

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Cooperatives in Nigeria date back to the inception of communal life and were necessitated by the desire to meet the social and economic needs of the people. This period was known as the era of unofficial cooperation. There is no doubt that cooperative can be a force for socio-economic development of African countries. For example, cooperative can empower members for economic activities. Cooperative is an organization formed for the promotion of the economic interest of its members. It is a free and voluntary business organization, jointly owned and operated by people with identical economic needs and having equal voice in its management and deriving proportionate services and benefit from it. Cooperative encourages small income earners to make meaningful savings and investment.

According to Momoh and Oso, cited in Akerele, Aihonsu, Ambali and Oshisanya (2014), cooperative thrift and loan society is a financial self-help cooperative which encourages members to save money together, and pooled resources are then used to provide low cost loans to members. They again stated that, Cooperative Thrift and Loan Society (CTLS) operates within a clearly defined area of location and a mutual link must exist between all members. This link is known as the common bond of the CTLS. The common bond may be based on all members living in the same locality or all members working for the same employer. Berthoud and Hinton in Akerele, Aihonsu, Ambali and Oshisanya (2014), sees cooperative thrift and loan society as being co-operative societies that offer loans to their members out of the pool of savings that are built up by the members themselves. This is a descriptive concept that does not refer to the purpose of cooperative thrift and loan society. However, it does describe them as being co-operatives; therefore co-operative principles could be inferred as being the purpose of cooperative thrift and credit society. The unique ownership status implicit in this definition (member run, owned and used) led to them being described by Onugu and Taiwo (2015) as being the purest form of co-operative. Not only are trading transactions restricted to members, restrictions are also placed on the membership by requiring that members belong to a common bond. This common bond or interest is usually multiple, associational, occupational or residential. The requirement to belong to a common bond is seen as a cornerstone in the success

of these usually high-risk credit co-operatives, as the social pressure that is created by the members knowing each other, lessens the risk of default.

The development qualities of cooperatives and their potentials for performance have led into various forms of cooperatives. The indebtedness of low income earners necessitated the establishment of cooperative thrift and loan societies. The main objective of this type of cooperative society is to mobilize funds for its members and disburse same in form of credits/loan to members in particular for economic purpose. It is formed among close associates with the aim of encouraging them to make some savings in the cooperatives for the future. The mobilization of the financial resources is done by members paying agreed sum of money periodically into joint pool for the purpose of giving credit to them with interest, unanimously agreed upon at a fixed time of repayment. The mobilized fund is disbursed as credit to members and it can be used to purchase consumable goods at an interest rate specified in the bye law.

According to Idoge (2013), credit plays a vital role in economic transformation and rural development. Credit is a crucial input required by the members of thrift and credit co-operative societies to establish and expand their enterprises with the aim of increasing the income of the households and the nation in general, while augmenting the individual borrower's ability to repay borrowed funds. Access to credit is regarded as one of the key elements in raising productivity and reducing poverty (Ojiako and Ogbukwa, 2012). For small-scale enterprises to grow up to medium and large-scale level, the need for formal credit source is indispensable because formal financial sector has the financial capacity to meet their growing credit demand, which the informal sector is incapable to supply (Gebeyehu, 2002). Credit enables the cooperative members to tap the financial resources and take advantage of the potentially profitable investment opportunities in their immediate environment (Zeller and Sharma, cited in Idoge, 2013). The use of credit has been envisaged as one way of promoting technology transfer, while the use of recommended inputs is regarded as key to economic development. While credit to the economy sectors remains a veritable tool for transformation and economic growth, credit repayment is of paramount importance to have viable financial institutions. In the same vein, Agu (2007) identified credit as an instrument not only for fostering development, but also for improving and expanding production among members of the cooperatives. As economic

activities increases and economies become more diversified, savings become inevitable. By this means, they are able to solve rural/urban indebtedness (abject poverty) by achieving their goal which is members' promotion through meeting member's needs.

Despite the importance of credit, many of the cooperative members do not have sufficient access to credit from formal financial institutions. Their major source of finance, especially at the start up stage, is the informal sector (i.e. from friends, relatives, local money lenders, e.t.c.). This poor credit access from formal financial source, based on the experience of some developing countries, arises partly from biased government policy, due to the operational practices and procedures of the formal financial institutions and the internal problems of small-scale enterprises themselves. Given the income level of the average cooperative members in Nigeria and the constraints in access to credit, it is believed that credit is an indispensable tool for achieving socio-economic transformation of the households. If well applied, it would stimulate capital formulation and diversified livelihoods, increased resource production in production, marketing efficiency and value addition, while enhancing net incomes (Nwagbo, cited in Idoge, 2013). Despite the acclaimed importance of credits in livelihoods promotion in Nigeria, empirical studies have shown that their management and repayment have been burdened with numerous challenges (Awoke 2004; Lobi 2010; Oboh and Ekpebu, 2011). A study by Rhasi (2000) found that the in efficiency in credit management is among the factors that hinder the performance of thrift and loan cooperative societies in Nigeria. On the other hand, the high rate of defaults among borrowers remained serious impediment. Awoke (2004) reported that the high rate of default arising from poor management procedures, loan diversion and unwillingness to repay loans had threatened the sustainability of most thrift and credit cooperative societies in Kaduna state. Olagunju and Adeyemo (2007) in buttressing this fact succinctly argued that the problem of default in loan repayment is one of the factors that militated against the performance of the thrift and credit cooperative societies, because it dampens the willingness of the cooperatives to increase the amount of loan and credit they disburse to their members.

According to Abdulahi (2016), in most thrift and loan cooperative societies in Kaduna state, members are very conscious of money and assets and continually strive to maximize them in one way or the other. The increase in the rate of investment of members is made possible by way of

proportionate rise in the rate of savings mobilization of the cooperative society. Saving mobilization is, therefore, the key factor in assessing the performance of the cooperative thrift and loan society. The performance of any business organization is judged in relation to its stated objectives. Subsidiary goals and their ranking vary, but this primary goal is upheld in practice. Therefore, cooperative performance can be judged in relation to the total present value of benefits it transfers to members, and their performance in savings mobilization depends to a large extent on the members.

According to Abdulahi (2016), savings mobilization in cooperative thrift and loan societies has to do with the ability of the members of the cooperative to keep resources aside for emergency and investment purposes. The savings behavior of the cooperative members depends primarily on the level of their income, according to some authorities, but should not be seen as a major determining factor for savings. Consequently, an analysis of the performance of Cooperative Thrift and Loan Societies in Kaduna State in relation to the aforementioned indices of cooperative performance is the thrust of this study.

1.2 Statement of the Problem

The relevance of cooperative thrift and loan societies in the socio-economic development of individual cooperative member, the immediate host community and the society at large cannot be overemphasized. For instance, Cooperative thrift and loan societies contribute immensely to the financial stability of the members, if well managed. Among others, members are helped to develop savings habit and have a common purse that they can fall back on in time of financial need without unreachable collaterals and unnecessary bureaucratic bottlenecks found in commercial banks. Besides, in any given area where a cooperative society is located, the immediate host community stands to benefit as the cooperative society will strive to impact positively on the community. According to World Bank reports (2010), low income earners dominate all the sectors of the economy. The need for loan among the low income earners cannot be over emphasized as it enables them to establish enterprises and diversify their livelihoods.

