of 60.64%. ATCCU's growth in members' deposits rates were lower than growth in assets rates in 2007 and 2008. This implies that although ATCCU saw some improvement in its member deposits over the four year period, the increase did not meet standard set by WOCCU except in 2008. Figure 4.15 below shows the trend of growth in member deposits. Management of ATCCU needs to embark on promotional campaign in the future to encourage more members to save with the union. The annual growth rate in members' deposits over the four year period has been 29%.

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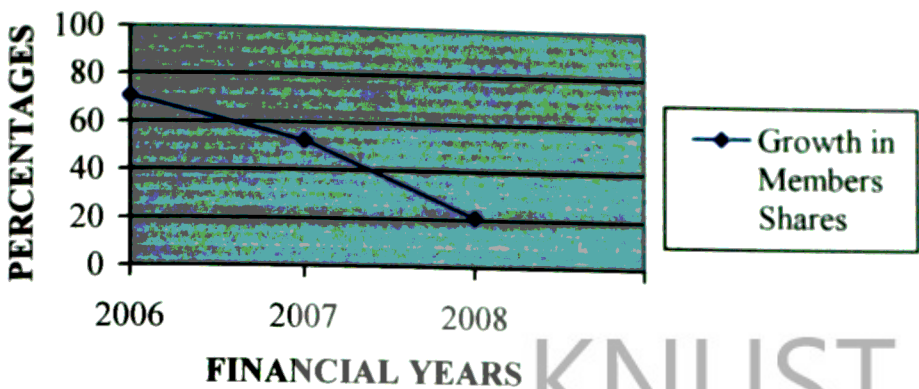
Figure 4.15: Growth in members Deposits



Growth in members' shares recorded 70.98%, 52.68% and 20.96% in 2006, 2007 and 2008 respectively. WOCCU recommends that the rate should be greater than the rate of growth in assets. ATCCU met this standard in 2006 and 2007 but failed in 2008. The rates indicate that ATCCU did well in growth in members' shares. It is possible that the increase in members' shares has been due to increase in its membership or that existing members expressed their confidence in the union by acquiring more of its shares. However, it was increasing at a decreasing rate. It rose from 70.98% in 2006 to 52.68% and 20.96 in 2007 and 2008 respectively. What management needs to do is to educate

more people to join the union and encourage existing members' to acquire more shares in order to reverse the declining trend in the growth in its members' shares.

**Figure 4.16: Growth in Members' Shares**

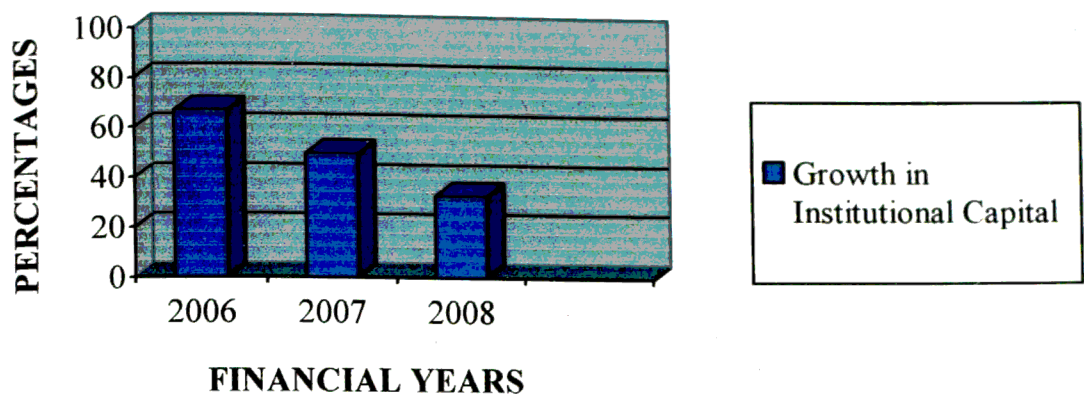


Institutional capital growth is the best indicator of profitability within credit unions. Static or declining growth trend in institutional capital usually indicates a problem with earnings. If earnings are low, the credit unions will have a great difficulty in adding to institutional capital reserves (Ofei, 2002). The trend depicted in figure shows that ATCCU had a declining earnings over the four year period.

Table 4.5 indicates that the union saw 66.85% in 2006; 49.74% in 2007; and 33.00% in 2008. WOCCU recommends that growth in institutional rate should be greater than the rate of growth in assets. Thus, the performance of ATCCU in the growth in institutional capital over the four year period has been good relative to WOCCU standard except in 2008. The annual institutional growth rate has been 35%.