According to Ojo, cited in Idoge (2013), one of the problems confronting small-scale enterprises, including farmers in Kaduna state is inadequate capital despite the fact that small-scale farmers

produce the bulk of the food consumed locally and some export crops which generate foreign exchange for the country. This makes loan very imperative, more especially as Kaduna state encourage private investors and diversify the economic and revenue base of the state. Lack of access to credit is generally seen as one of the main reasons why many people in Kaduna State remain poor (Abdulahi, 2016). Usually, the poor have no access to loans from the conventional banking institutions because they cannot put up acceptable collaterals and or because the costs of credit management in terms of screening and monitoring the activities of the poor and enforcing their contracts are too high for the banks to make lending to this group of people profitable (Hermes and Lensink, 2007).

However, access to financial services, as opined by Ehigiamusoe (2009), enables the poor household to move from everyday for survival to planning for the future by savings, investing in better enterprises, children's education and health and socio-economic empowerment (Ugwumba et al 2008). This has necessitated the formation of thrift and loan cooperatives as a way to access less strenuous/stressful credit. Despite the formation of cooperatives as a way to improve their access to credit and reduce the loan default rate, studies have shown that cooperative members still have high risk of default which have negative impact on the performance of the thrift and loan societies. According to Idoge (2013), empirical evidence from various studies showed that cooperative members are prone to loan default and sometimes they make willful default; managerial ability is poor, they don't keep accounts, and it is therefore difficult to monitor their operation by the cooperative societies. Improving the performance of thrift and loan cooperative societies in Kaduna State is an important step towards achieving the economic development objective of Kaduna State government. For this to succeed, the problem of high default risk associated with them, which made the financial institutions reluctant to extend loan, has to be solved (Gebeyehu, 2002), while it is important to know the loan repayment capacity of small-holder cooperative members in Kaduna state as this will help in forging policy towards the growth of the sector,

There are numerous literature and extant studies (Eze, (2007), Olagunju and Adeyemo (2007), Oladeebo and Oladeebo (2008), Afolabi (2010), Akerele et al. (2014), Anigbogu et al. (2014) and Ojiako et al. (2014) to mention a few), conducted in Nigeria on thrift and loan cooperative

societies performance with reference to members' savings, amount of loan applied for by the members, amount approved by their cooperative, amount disbursed and members' loan repayment capacity. Over the years, a key issue that has emerged is the question of cooperative performance in credit service delivery. Cooperative performance could be influenced by a myriad of factors such as Loan repayment, amount of credit disbursed. The question of thrift and loan cooperative performance is one of the important issues since it influences member's access to credit. Onyeagocha et al. (2012) noted that one way to improve cooperative performance is to investigate the factors which affect loan service delivery. Meanwhile, these studies created a big gap as majority of the literature and studies were highly concentrated in the south-western and south-east Nigeria, with little or no study and documented evidence of such studies in the Northern part of the Nigeria, especially the North-West of the country with reference to Kaduna State. Unfortunately, despite the lofty socio-economic members benefits derived from cooperatives particularly, thrift and loan cooperatives in Kaduna state, it is apparent that their activities and performance were not accounted for.

It is against this backdrop that the researcher determined to evaluate the performance of the thrift and loan cooperative societies in Kaduna state. In this study, the explanatory variables to evaluate the performance of thrift and cooperative societies in Kaduna State was anchored on how the thrift and loan cooperatives are able to approve and disburse sufficient amounts of credit to the members; the timely disbursement of loan (time lag); loan repayment capacity of the members, and the efforts of the thrift and loan cooperative societies in facilitating loan repayment ability of their members. Therefore, the present study sought to reduce the gap created by the extant studies on the subject matter.

1.3 Research Questions

The following research questions guided the study:

- i) Can cooperative thrift and loan society's socio-economic profile influence the performance of CTLS in savings mobilization?
- ii) How do cooperative thrift and loan societies perform in mobilizing savings among their members in respects to amount and pattern of savings?

- iii) How much (amount in Naira) was the cooperative thrift and loan societies able to disburse to their members and the time lag after the application for the loan?
- iv) What is the pattern of loan repayment in cooperative thrift and loan societies and how did the cooperative facilitate loan repayment among the members?
- v) Are there any constraints that hinder optimum performance of cooperative thrift and loan societies in Kaduna state?

1.4 Objectives of the Study

The broad objective of this study is to evaluate the performance of Cooperative Thrift and Loan Societies in Kaduna State. Meanwhile, the study will be specifically aim at the following objectives:

- i) Evaluate the influence of cooperative thrift and loan society's socioeconomic profile on CTLS capacity to mobilize savings among its members;
 - ii) Determine how the cooperative thrift and loan societies perform in mobilizing savings among the members based on the amount and their pattern of savings;
 - iii) Assess the amount of loan the cooperative thrift and loan societies were able to disburse to their members, and the disbursement time lag after the application for the loan;
 - iv) Examine the performance of cooperative thrift and loan societies in facilitating loan repayment among its members;
 - v) Identify the constraints that hinder optimum performance of cooperative thrift and loan societies in Kaduna State, and make robust recommendations that will enhance the effective performance of cooperative thrift and loan societies in Kaduna State.
- These will be done based on the findings from the study.

1.5 Hypotheses of the Study

The following null hypotheses were formulated

- H₀₁:** The savings patterns of members have not significantly affect the amounts of savings mobilize by the cooperative thrift and loan societies.
- H₀₂:** The time lag after loan application has no significant relationship with the amount of loan disbursed to the member by the cooperative thrift and loan societies

- H₀₃:** the performance of cooperative thrift and loan societies in facilitating loan repayment among its members has not significantly influence loan repayment pattern.
- H₀₄:** The cooperative thrift and loan society's socio-economic profile have not significantly influence their performance in savings mobilization; loan disbursement and loan repayment;
- H₀₅:** The challenges faced by the thrift and loan cooperative societies do not significantly influence their performance in loan disbursement

1.6 Significance of the Study

The study was carried out to examine the determinant of the performance of Cooperative Thrift and Loan Societies in Kaduna State.

The Kaduna State Cooperative Department that oversees the affairs of cooperative development in the State will find the outcome of this study very useful as it will provide them with evidence based on empirical data that will help them to formulate effective cooperative policies and programme packages that will help tackle the avalanche of socio-economic challenges in the State, as well as adequately monitoring and implementing such policies and programme packages in such a manner that Thrift and Loan societies in the State can be taken to greater heights.

This study will be beneficial to the Management Committee members of cooperative societies, particularly Thrift and Loan societies who may not be efficient in the management of Thrift and Loan societies and may be facing various challenges. The outcome of this study will be an eye opener in this direction; to sensitize the Management Committee about Thrift and Credit cooperatives in Kaduna State which will give them a sense of direction in the management of their cooperative societies.

Separate studies on Thrift and Credit cooperatives have been conducted by some cooperative experts (e.g. Nwana, 2011; Afolabi, 2010) However, none of these focused on the performance of Thrift and Loan societies in Kaduna State. Therefore, there is the need for this present study in the area to fill this gap so that empirical evidence of the performance of this type of cooperatives in the State will be well documented.

The Cooperative members themselves who are the direct beneficiaries of Thrift and Loan societies will benefit from the findings. They will be more aware of the processes of Thrift and Loan societies in terms of loan-seeking modalities, interests, repayment processes and penalties for defaulting. This will help them to be more responsive to their cooperative society.