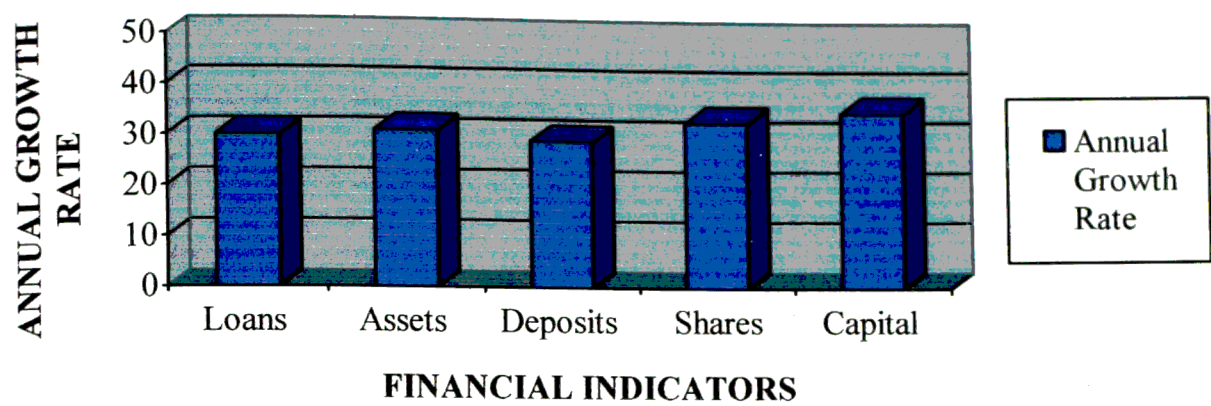


**Figure 4.17: Growth in Institutional Capital**



The annual growth rate of loans, assets, members’ deposits, members’ shares and institutional capital between 2005 and 2008 financial years are presented in figure 4.18 below. It is evident that ATCCU achieved the highest annual growth rate in institutional capital and shares. This is followed by growth in assets, loans and members’ deposits. The trend is in contradiction with the concept of credit union as a tool for fighting poverty through the provision of affordable and easily accessible loans to members. Loans constitute the greatest income earning assets of credit union. Therefore, if there is increase in the annual growth rate of institutional capital, there should be corresponding increase in annual growth rate in loans, other things been equal. However, the reverse is the case in this scenario.

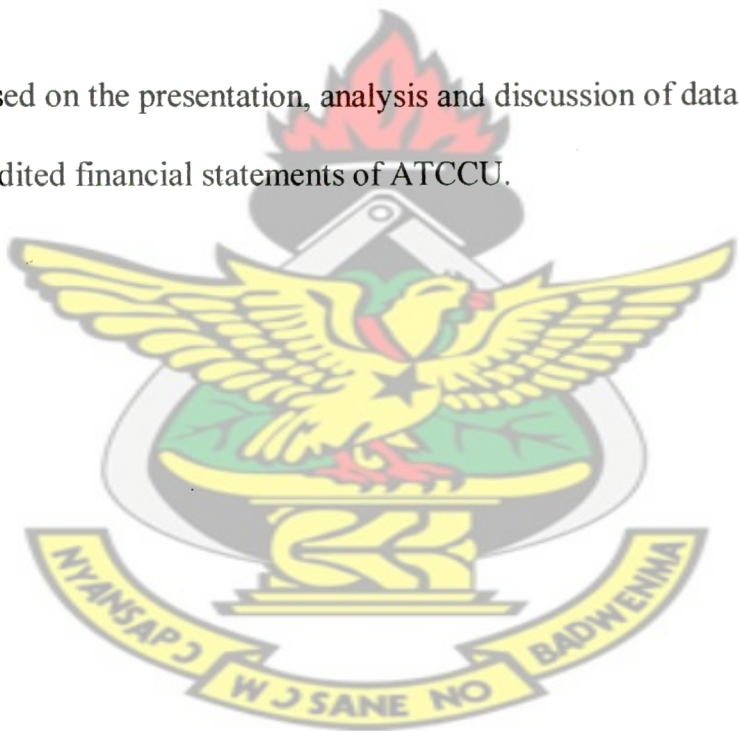
**Figure 4.18: Annual Growth Rate in Loans, Assets, Deposits, Shares and Capital of ATCCU**



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**4.2 Conclusions**

The chapter has focused on the presentation, analysis and discussion of data specifically extracted from the audited financial statements of ATCCU.



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## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

In chapter four of the study data gathered from the field were presented, analyzed and discussed. In this chapter summary of the findings, conclusions and recommendations are presented. The presentation begins with summary of the findings, followed by conclusions and recommendations in that order.

#### 5.1 Summary of Findings

The specific objectives of the study and summary of findings thereon are presented below:

- ✓ Summary of the findings are: that the percentage of total assets invested in loan portfolio from 2005 to 2008 fell within the 70-80% standard set by WOCCU; that the percentage of total assets invested was below the 10% standard set by WOCCU except in the year 2006; that liquid assets to total assets performance was within WOCCU's performance standard; that the percentage of total assets invested by ATCCU in financial investments in each of the four years was above the maximum target of 2% set by WOCCU from 2005 to 2008; that ATCCU performance in the percentage of total assets that were financed by member shares has not been encouraging, ATCCU has been performing poorly in this regard in each of the years the percentage fell below 10-20% range set by WOCCU; that the percentage of members savings to total assets from 2005 to 2008 fell within the 70-80% standard set by WOCCU; and that the percentage of assets that were financed by institutional capital was above the minimum 10% standard set by WOCCU.



- ✓ **To examine the asset quality of ATCCU:** Non-availability of delinquency data in the financial statements did not permit the study to adequately measure ATCCU's asset quality. The data only enable the study to measure one dimension of the asset quality variable: non-earning assets to total assets percentage. The percentage in each of the years was above the 5% maximum recommended by WOCCU.
- ✓ **To evaluate the rates and return of ATCCU:** Summary of the findings are that ATCCU's net loan income to average net loan portfolio percentage in each of the years was above WOCCU standard of at least 10%; that the percentage of financial investment income to average financial investment in each of the years fell below the market rate as recommended by WOCCU.
- ✓ **To evaluate the liquidity of ATCCU:** Summary of the findings are that ATCCU's short-term assets-short-term payables to total member deposits percentage in each of the years astronomically fell below 150% standard recommended by WOCCU; that ATCCU met 10% WOCCU standard in 2006, 2007 and 2008 but failed in 2005 in liquidity reserves to total member deposits percentage; that ATCCU was able to meet WOCCU's target of 10% in liquid assets (non-earning) to credit union liquidity percentage in 2006 and 2007, however, it failed to meet the target in 2005 and 2008.
- ✓ **To examine the growth of ATCCU:** The findings indicate that during the four-year period the average annual net loan growth rate of ATCCU was 30% with the rate of growth in each of the years meeting WOCCU standard except 2006; that the annual growth rate in assets was 31% with the percentage in each of the four years indicating that ATCCU met WOCCU standard in 2006, 2007 and 2008; that annual growth rate in member deposits was 29% but the rate in each

of the years could not meet WOCCU's standard; that the average annual growth rate in members shares was 33% with growth rate in each of the four years meeting WOCCU's standard but failed in 2008; that ATCCU average growth rate in institutional capital over the four-year period was 35% with the percentage rate in each of the years was good relative to WOCCU standard.

## 5.2 Conclusions

Based on the above findings the following conclusions are made about the performance of ATCCU over the four-year period: that ATCCU has maintained an effective financial structure although most of the indicators have shown a depreciating performance; that in assets quality ATCCU fail to meet WOCCU standard based on the parameter used; that in rates and return, ATCCU has generally operated within WOCCU standards even though there has been a downward trend in most of the indicators; that ATCCU's liquidity situation has not been impressive over the last four years; and that ATCCU has generally seen growth although some of the growth indicators have seen a depreciating trend.

## 5.3 Recommendations

One of the specific objectives of the study is to make recommendations to policy makers on the way forward of ATCCU in particular and credit unions in Ghana in general. In line with the above findings and conclusions, the study would like to make recommendations for the advancement of ATCCU in particular and credit unions in Ghana in general. The literature indicates that one of the compelling reasons why some people join credit unions is easier access to loans at an affordable cost. The analysis in chapter four indicates that loan interest charged by ATCCU is little lower from that

charged by commercial banks. Management should begin to look at how best it can bring down its interest rates on loans so that more and more members can patronize the operations of the union.

Furthermore, management of the union should intensify its educational campaigns to facilitate the rapid growth of the union. In the last four years members shares and institutional capital have been increasing at a decreasing rate. Management should buy radio and television time to educate the saving public on the need for them to join the union. This should be augmented with sponsorship programmes, reduction in rates charged on loans and discharge of other social responsibilities such as building of school blocks for deprived communities in its areas of operations.