The scholarly importance of this study cannot be overemphasized as the findings will contribute to existing body of knowledge, provide information, open up research areas and assist in the design of such studies for student researchers in Cooperative Economics and Management and in related fields. In different respects, this study will be a reference material for such student researchers whose research problems may be related to this present study.

1.7 Scope of the Study

This study analyses the performance of Cooperative Thrift and Loan Societies in Kaduna State. Therefore, the study exclusively focused on existing and functional thrift and loan cooperative societies that in Kaduna State. Meanwhile, the respondents for the study were specifically the representative of the societies which are the management committee members of the selected thrift and loan cooperative societies that are primary cooperative societies.

Also data used for this study were restricted to amount of members' savings the cooperative were able to mobilize over a specific period of time, amount loan the thrift and loan cooperative societies were able to approve and disburse as well as how the cooperative were to facilitates loan repayment among its members.

The performance of the cooperative societies were measured in terms of the members savings mobilization capacity, the amount of loans they apply for, the amount of loans granted to members, timely disbursement of the loan; attitude of the members towards loan repayment, loan recovery measures put in place by Thrift and Loan Societies, as well as the effect of cooperative socio-economic factors on the members' savings and loan repayment pattern.

In the same vein, the performance of the cooperative societies were also restricted and measured within specific time frame of five (5) financial years. Their performance in savings mobilization,

loan disbursement, and loan repayment were compared within 2010 to 2015 financial years. The data were sourced from the primary societies that operate within the study area

Lastly, the study obtained most of its data on savings, loan disbursement and loan repayment from secondary source. These secondary sources of data were the thrift and loan cooperative societies financial reports for 5 years (2010 – 2015); members' savings and contributions ledger books, record of loan disbursement, record of loan defaulters. Also structured questionnaire was also used to obtained information on the loan repayment pattern and challenges that hindered cooperative performance.

1.8: Definition of Key Terms

Determinant: this can be seen as something that controls or affects what happens in a particular situation. Determinant in this context is referring to those factors (savings, loan disbursement and loan repayment pattern) which decisively affect the performance of thrift and loan cooperative societies in Kaduna State. Also determinant is an element that identifies the nature of thrift and loan cooperative societies which fixes or conditions thrift and loan cooperative societies performance.

Performance: performance is a composite assessment of how well an organization executes on its most important parameters, typically financial, market and those activities which ensure that goals are consistently being met in an effective and efficient manner. Performance can focus on the performance of an organization, a department, employee, or even the processes to build a product or service, as well as many other areas. Performance is also known in this context as a process by which thrift and loan cooperative societies align their resources, systems and members to strategic objectives and priorities.

Cooperative Thrift and Loan Society: is a group of people who want to solve their financial problem through cooperative will come together and form credit cooperatives. They see the need to have a pool of funds through their savings and give to members in form of loans when they are in financial difficulties. Thrift and credit society is a society formed among closed associates with the aim of encouraging them to make some saving for the future. Cooperative thrift and

credit society is a voluntary association of person united by a common bond who have joined together in order to encourage one another to save regularly part of earnings and provide themselves with credit at reasonable rates.

Savings: The portion of disposable income not spent on consumption of consumer or capital goods but accumulated or invested directly in cooperative society for future plan occurrence or unforeseen circumstances. Saving also involves reducing expenditures, such as recurring costs. In terms of personal finance, saving generally specifies low-risk preservation of money, as in a deposit account, versus investment, wherein risk is a lot higher; in economics more broadly, it refers to any income not used for immediate consumption.

Loan Disbursement: Disbursement is a distributing payment of money (credit) that fulfills a contractual or business arrangement. The word disbursement comes from the Old French word *disburser*, "extract money from a purse," with *bourse* meaning "purse." Disbursement is the act of paying out or disbursing money, especially in the context of loans. When the borrower (cooperative member) receives all or a portion of the loan funds he/ she applied for, it is said to have receive a loan disbursement. A disbursement is a payment made by the cooperative in cash or cash equivalents during a set time period.

Loan Repayment: loan repayment is the act of paying back money previously borrowed from a cooperative society. Repayment usually takes the form of periodic payments that normally include part principal plus interest in each payment.

1.9 Limitation of the study

In the course conducting this study researcher encountered some challenges which range from inpatient and inability of the management committee members to give enough attention and they find it difficult to release some sensitive information concerning the financial statement of their cooperative society over five years period.

The researcher also finds it difficult to cover the whole of Kaduna State; as such the respondents for this study were appropriately sampled.

CHAPTER TWO

LITERATURE VIEW

This chapter reviews relevant literature related to the performance of Cooperative Thrift and Loan Societies. The chapter is divided into the following sub-topics:

2.1 Conceptual Review

- ✓ The Concept of Cooperative Thrift and Loan Societies.
- ✓ Types of Cooperative Thrift Society
- ✓ Characteristics of Cooperative Thrift and Loan Societies
- ✓ Objectives of Cooperative Thrift and Loan Societies.
- ✓ New Principle for Cooperative Thrift and Loan Societies.
- ✓ Challenges of Cooperative Thrift and Loan Societies.
- ✓ Overview of Savings Behaviour
- ✓ Loan Borrowing/Disbursement
- ✓ Loan Recovery in Cooperative Thrift and Loan Societies
- ✓ Concept of Performance
- ✓ Concept of Thriftiness (Savings)
- ✓ Concept of Loan
- ✓ Factors That Facilitates Loan Repayment among Cooperative Members
- ✓ Loan default and its implications on Cooperative performance

2.2 Empirical Review

2.3 Theoretical Framework

2.4 Conceptual Framework (Operationlization of Study Variables)

2.1.1 Concept of Cooperatives

Cooperative comes from the verb “operate” meaning to work and a prefix “Co” meaning together and merging the two gives the word “Cooperative” In its broadest sense it means any two or more persons working together to achieve some aims. Cooperative societies are institutions within whose framework cooperative or joint activities by people take place, in a formalized deliberate social and economic sphere of human endeavor. According to Ebue (2006) cooperation can be defined as voluntary and autonomous, association of persons who come together, pull their resources (human and material) to solve their economic and social problems.

Cooperative is based on the value of self-help, democracy, quality and solidarity. The first agricultural cooperative societies started in Israel in 1010 by the Israeli settlement. The Kujali and Kibbutz Mosharin and Moshav Shitufu, (Berko, 2001).

The history of cooperative in Nigeria before 1930 is not settled; but there is evidence of early attempts to establish cooperatives on Orthodox lines. In 1917, towards the end of first world war goods and commodities were very scarce. As a result whites' settlers in Lagos and other areas met to resolve the problem by organizing themselves into cooperative to import the goods they wanted. The cooperative societies were consumer and the organization was in keeping with their background. At the end of the war the cooperative societies wound up because there was no need for them as goods have started to pour in. In 1926, farmers in Agege in Western Nigeria who were agitating for the rise of prices of their agricultural commodities formed together to present their case to the government. In 1929, the government itself got interested in the plight of the farmers especially at Abeokuta, Agege and Ibadan and directed the farmers into association. Which later becomes the Nigeria Cooperative Cocoa Marketing Association based in Ibadan? The Department of Agriculture was 80 percent successful in the venture that many people associations were formed in the western, south and Eastern provinces and English speaking Cameroon. This was the position up to 1933 and it was the success of the Department of agriculture up to this period which prompted the government of Nigeria to invite C.F Strickland from India to look into the problem of introducing cooperative into Nigeria as a whole, and make his recommendations.