Again, in order to ensure good corporate governance where reports given to member of the union will be complete and useful, delinquency figures should be provided in the financial statements of the union so that members will be well informed about the state of affairs of the union. This will enable members to put pressure on those members who refuse to honor their loan obligations to do so. Failure to provide information on loan delinquency makes the financial statements of the union incomplete and a bit misleading.

Furthermore, in agreement with Asante (1995) that the future of credit unions is contingent on the upgrading of loan appraisal process so as to limit loan delinquency which requires institutional strengthening including employing professional staff or upgrading the existing staff, the study recommends that the management of ATCCU should embark upon vigorous training of its staff. This will further deepen the performance of the union. The union has the potential of growing into a full bank if its

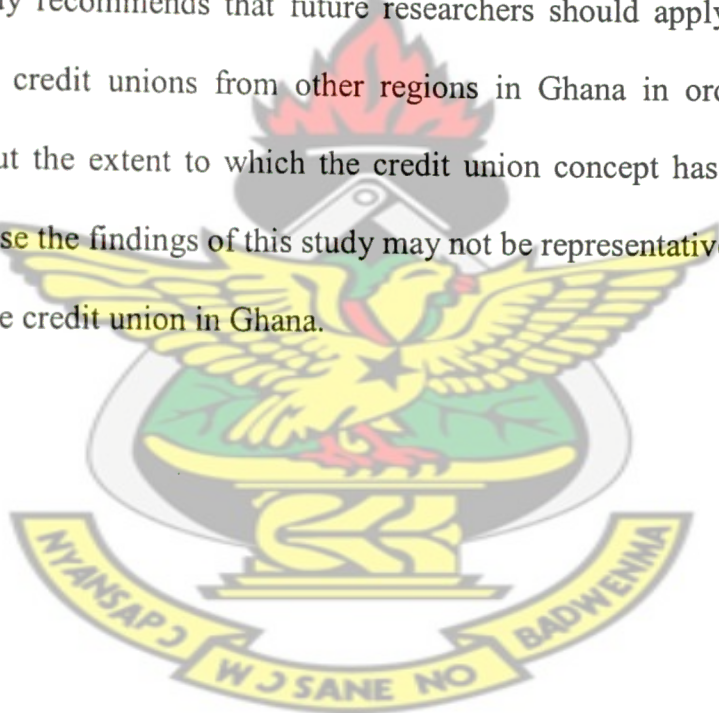


management are able to accelerate its annual growth rate through prudent management practices and strengthened internal controls.

Also, in order to promote the credit union concept in Ghana as one of the tools for fighting poverty and financial exclusion, the government of Ghana should pass a legislation that will bring the operations of credit unions under the supervision of the Bank of Ghana. This will ensure uniform standards and inject some level of sanity in the system thereby increasing the confidence of the citizenry in the credit union concept.

## KNUST

In addition, the study recommends that future researchers should apply PEARLS to purposively-selected credit unions from other regions in Ghana in order to have a reasonable idea about the extent to which the credit union concept has developed in Ghana. This is because the findings of this study may not be representative of the extent of development of the credit union in Ghana.



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**APPENDIX 1: A LIST OF 21 RATIOS ISSUED BY MICRORATE TO ASSESS THE PERFORMANCE OF MFIs AND THEIR DEFINITIONS**

CATEGORY OF RATIO	TYPE OF RATIO	FORMULA
PQ1	Portfolio at risk	Portfolio at risk/gross loan portfolio
PQ2	Provision expense ratio	Loan loss provision expense/average portfolio
PQ3	Risk coverage ratio	Loan loss reserves/portfolio at risk
PQ4	Write-off ratio	Write offs/average portfolio
EP1	Operating expense ratio	Operating expenses/gross loan portfolio
EP2	Cost per client	Operating expenses/average number of clients
EP3	Personnel productivity	Number of borrowers per staff
EP4	Credit officer productivity	Number of active borrowers/number of credit officers
FM1	Funding expense ratio	Interest and fee expense/average gross portfolio
FM2	Cost of funds ratio	Interest and fee expenses on funding liabilities/average funding liabilities
FM3	Debt/equity ratio	Total liabilities/total equity
P1	Return on equity	Net income/average equity
P2	Return on assets	Net income/average assets
P3	Portfolio yield	Cash financial revenue/average gross portfolio
Prd 1	-	Personnel expense/average gross portfolio
Prd2	-	Credit officers/total personnel
Prd3	-	Incentive pay as % of base salary
Prd4	-	Percent of staff with < 12 months
O1	-	Average loan balance per client
O2	-	Current assets/current liabilities
O3	-	Equity/assets

Where:

PQ=Portfolio Quality;

EP=Efficiency and Productivity;

FM=Financial Management;

P=Profitability;

Prd=Productivity;

O=Other.