Other societies followed after in 1949, the Agricultural Cooperative Federation of Agricultural Cooperative Societies in Nigeria.

Credit Societies

Credit societies are made up of the following types:

- ✓ Cooperative thrift and credit societies (CTCS)
- ✓ Cooperative thrift and loan societies (CTLS)
- ✓ Cooperative credit unions
- ✓ Cooperative banks

Advantages of Credit Cooperatives

Onyeze (2009) maintains that America, Britain and entire Western Europe used cooperatives, among other measures, to wage war against poverty and today they seem to have survived it and are recognized as first world or developed countries. So Nigeria, that is still in the debt of poverty should embrace cooperative and credit societies which will help to fight those feature of poverty like, unemployment insufficient food supply, inadequate shelter, clothing for the common, ignorance, etc.

Amahalu (2007) identifies the advantages of credit cooperatives to include;

- It affords the opportunity for saving and borrowing loan with less difficult.
- Eliminates the alternative of going to money lender and their associated high interest rate.
- Provides for free education on the best way to use loan.
- Cooperative education means a combination of information dissemination and persuasion. Government extension staff provides these services free to cooperative.
- It is more permanent when compared with Isusu/Esusu group.
- It is readily available with less interest rate and formalities
- It is a tool for small and medium scale entrepreneurial development thus, creates opportunities for employment, reduction of poverty, crime wave, etc. Borrowed loan can be used to start small and medium scale ventures.

2.1.2: Concept of Thrift and Loan/Credit Societies

Cooperative Thrift and Credit Societies are usually formed by people belonging to the same craft, trade or work in the same organization. The money saved is given out as loans to its members usually twice or thrice of the members' total savings. The society charges a low rate of interest. By making credit available in this way, members of such societies are protected from the clutches of greedy moneylenders who charge high interest rate, A Cooperative Credit Society does not operate with profit motive. However, when profit are made, they are used for extending interest free loans to members.

Thrift and Credit Societies are the fastest growing type of Cooperative in Nigerian because it closely follows the financial self-help tradition prevalent in all Nigerian Communities. Thus

large sums of money will be accumulated through proper organization and management of Thrift and Credit Societies. The harnessing of the fund would provide the strongest base for Cooperative financing, especially when it is linked with government's policies on micro- credit delivery in rural and urban areas of the country (Ebonyi , 2006). Similarly, Adeyeye (1989) opined that Thrift and Credit Cooperative are societies that encourage members to save periodically and provide credit facilities to members. Thrift and Credit Cooperative have also been found useful in executing the function of rural banks thus enabling the rural dwellers to save and obtain the required fund for profitable investment.

Buden (2001) states that Thrift and Credit Cooperative Society is an organization that is established mostly in workplace for the employees with the main aim of enabling them to save some percentage of their salaries (normally deducted at source) and borrow when in financial difficulty. Promotion of thrift is the main feature of the Thrift and Credit Cooperative Societies. People, regardless of how low their income are capable of setting apart in savings small amount of their earnings, when they are given incentive to save and provide with a safe and convenient savings device. Thrift and Credit Society is a safe and profitable saving institution. It encourages saving by making people realize the economic and social benefits of thrift and the disadvantages of excessive and unproductive expenditure (Boavida, 2000).

Cooperative Thrift and Credit Societies have been instrumental to the mobilization of enormous savings and accumulation of funds that have helped millions of small income in the past thus creating Thrift and Credit System that have lifted members out of abject poverty and by helping them to establish their own business, own houses and other productive ventures.

Furthermore, Cooperative Thrift and Credit Societies are specialized in accepting savings deposits and making loans. They are often mutually held (often called mutual savings banks), meaning that the depositor and borrowers are members with voting rights, and have the ability to direct the financial and managerial goals of the organization, similar to other mutual enterprise. In the same respect, Boavida, (1996), explained that, thrift and Credit Cooperative have grown rapidly in Nigerian because commercial loans are either inaccessible or too costly, while public finance agencies fail to deliver the services needed by small borrowers.

Savings and Credit Cooperative serve a wide range of client including the poor and self-employed as well as formal sector employees, and have shown a potential to enhance financial and economic development in the country. They provide funds for emergency as well as non-exclusive starting loans to small enterprises that may eventually gain access to bigger bank loan to finance expansion.

Thrift and Credit Cooperatives have clearly demonstrated the capacity to savings to finance member's economic need thus reducing poverty and enhancing the standard of living of its members and indeed the larger society. According to Oladeebo (2003), Thrift and Credit Societies is a type of cooperative where what everybody saves is pooled together and members can take loans either to buy household items, vehicles, lands, houses or do business, but there is a bond that the borrowers must benefit from the pool. By this, credit and investment cooperatives therefore, have contributed to wealth creation and poverty reduction.

Thrift and Credit Society is often regarded as one of the Micro Finance Institutions (MFI) that promotes entrepreneurship and industrialization desirable for economic development. This type of cooperative provides members the opportunity to conveniently save their money and collect loans at cheaper interest rates without unnecessary collaterals and complex bureaucratic process as seen in the case of commercial banks where the borrower is colonized and turned to a slave based on terms of repayment. Germany used this type of cooperative to revive their economy (Amahalu 2007).

Thrift and Credit Societies aim at establishing a sound system of credit to cater to productive and provident needs of the members cooperators (Buden 2001). Promotion of thrift is the main feature of the credit cooperative movement. People regardless of how low their income are capable of settling apart in savings small amount of their meager earnings, when they are given incentive to save, and provided with a safe and convenient savings device and educated on the advantage of savings.

According to Buden (2001), Thrift and Credit Society is a safe and profitable saving institution. It encourages savings by making people realize the economic and social benefit of thrift and the advantage excessive and unproductive. Financial cooperative enables members to meet their needs for financial services, such as savings and credit at low cost and with easy access through pooling of limited capital. The members' mandatory purchases of ownership shares as the final base to enable the cooperative extend credit to members (Fonteyne, 2007). This type of cooperative is often known as credit unions, savings and credit cooperative or cooperative banks. Membership is typically based on a common bond that helps to establish trust between net savers and borrowers. Financial cooperative operates a different set of values and objectives than invest owned banks and are based on a model driven not only profit motives but also by social objective that focus on service and responsiveness of members needs.

According to Nwaoke, Arukhe and Uche, (2005) Cooperative Thrift and credit Society is an organization formed among close associates with the aim of encouraging them to make savings for future in a more conducive environment where paper work is minimized, everyone knows each other and there is trust. A thrift and credit cooperative is a free association of people with a common bond of saving and lending money to one another at low interest rate for productive purposes.

Berko (2001) sees cooperative thrift and credit societies as associations that have been of tremendous assistance to many Nigerians both in the urban and rural areas. The credit system is cheaper and more secured than the private money lenders with their high interest rates and discriminatory attitude of their services. The processes involved in obtaining credit from the CTCS are easier and not complicating. Unlike other financial houses which require collateral land **"come today and come tomorrow"** procedures.

Oguntinyinbo, (2011) asserts that credit cooperative societies are the most successful cooperative societies especially in the African setting. In Nigeria, credit cooperative was among the first type of cooperative to be established both formally and informally. It' is a voluntary association of people who willingly converge under cooperative society in order to encourage one another to

save a part of their earnings on a regular basis so as to provide for themselves loanable funds at an affordable rate of interest. A cooperative thrift and credit society is designed to encourage members to save part of their income on a regular basis for the future.

Umehali, (2006) described thrift and credit society as a society which mobilizes enough credits for disbursement to members by cooperating or working together with some agricultural cooperatives. In these regard, the relationship or corporation can take place in form of partial combination where the credit cooperative society agrees together with a marketing cooperative to achieve a purpose with each cooperative retaining its identity. The working agreement where the members retain their identity is known as the link-up system. The link-up system can take the following form:

An agreement where the credit society should give loan to members of the marketing cooperative society who should sell their produce through their marketing society and channel the sales proceeds through the credit society for the society to make automatic deduction of loan given before handing the balance to the members of marketing cooperative society. When credits are given out by a society to other societies or members that are in need, the purpose of doing so is to make more money through the payment of interest. The accumulated interest may be disbursed to the needy members. Also the society may invest the money for the growth and development of the society. Also education remains the bedrock of every society or organization that must succeed. This is so because without a thorough knowledge of the dos and the don'ts, such societies will remain in shamble thereby failing to achieve their objectives.

Temu, (2010) opined the need for cooperative education in promoting the activities of every thrift and credit society. According to him, if for example a choice between two alternatives is given, alternative 'A' is a cooperative society with a large amount of capital and no education, alternative 'B' is a cooperative society with a small amount of capital and knowledgeable members, our experience inclined us to choose the later. This choice is as a result of the fact that the more cooperative education the members possess, the easier it will be for its management. A society with ignorant members is a very heavy burden to the society. This is so because members

often times may not see the need to pay their thrift savings and on time. Most often, some members that collect loan do not repay, some do repay late.

A group of people who want to solve their financial problem through cooperative will come together and form credit cooperatives. They see the need to have a pool of funds from where they can give loans to their members. The activities of credit cooperative are mainly thrifting, loaning and recovery. Various authors have tried to give meaning to the concept of thrift and loan/credit society. According Burden (2001) for instance, thrift and loan is the workers credit society which an organization established in a work place for employees with the aim of enabling them (employees) to save part of their salary (normally deducted at source) and give them the opportunity to borrow when in financial difficulties. However, entry to the organization is voluntary. Umebali (2006) stated that thrift and credit society is a society formed among closed associates with the aim of encouraging them to make some saving for the future. He went further to say that people save primarily to invest. Okechukwu (2001) described cooperative thrift and credit society as a voluntary association of person united by a common bond who have joined together in order to encourage one another to save regularly part of earnings and provide themselves with credit at reasonable rates.

Again, World Council of Cooperative Thrift and Credit Society (WOCCU) defined Cooperative Thrift and Credit Society as non-bank financial institutions owned and controlled by members. It is also a democratic, member-owned financial co-operative. Each member, regardless of account size in the Cooperative Thrift and Credit Society, may run for the board and cast a vote in elections. As financial intermediaries, Cooperative Thrift and Credit Society finance their loan portfolios by mobilizing members' savings and shares rather than using outside capital, thus providing opportunities for generations of members. Cooperative Thrift and Credit Society exist to serve their members and communities. As not-for-profit cooperative institutions, Cooperative Thrift and Credit Society use excess earnings to offer members more affordable loans, a higher return on savings, lower fees or new products and services. They serve members from all walks of life, including the poor and disenfranchised (Ayanwale and Bamire, 2000). Cooperative Thrift and Credit Society provide members the opportunity to own their own financial institution and help them create opportunities such as starting small businesses, building family homes and

educating their children. In some countries, members encounter their first taste of democratic decision making through their Cooperative Thrift and Credit Society. Cooperative Thrift and Credit Societies are safe, convenient places to access affordable financial services. Cooperative Thrift and Credit Society offer a full range of financial services, giving members greater flexibility to meet their individual needs. In some countries, Cooperative Thrift and Credit Society are known by different names to better express those services. In Afghanistan, for example, Cooperative Thrift and Credit Society are called Islamic Investment and Finance Cooperatives (IIFCs) to comply with Islamic lending practices.

In Africa, they are known as Savings and Credit Co-operative Societies (SACCOs) to emphasize savings before credit. Acquisition of houses, cars, land, and payment of medical expenses, funeral expenses and rent advances are a few needs that members of a Cooperative Thrift and Credit Society expect to be satisfied with as and when they arise (Adeyemo; Openiyi; Onyenwaku and Ozoh, in Akerele, Aihonsu, Ambali and Oshisanya, (2014). The aims of a Cooperative Thrift and Credit Society are multiple and a mixture of financial and social aims. The financial aims can be broadly summarized as to:

- Promote thrift by encouraging members to save regularly.
- Provide loans to members at a reasonable rate of interest.
- Assist members to make more effective use of their financial resources. (Akerele, Aihonsu, Ambali and Oshisanya, 2014).

The current worldwide economic recession call for effective lending and excellent loan administration in order to increase the productivity of the peasant households. This will consequently affect the members of thrift and credit cooperative. Structurally, Nigeria's agriculture is in the hands of small- scale farmers, cultivating less than 5 hectares of land (Ijere,; Osuntogun and Oludimu in Akerele, Aihonsu, Ambali and Oshisanya 2014). Studies on smallholder loan schemes revealed that the schemes are constrained by poor loan repayment and this has been attributed by many factors. It had been observed that most small- scale farmers do not possess the ability to repay back loans at the due time because of so many constraints which later has an adverse effect on the cooperative thrift and credit society. With this effect the society

will not be able to meet the felt needs of their members. The need to prevent this drastic scenario in the society informs the objectives.

In view of the above definitions cooperative thrift society tends to deal with social and economic needs of the masses because cooperative thrift society deals with people who identified their common felt-needs and as such strive willingly and enthusiastically to solving them with resources at their disposals. Adekunle (2008) supported the view that CTCS are member based organizations that help member to address their economic problems. They are not banking institutes because of their goals. The ultimate goals are to encourage thrift among the members and to meet the financial needs of people who might otherwise fall prey to loan sharks and other predatory lenders.

Nwaoke et,al. (2005) observed that CTLS is an organization formed among close associates with the aim of encouraging them to make savings for future in a more conducive environment where paper work is minimized, everyone knows each other and there is trust. A thrift and credit cooperative is a free association of people with a common bond, save and lend money to one another at low interest rate for productive and provident purposes. Ehigiamusoe (2009) sees CTLS as alternative financial structures which meet the savings and credit members of urban salary earners to be able to bridge their cash flow gaps with loans from CTLS. While Onyeze (2009) observed that CTLS and CTCS have been tremendous assistance to many Nigerians, this credit system is cheaper and more secured than the private money lenders with their high interest rates and discriminatory attitude of their service.

CTLS or CTCS is a veritable vehicle for savings mobilization and participatory credit administration. The researcher views CTLS/CTCS as types of formal cooperative society mainly for savings mobilization, credit administration and loan recovery at a specified rate of interest and period of repayment.

Types of Cooperative Thrift Society

Cooperative thrift society consists of the following:

- ✓ Mutual group cooperative thrift society
- ✓ Thrift and credit cooperative society

✓ Thrift and loan cooperative society

Mutual Group Cooperative Thrift Society: This is type of cooperative thrift society where individuals contribute money according to the agreed amount, which is handed over to each member on rotational basis and is used for investment. Sometimes they will agree on the type of project the money should use for. There is no limited number of members. it depends on the people involved.