Source: Consultative Group to Assist the Poorest (2003) Microfinance consensus guidelines.

Definitions of selected financial terms, ratios and adjustments for microfinance, 3<sup>rd</sup> ed.

Washington DC, USA.

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## APPENDIX II: THE PEARLS RATING SYSTEM INSTRUCTIONS

### P = PROTECTION

PEARLS	DESCRIPTION	TARGETS
P1	Allowance for Loan Losses/Delinquency>12 months	100%
P2	Net Allowance for Loan Losses/Total Delinquency	35%
P3	Complete Loan Charge-Off Delinquency > 12 months	100%
P4	Bad Debt Charge-Off/Total Loan Portfolio	0%
P5	Accumulated Recovered Charge-Offs/ Accumulated Charge-offs	-

### E = EFFECTIVE FINANCIAL STRUCTURE

PEARLS	DESCRIPTION	TARGETS
E1	Net Loans/Total Assets	70-80%
E2	Liquid Assets/Total Assets	Maximum 20%
E3	Financial Investments / Total Assets	Maximum 10%
E4	Non-Financial Investment / Total Assets	100%
E5	Member Savings Deposits/Total Asset	70-80%
E6	Borrowed Funds (External Credit)/ Total Assets	
E7	Member Shares/Total Assets	10-20%
E8	Institutional Capital/Total Assets	Minimum 10%

### A = ASSET QUALITY

PEARLS	DESCRIPTION	TARGETS
A1	Total Loan Delinquency/Total Loan Portfolio	Less than 50%
A2	Non-earning Assets/Total Assets	Less than 5%
A3	(Zero Cost Funds/Non-earning Assets)	Greater than or equal to 100%

### R = RATES OF RETURN AND COSTS

PEARLS	DESCRIPTION	TARGETS
R1	Net Loan Income/Average Net Loan Portfolio	At least 10%
R2	Liquid Asset Income/Average Liquid Assets	Highest rate Possible
R3	Financial Investment Income/Average	Market rates

	Financial Investment	
R4	Non-Financial Investment Income/Average Non-Financial Investment	Rates greater than R1
R5	Financial Cost: Member Deposits/Average Member Deposits	Competitive rates
R6	Financial Cost: Borrowed Funds (External Credit/Average Borrowed Funds (External Credit))	Same or lesser than R5
R7	Financial Cost: Member Shares/Average Member Shares	Same or greater than R5
R8	Gross Margin/Average Total Assets	Sufficient to cover costs
R9	Operating Expenses/Average total Assets	3-10%
R10	Provisions of Risk Assets/Average Total Assets	To cover 100% of Delinquent loans
R11	Non-Recurring Income or Expense/Average Total Assets	Minimum possible
R12	Net Income/Average Total Assets	Greater than or equal to 10%

### L = LIQUIDITY

PEARLS	DESCRIPTION	TARGETS
L1	Liquid Assets- Short-term Payables/Total Member Deposits	Minimum 15-20%
L2	Liquidity Reserves/Total Member Deposits	10%
L3	Liquid Assets (Non-Earning) Total CU Liquidity	10%
L4	CU Deposits in CFF/Total CU Liquidity	10%

### S = SIGNS OF GROWTH

PEARLS	DESCRIPTION	TARGETS
S1	Growth in Total Assets	Greater than the inflation Rate +10%
S2	Growth in Loans	Greater than 70-80%
S3	Growth in Member Deposits	Greater than 70-80%
S4	Growth Borrowed Funds	Greater than inflation and growth-Assets
S5	Growth in Members Shares	Greater than inflation and growth-Assets
S6	Growth in Institutional capital	Greater than or equal to 10%
S7	Growth in Membership	5%



Source: Adapted from Richardson, D.C., (1997) PEARLS, Financial Stabilization Monitoring and Evaluation. *Research Monograph Series no. 1*. World Council of Credit Unions.