Cooperative Thrift and Loan Societies: Cooperative thrift and loan/credit societies are alternative financial structures which meet the savings and credit need of their members. In operations and targets of services they are microfinance schemes. According to Okonkwo (2010), the main objective or aim of credit cooperative is to give loans to members, to help them carry out their different businesses and also solve their financial needs. This objective is clearly stated in the bye-laws of the Cooperative society. He further maintained that the aim of cooperative thrift and credit society is to provide a remedy for rural/urban indebtedness. Peasants in the rural areas anywhere in the world live in poverty from year to year, often saddled with debts. The salary earners out of necessity, borrow from usurious merciless money lenders at excruciating high rate of interest at times, one hundred percent (100%) interest.

They often mortgage their lands, trees which will be used by the money lenders in case the borrower fails to repay the loan. The solution to this misery is the formation of credit cooperative societies.

Eze, (2003) observed that the main objective of thrift and credit cooperative societies is to save money through regular thrift contribution and to lend the money to members in turn at a minimum interest rate for definite purposes. Manual of the state cooperative division on cooperative thrift and loan/credit societies identifies the objectives of C.T.L.S to include;

- Encourage the habit of savings
- Provide a means whereby, savings may be made regularly
- Enable members obtain loans for productive and provident purposes at reasonable rate of interest and with convenient terms of payment.

2.1.3: Mobilization of savings by Cooperative Thrift and Loan Societies

Raising of venture capital is usually the responsibility of the owners of business while the employees render services and produce goods which are procured by the organization's customers. There are different sources of capital usually open to cooperatives including credit cooperative. These sources are grouped as owned and borrowed capital. Amahalu (2007) states that owned capital is obtained within the cooperative complex and borrowed capital is obtained outside the cooperative complex. Outside the cooperative complex is otherwise known as third party. Cooperative complex refers to the members of the cooperative and the cooperative business enterprise. Owned sources include; shares, reserves etc. sources of reserves include; retained annual shared capital, lapsed patronage grants and gifts, special earnings from assumption of member's liabilities to private outside lenders, manipulation of valuation etc. external sources of finance include borrowed fund from members of the cooperative, borrowed fund from the government, borrowed fund from financial institutions (commercial banks, micro finance banks, development banks etc) borrowed fund from other cooperative financial institutions, trade credit, etc. Ogbonna (2006) identified internal financing of cooperative to include entrance fee, share capital, savings deposit, admission fee and the external financing to include loans, deposits, overdraft, grants and aids.

- ✓ Thrift savings (ordinary savings)
- ✓ Special savings

Thrift savings or ordinary savings are compulsory and regular savings made by members of credit cooperatives. A member must regularly save a minimum sum prescribed in the bye laws or such other amounts the general meeting may fix. Every CTLS adopts bye-laws which regulate its operations. The bye-laws are approved and are registered by the Director of Cooperatives. Byelaws are in consonance with the provisions of cooperative legislation. Thrift savings are not easily withdrawable as long as the person is a member unless in exceptional circumstances like;

- A member not being indebted to the society
- A member not being sure for another member's loan
- Presentation of satisfactory evidence that the money is required for productive purposes.

Unlike thrift savings, special savings may be made for any purpose the member deem necessary. Special savings are easily withdrawable. After a prospective member has joined, thrift coupon is distributed for him to authorize the amount to be deducted from his or her monthly salary for

savings. The authorization paper will be sent by the payroll section for the deductions which will subsequently be paid into cooperative society's bank account. The analysis of the monthly deduction will be sent by the payroll section of the credit cooperative for postings in the personal ledger and other ledger after reconciling with the bank statement. Each member of a credit cooperative is also issued with a pass book which contains information's on savings and loans transactions with the society. The passbook is kept by the member and he or she sends it to the secretary of the cooperative society for record up to date at intervals.

Any disagreement discovered by a member calls for the attention of supervisory committee whose duty is to verify the correct financial situation. This procedure is possible when all the members are workers of the same organization. Savings can also be mobilized by the individual member paying his or her contribution to cooperative at the end of the month. Where members are into workers of the same organization or members are self employed deduction at source will not be possible. Mobilization of savings in this case will be by individual members' contribution Agu-Aguiyi (2012) showed that 49.09% of the individuals provide money from their personal saving. That is why they could not raise enough money for the societies. She further stated that credit societies raise most of their fund from micro finance banks (48.27%) because the microfinance banks charge lower interest rates and are more convenient.

2.1.4: Savings and Investment

From savings in cooperative thrift and credit societies, there are various media available to members of the cooperative societies where deposit and savings could be made which include commercial Banks, Federal Savings Bank (FSB), insurance companies for investment (Ibe 2007). Over a period, total savings must equal total investment. In order words, there must be equilibrium in the system. The level of income determines the level of savings. According to Adekanye (1986), if investment is greater than savings, then national income will rise but if savings are greater than investment, then national income will fall. This will continue until savings are reduced to such a level that they once against equal investment.

2.1.5: Loan Repayment

Loan issued to members could be repaid in two ways; the instalment repayments, where the loan amount and interest are repaid in piece meal within a stipulated period of time (usually six or twelve months). Full repayment at once; here members are allowed to take loan for a period of time agreed upon. They refund fully when due with all interest as accrued.

Maximum credit limits is the upper limit of an amount of loan that may be approved for a member during the society's financial year, Regulation 45, states that, in every registered society whose objects include and whose bye-laws permit the making of loans to members in excess of members' shares of interest or savings in the society, a maximum credit shall be fixed for each member by the general meeting. Maximum credit is usually a multiple of a member's total paid up share capital plus total savings. It could be double, triple etc.

On approval of a loan, the applicant must sign four records to show that he or she has received the loan. These are:

- Loan application form
- Loan application for
- Loan bond
- Loan register and payment voucher.

Also the borrower's sureties must sign both the loan bond and loan register for attestation, (Adesina 1998).

2.1.6: Loan Borrowing/Disbursement

This involves giving out credit or loans. Loans may be granted to members on application and for productive and provident purpose. Only members are eligible for loans unless where the cooperatives agree to do non member business. A member can borrow a multiple of the shares (if any) and thrift savings are fixed by the general meeting or bye-laws. Amahalu et al (2007) stated that loans are processed with loan application form which will be obtained from the cooperative credit society. It is filled by the member requiring the loan in his own hand writing and he will get two members to surety him as provided in the society's bye-laws. Application form should contain information on the personal circumstance of the loan applicant as well as information on which the loan evaluation was made loans are approved by the credit committee after examining

the loan application form and the two members who are to surely the member should study the form carefully. On receiving the loan the member borrow signs an authority for monthly deduction in order to liquidate the loan and it is normally presented to the payroll section for deductions.

2.1.7: Concept of Performance

Co-operative performance can be measured against five key measures as suggested by wei et al. (2010). These measures include procurement strategy and performance, marketing strategy and performance, distribution strategy and performance and finally information systems strategy and performance. Performance indicators can be categorized further, into quantitative and qualitative indicators. The quantitative performance can be analysed basing on the financial and statistical reports. The procurement strategy is employed by co-operative unions to enlarge the economy of scale in procurement and to control the purchasing costs.

A procurement committee is formed and composes of representatives of members of the co-operative union. The crop product is collected inspected, checked-in and bulked on behalf of members. The store management performance strategy is applied to decrease storage costs, increase sales profits and growth rate; improve product layout and management and to enhance chain store staffs' capabilities. The chain store management strategy should be led by an expertise team. The team members are responsible for monitoring various kinds of store activities and plans, such as, store plan, merchandise display system, commercialized skills, promotion activities, customer service training; customer complaint resolution and performance evaluation. It includes sales management and administrative management. The former focuses on monitoring and follow-up in sales related fiscal reports. The latter focuses on human resources development and training. In addition, several programs are implemented by the management team, such as, the safeguard plan, the motivation and compensation plan, and the efficient improvement program to decrease the ratio of lack-of-products and to increase customer visits.

The marketing strategy ensures a variety of products and services for customers. It is responsible for creating and initiating marketing campaigns, such as promotion plan and media advertisements. The Distribution strategy and performance enables members to distribute jointly

for cost reduction, enlargement in economy of scale and simplifying the process of distribution, delivery and transportation. If members process and package their products before delivery to the market, they achieve timely delivery, product turnover shortening, inventory costs reduction, ordering costs reduction and transportation costs reduction.

Roy cited in Kassali, Adejobi and Okparaocha, (2013) noted that one of the most important features of a successful cooperative enterprise is a sound accounting system which does not differ greatly from profit type firms and financial ratios used in evaluating a business firm's performance are valuable tools for measuring the strengths and weaknesses of a cooperative enterprise. This involves keeping an accurate record of each member-patron's purchases and sales through the cooperative. A monthly balance sheet and operating statement are usually required and the amount by which assets exceed liabilities is shown as member's equity in the balance sheet. The projected financial statements for an enterprise offers the financial analyst the ability to calculate financial ratios that allow him to form judgment about the efficiency of the enterprise, its return on key aggregates, its credit worthiness and solvency (Gittinger, 1992). Financial ratios can be analyzed using three parameters: efficiency ratios, Income ratios, and credit worthiness ratios.

Efficiency ratios enable analyst to form a judgment about the efficiency in assets use and allow expense control of an enterprise. Efficiency ratios include:

- (i) **Inventory turnover** which is the measure of the number of times that an enterprise turns over its stock each year and indicates the level of inventory needed to support a given level of sales. A low ratio means that large stocks must be held to ensure that production schedule is met and high turnover indicates that the enterprise is able to recover its inventory investment rapidly and that there is a good demand for its product or services.
- (ii) The **operating ratio** which is obtained by dividing the operating expense by the operating costs. This is most useful when operations of the same enterprise are compared year by year or when the enterprise is compared with similar industries.

- (iii) ***Income ratio:*** This shows the long term financial ability of an enterprise to generate funds for reinvestment and growth and to provide satisfactory return on investment. Income ratios include return on sales, return on equity, and returns on assets.
- (iv) ***Credit worthiness ratio:*** this enables judgment about the degree of financial risk inherent in the enterprise before undertaking a project. It shows what financing the project will need and the suitable terms. Credit ratio is measured by the current ratio and the debt-equity ratio. The current ratio which is the current assets divided by the current liabilities is an indication of the margin that the enterprise has for its current assets to shrink in value before it faces difficulty in meeting its current obligation.

According to Gittinger as cited in Kassali, Adejobi and Okparaocha, (2013), an important financial ratio for credit agencies is the debt-equity ratio which is found to be a good guide against “losses”. Another tool in financial performance analyses is the Balance Sheet. According to Okeya and Adediran (1996), the balance sheet is a “snapshot” picture of the financial ratio state of an enterprise. That is the statement of the assets and liabilities of a business at a particular date. It enables the management to deliberate on their operational achievement for that year before presentation to the shareholders. From that balance the following ratios can be computed: -

Current ratio: this is the ratio of current assets to current liabilities. The main purpose of this ratio is to measure the short – term solvency and it indicates that the company could readily cover its liabilities adequately through cash generated with its current assets.

Acid test ratio: The quick ratio or acid test ratio is a specific test of liquidity. It tests whether a business is expecting to realize enough cash from its current assets in the near future to pay off all its current liabilities.

Equity to assets: This ratio indicates the proportion of the shareholders’ stake in the assets of the business, i.e. the ratio of the business’ assets financed by the shareholders.

Debt to Equity: This ratio is important in knowing if the company or the cooperative society has over borrowed or not. A maximum “safe” debt/equity ratio is 50%, which means that one half of the total assets of a business are being externally financed.

Akridge and Hertel in Kassali, Adejobi and Okparaocha, (2013) found non- significant costs advantages between cooperatives and IOFs dealing in grain and farm supply, using a generalized trans-log cost function. Lerman and Fulton cited in Kassali, Adejobi and Okparaocha, (2013) compared the financial performance of two types of dairy farms between and concluded that cooperatives performed significantly better than IOFs in terms of leverage, liquidity and asset performance. In Nigeria, one the problems among cooperatives is lack of adequate capital and proper financial management. Adesina (1998) identified poor patronage, overdue loans, over population and the failure to put cooperative education and uphold cooperative principles as major problems of cooperative management in Nigeria. There is also the problem of financial performance records of cooperatives. Kassali and Adeyemo (2007) found that cooperatives societies operated in a competitive environment and engaged in development and poverty alleviation projects while membership and number of services provided to members were some of the determinants of cooperative performance.

An organization’s performance involves identifying plans to achieve those outcomes, carryout those plans and determining whether the outcomes were achieved (System Wise Consulting LLC 2009). In the same vein, organizational performance refers to how well an organization like Cooperative Societies is doing to reach its vision, mission and goals. Meanwhile, measuring performance in Cooperative organizations is a crucial aspect of effective management because performance is a very complex concept in which a lot of attention needs to be paid on how it is being measured.

According to Better Evaluation (2013), an organizational assessment is a systematic process for obtaining valid information about the performance of an organization and the factors that affect performance. Also, System Wise LLC (2009) was of the opinion that performance measure is a defined method for observing an attribute of organization performance and this specified what, when and how data will be collected from a specific attribute of performance selected for the

purpose of evaluating performance. In the view of Lively (2013), performance measurement provides many benefits to any organization particularly Cooperative Societies and creates a structured approach to reviewing goals, success and accountability. She further stated that measurement information is used to set goals, detect and correct Cooperatives where figures and facts are always in use, measurement information is an important tool for correction when the need arises. Also, measurement information helps in describing, improving, processing and accomplishment of the organizational documents.

According to Wei Meng (2010), a business organization could measure its performance using the financial and non-financial measures. The financial measures includes profits before tax and volume of the organizational turnover while the non-financial measures focus on issues pertaining the customers satisfaction and customers referral rates, delivery time, waiting time and employee turnover. Furthermore, Wei Meng (2010) agreed that the contributions of these two measures help the owners and managers to gain a wider perspective on measuring and comparing their performance, in particular, the extent and effectiveness and efficiency in utilizing the resources, competitiveness and readiness to face the growing external pressure including globalization.

There is another method of measuring organization performance called balance scorecard. The balance scorecard was developed in 1992 by Professor Robert Kaplan and Professor David Norton of Harvard University. According to Lard (2010), using the balance scorecard helps managers to resist the temptation to fixate on financial measures and instead monitors a diverse set of important measures. They also believed that the idea behind the balance scorecard is to provide a balance between financial measures and other measures which are important for understanding organizational activities that lead to sustain a long-term performance. The balance scorecard recommends that managers gain an overview of the organization's performance by tracking a small number of key measures that collectively reflect four dimensions which includes:

1. Finance
2. Customer
3. Internal business process

4. Learning and growth (Kaplan and Norton cited in Lard, 2010).

Desjardin, (2009) defines profitability as the potential of a venture to be financially successful. Although it may be found that one factor or a set of factors are not successful, abandoning the venture may not be its optimal solution. Financial ratios which use data from firm's statement of financial position, statement of comprehensive income, statement of cash flow, statement of cash flow and certain market data are often used when using financial performance of a firm. Myers (2004) ascertains that a negative relationship between debt and turn over on the basis that successful companies do not need to depend on so much external funding but rather they should instead rely on their internal reserves accumulated from past profits. It is expected that firms' most members will join SACCOs which have been profitable due to their going concern basis.