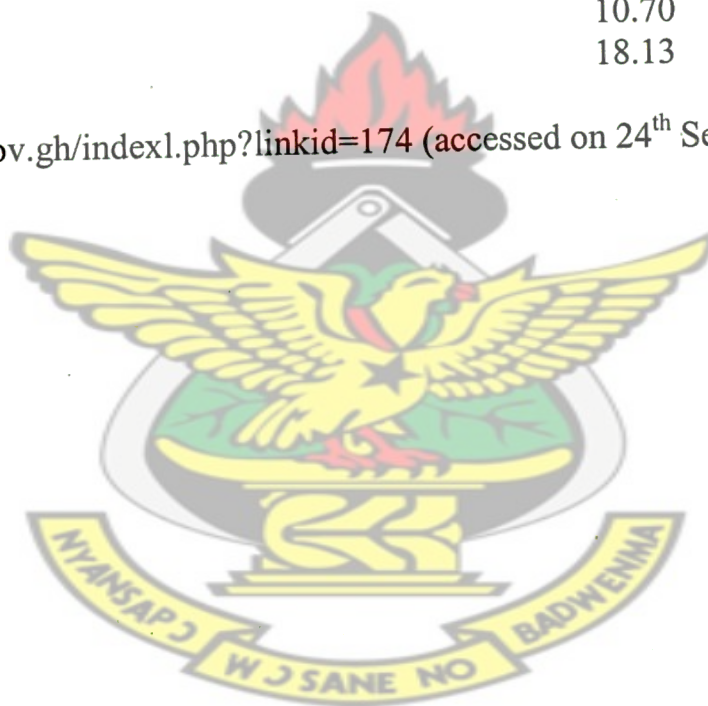
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### APPENDIX III: ANNUAL AVERAGE INFLATION (%) IN GHANA

Year	Average Inflation (%)
2003	26.70
2004	12.60
2005	15.50
2006	10.90
2007	10.70
2008	18.13

Source: <http://www.bog.gov.gh/index1.php?linkid=174> (accessed on 24<sup>th</sup> September 2009).



**AKROFOUM ZONAL TEACHERS CO-OPERATIVE CREDIT UNION**

**INCOME AND EXPENDITURE STATEMENT**  
**FOR THE PERIOD ENDED 30<sup>TH</sup> JUNE, 2006.**

<b><u>PARTICULARS</u></b>	<b><u>NOTES</u></b>	<b><u>2006</u></b>	<b><u>2005</u></b>
Interest on Loans	-	309,920,749.00	201,187,392
Financial Income	1	10,855,407.43	18,047,806
Non-Financial Income	2	51,082,439.72	39,032,400
		<b><u>371,858,596.15</u></b>	<b><u>258,267,598</u></b>
<b><u>LESS EXPENDITURE</u></b>			
Cost of Fund	3	56,256,528.60	87,932,184
Provision for loan loss	4	93,221,246	10,500,000
Personnel	5	48,398,750.00	34,335,000
Occupancy	6	1,895,000.00	7,303,000
Organization	7	51,401,750.00	11,789,000
Security	8	10,250,000.00	2,119,000
Administration	9	25,758,286.91	21,162,108
<b><u>TOTAL OPERATING EXPENSES</u></b>		<b><u>287,181,561.51</u></b>	<b><u>175,140,292</u></b>
<b><u>NET SURPLUS</u></b>		<b><u>84,677,034.64</u></b>	<b><u>83,127,306</u></b>
<b><u>APPROPRIATION OF SURPLUS</u></b>			
Net Surplus B/d		84,677,034.64	83,127,306
25% Statutory Reserve		21,169,258.66	20,781,827
10% Education Reserve		0	8,312,731
Dividend		13,714,714.85	26,026,380
Operating Reserves		49,793,061.13	28,006,368
		<b><u>84,677,034.64</u></b>	<b><u>83,127,306</u></b>



AKROFOUM ZONAL TEACHERS CO-OPERATIVE CREDIT UNION

BALANCE SHEET AS AT 30<sup>TH</sup> JUNE, 2006

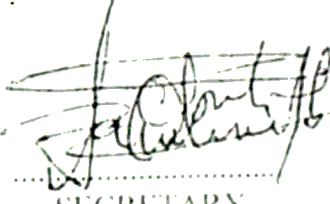
<u>PARTICULARS</u>	<u>NOTES</u>	<u>2006</u>	<u>2005</u>
<b><u>ASSETS</u></b>			
Liquid Fund	10	119,198,086.79	60,065.37
Liquid Investment	11	145,698,985.59	119,034,709
Other Investment	12	49,605,323.00	36,177,423
Loan (net)	13	1,319,321,214.00	1,019,894,907
		<u>1,633,823,609.39</u>	<u>1,235,172,410</u>
Accounts Receivable	14	61,325,000.00	38,295,000
Fixed Assets	15	154,129,345.00	156,182,005
<b>TOTAL ASSETS</b>		<u>1,849,277,954.38</u>	<u>1,429,649,415</u>
<b>FINANCE AS FOLLWOS</b>			
<b>CURRENT LIABILITIES</b>			
Accounts Payable	16	70,736,243.45	114,723,564
Risk Management Fund	17	41,749,200.00	22,683,450
Welfare	18	32,983,995.00	0
Savings	19	1,381,533,207.14	1,099,087,275
Shares Capital	20	148,331,463.00	86,754,600
Reserves	21	173,943,845.79	106,400,526
<b>TOTAL EQUITY &amp; LIABILITIES</b>		<u>1,849,277,954.38</u>	<u>1,429,649,415</u>

Approved by Management Committee on ..... day of ..... 2006.

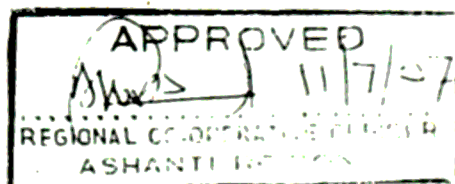
The above statement together with the attached certified schedules giving full details of all assets is to our best knowledge and belief correct.

  
.....  
CHAIRMAN

  
.....  
MANAGER

  
.....  
SECRETARY

Approved by Registrar of Co-operatives.....



**AKROFOUM ZONAL TEACHERS CO-OPERATIVE CREDIT UNION**  
**MAIN OFFICE**

**BALANCE SHEET AS AT 30<sup>TH</sup> JUNE, 2007**

<u>PARTICULARS</u>	<u>NOTES</u>	<u>2007</u>	<u>2007</u> <u>GHC</u>	<u>2006</u>
<b><u>ASSETS</u></b>				
Liquid Fund	10	54,899,489.09	5,489.95	61,769,088.37
Liquid Investment	11	82,301,184.51	8,230.12	90,522,307.57
Other Investment	12	31,447,423.00	3,144.74	44,147,423.00
Loans (net)	13	1,167,285,923.00	116,728.59	1,066,597,250.00
Accounts Receivable	14	70,215,893.34	7,021.59	70,251,893.34
Fixed Assets	15	149,880,685.00	14,988.07	153,086,845.00
<b>TOTAL ASSETS</b>		<b>1,556,030,597.94</b>	<b>155,603.06</b>	<b>1,486,374,807.28</b>

**FINANCE AS FOLLOWS:**  
**CURRENT LIABILITIES**

Account Payable	-	-	57,309,912.85
Risk Management Fund	69,658,350.00	6,965.83	28,957,200.00
Welfare Accounts	49,476,000.00	4,947.60	25,280,000.00
Members Savings	1,172,414,487.14	117,241.45	1,155,644,592.14

**EQUITY FUNDS**

Members Shares	146,742,600.00	14,674.26	112,073,600.00
Reserves	117,739,160.80	11,773.92	107,109,502.29
	<b>1,556,030,597.94</b>	<b>155,603.06</b>	<b>1,486,374,807.28</b>

Approved by Management Committee on 27<sup>TH</sup> day of FEBRUARY 2008

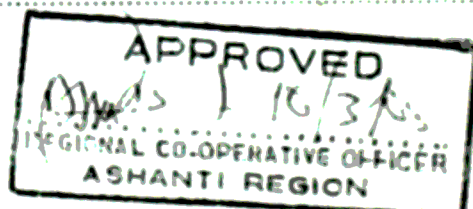
The above statement together with the attached certified schedules giving full details of all assets is to our best knowledge and belief correct.

Apple  
CHAIRMAN

Atif Adhikari  
MANAGER

Anthony  
SECRETARY

Approved by Registrar of Co-operatives.....



**AKROFOUM ZONAL TEACHERS CO-OPERATIVE CREDIT UNION  
MAIN OFFICE**

**INCOME AND EXPENDITURE STATEMENT  
FOR THE PERIOD ENDED 30<sup>TH</sup> JUNE, 2007.**

<u>PARTICULARS</u>	<u>NOTES</u>	<u>2007</u>	<u>2007</u> <u>GHe</u>	<u>2006</u>
Interest on Loans	-	157,156,642.00	15,715.66	167,466,582.00
Financial Income	1	5,217,245.66	521.73	9,417,951.33
Non-Financial Income	2	19,613,720.00	1,961.37	27,306,102.72
<b>TOTAL INCOME</b>		<b>181,987,607.66</b>	<b>18,198.76</b>	<b>204,190,636.05</b>
<b><u>LESS EXPENDITURE</u></b>				
Cost of Fund	3	24,635,136.15	2,463.51	47,220,984
Provision for loan loss	4	19,335,525.00	1,933.55	46,620,210
Personnel	5	34,345,000.00	3,434.50	25,030,000
Occupancy	6	1,460,000.00	146.00	1,830,000
Organization	7	52,969,000.00	5,296.90	35,328,250
Security	8	18,283,000.00	1,828.30	10,250,000
Administration	9	14,109,288.00	1,410.93	24,459,286.91
<b>TOTAL OPERATING EXPENSES</b>		<b>165,136,949.15</b>	<b>16,513.69</b>	<b>190,738,730.91</b>
<b>NET SURPLUS</b>		<b>16,850,658.51</b>	<b>1,685.07</b>	<b>13,451,905.14</b>
<b><u>APPROPRIATION OF SURPLUS</u></b>				
25% Statutory Reserve		4,212,664.63	421.27	3,362,976.29
Dividend		-	-	10,088,928.85
Operating Reserves		12,637,993.88	1,263.80	-
		<b>16,850,658.51</b>	<b>1,685.07</b>	<b>13,451,905.14</b>



**AKROFOUM ZONAL TEACHERS CO-OPERATIVE CREDIT UNION LTD.**  
**CONSOLIDATED ACCOUNTS**

**INCOME AND EXPENDITURE STATEMENT**  
**FOR THE PERIOD ENDED 30<sup>TH</sup> JUNE, 2008**

<b><u>PARTICULARS</u></b>	<b><u>NOTES</u></b>	<b><u>2008</u></b> <b><u>GHC</u></b>	<b><u>2007</u></b> <b><u>GHC</u></b>
Interest on Loans	-	56,380.02	38,352.77
Financial Income	1	536.40	603.70
Non-Financial Income	2	6,661.79	5,519.97
<b>TOTAL INCOME</b>		<b>63,578.21</b>	<b>44,476.44</b>
<b><u>LESS EXPENDITURE</u></b>			
Cost of Fund	3	10,097.84	8,781.11
Provision for loan loss	4	6,641.00	7,488.75
Personnel	5	10,629.97	6,840.50
Occupancy	6	180.00	326.00
Organization	7	9,857.60	7,241.70
Security	8	2,012.26	2,230.10
Administration	9	7,515.94	2,813.76
<b>TOTAL EXPENDITURE</b>		<b>46,934.61</b>	<b>35,721.92</b>
<b>NET SURPLUS</b>		<b>16,643.60</b>	<b>8,754.52</b>
<b><u>APPROPRIATION OF SURPLUS</u></b>			
<b>NET SURPLUS B/FWD</b>		<b>16,643.60</b>	<b>8,754.52</b>
25% Statutory Reserve		4,160.90	2,188.63
Operating Reserves		11,215.33	6,565.89
Dividend on Shares		1,267.37	0



**AKROFOUM ZONAL TEACHERS CO-OPERATIVE CREDIT UNION LTD.  
CONSOLIDATED ACCOUNTS**

**BALANCE SHEET AS AT 30<sup>TH</sup> JUNE, 2008**

<u>PARTICULARS</u>	<u>NOTES</u>	<u>2008</u> <u>GHe</u>	<u>2007</u> <u>GHe</u>
<b><u>ASSETS</u></b>			
Liquid Fund	10	8,263.61	13,978.33
Liquid Investment	11	8,300.94	14,610.86
Other Investment	12	4,111.93	4,295.93
Account Receivable	13	57,221.52	8,830.40
Loan (net)	14	295,356.96	191,034.31
Fixed Asset	15	26,266.51	15,956.70
<b>TOTAL</b>		<b><u>399,521.47</u></b>	<b><u>248,706.53</u></b>
<b><u>FINANCED BY:</u></b>			
<b><u>CURRENT LIABILITIES</u></b>			
Accounts Payable	16	34,829.60	18,594.98
Members Savings	17	300,507.06	181,861.25
<b><u>EQUITY FUNDS</u></b>			
Members Shares	18	27,392.76	22,646.59
Reserves	19	36,792.05	25,603.71
<b>TOTAL</b>		<b><u>399,521.47</u></b>	<b><u>248,706.53</u></b>

Approved by Management Committee on 29th day of May 2009.

The above statement together with the attached certified schedules giving full details of all assets is to our best knowledge and belief correct.

Apah  
CHAIRMAN

Hitchhiker  
MANAGER

Secretary  
SECRETARY

Approved by Registrar of Co-operatives.....