Kalehu and temu, (2004) found out that there was limited evidence that investors prefer to invest in profitable firms. They found out that profitability measured as the return on equity is negatively related to average shares held by institutional investors. Joetta (2007) studied the reason why Return on Equity (ROE) is used as the measurement of the amount of profit generated by the equity in the firm. ROE is an indicator of the efficiency of the firm to generate profit from equity. Jensen investment paper 2008 stated that ROE provides a useful measurement of profit generating efficiency because of the fact that it measures how much earnings a company can get on the equity capital. ROE is the company net income after tax divided by shareholder equity. Net income is the company earnings after paying all tax and expenses. Equity represents the capital invested in the company plus the retained earnings. ROE is inclusive of retained earnings from the previous period and communicates to the investors how efficiently the capital is reinvested.

Many managers find a process for developing a useful set of performance indicators for their organizations difficult. One reason for this is that many indicators give a useful but only partial view of the overall picture. Also some indicators are qualitative in nature, whilst the hard quantitative end of assessing performance has been dominated by financial analysis. In an attempt to cope with this very heterogeneous situation, balanced score cards have been used as a way of identifying a useful, but varied set of key measures. Balanced score cards combine both

qualitative and quantitative measures, acknowledge expectations of different stakeholders and relate an assessment of performance to choice of strategy. Employee based SACCOs have low delinquency because the employer guarantees loan recovery and remittance. The biggest challenge in credit management is to up sustainable and cost effective system of loan recovery and default control. Van (1995) the firms credit policies are the chief influence on the level of debtors, measuring the manager position to invest optimally in its debtors to be able to trade profitably with increased revenue.

2.1.7.1: Reasons/Effects of Poor Performance in Cooperative Thrift and Loan Society

For anything to happen in life there must be a cause or reasons behind that. Every thrift and credit society has the objective of performing reasonably but these objectives are not always actualized that is why some societies perform poor. According to Amahalu (2007); the following reasons could lead to poor performance in every cooperative thrift and credit society. They are:

i. Problem of overdue loan: Overdue loan have been a problem that have been pulling most thrift and credit societies down. In this regard, members who collect credit from the society promising to pay at an approved and appointed time failed to meet up with the agreement.

The credit given to them which serves as investment will yield more when returned and given to the next borrower but reverse is always the case. Due to non-payment of the loan, the chances of the society achieving its objectives will be at stake thereby performing poorly.

ii. Furthermore, he opined that inadequate funds affect the performance of most thrift and credit society. A society with the required amount of money for their day to day activities will do exploits. In some cases, the required or needed funds are not adequately provided. These could be as a result of some factors like low membership size, irregular payment of thrift savings, ignorance, etc. When members refuse to save regularly, it affects fund mobilization in such society and without enough mobilized funds, the challenges of giving credit to members will occur. The functions of thrift and credit societies will be affected or will not be accomplished if situation of inadequate funds occurs. Adebayo, (1999) noted that availability of funds in a society is a *sine-qua-non* to the overcoming financial challenges thereby performing reasonably.

iii. In the words of Nwankwo (2004), overdue loans are the major problems facing credit societies which prevent them from performing reasonably. This problem hinders the progress of the society in achieving its objectives which is fund mobilization and disbursing same to its members. However, the effect of the problem includes: The funds of the society are tied in the hands of those overdue debtors. Other members who want loan cannot get and it causes members to decline in attending meeting because they feel disappointed. Onyeze (2009) identified that irregular payment of thrift savings is another problem facing the society. This is a problem that is common with societies formed by artisans, traders, craftsmen, etc who are not under one employment.

2.1.8: Concept of Thriftiness (Savings)

According to Nayak (2013) saving is an important macroeconomic variable to be studied under the purview of the economic arena on an individual as well as household basis. According to classical economists like Adam Smith, David Ricardo and Mill, saving is an important determinant of economic growth. Saving components can be based on an individual or on household basis which proves to be the well being. For an individual thriftiness becomes the cushion for the future's intercourse of the unforeseen and upcoming as well as the uncertain circumstances of life. Saving is the part of the income earned by the individuals. For the higher economic growth for the country, marginal propensity to save should be higher but it helps to the multiplier process. The determinants and patterns of saving differ from rural to urban region. In rural areas, the marginal propensity to consume is more rather than the marginal propensity to save which seems to be vice-versa in urban areas where the marginal propensity to save is more than that of the marginal propensity to consume.

Saving in its literal meaning is that part of income which is not spent .In other words, saving refers to all or part of income which is not spent immediately, but reserved for future purposes. A developing country like Nigeria cannot afford to downplay the important subject of savings because of its relevance to the economic activity of the nation. The dearth of adequate saving in the nation will lead to dearth of investment and subsistence business development. Savings among cooperative farmers' is dependent on farm income, per-capita income, capacity to save, willingness to save, cultural attitudes and distribution of financial institution (Hussein and

Thrillwall, 1999) Furthermore, positive correlation has been found to exist between farming house hold and the absolute level of income (Bime, 2006). Real rate of interest and level of disposable income have also been found to be positive estimator of savings (Mejaha, 2005). Co-operators are expected to save a specific amount of money daily, weekly, monthly or quarterly as it is convenient among individual cooperative farmers.

Oxford Advance Learners Dictionary (6th Edition) define savings as money set aside for future use, while Pan Dictionary of Economics and Commerce view savings as an accumulated sum that an individual may either consume or save his/her disposable income. Thus, saving is a sacrifice of current consumption for capital accumulation which leads to investment and subsequently additional out-put that can be used for consumption in future. According to Alade (2006) saving means a surplus of production over consumption which can be achieved in two ways; either by reducing consumption or by increasing production.

The definition of savings as a reduction in consumption is aptly captured in the popular parlances that a farmer who consumes the seedlings meant for the planting season cannot expect to reap a bumper harvest the next time around. Saving is important for agricultural production in the life of cooperative farmers because it is used as credit for lending to needy individuals. The principal and interest is calculated to be paid back either install mentally or otherwise. The amount of loan that an individual cooperative member would obtain depends on the amount of saving he/she has. The amount that individual cooperative members save, however depend on a number of factors (Adeyeno and Bamire 2005).

Similarly, Ayanwale and Bamire (2000) affirmed that the saving behavior of cooperative members in developing countries is less dependent on the absolute level of aggregate income, but more dependent among other factors on the relationship between current and expected income, the nature of business, household size, wealth and demographic factors like age. Adeyemo and Akala (2007) stated that there is a high degree of responsiveness of saving to change in in-come among farming house hold in Nigeria.

According to Lewis cited in Nayak (2013), the central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing four or five percent of its national income changes into an economy where voluntary saving is running at about twelve to fifteen percent or more of the national income. According to Rao (1980) saving constitutes the basis for capital formation, and capital formation constitutes a major determinant of economic growth. In the developed countries, the income is generated at a higher rate which encourages people to have more savings which opines to more investment leading to more capital formation. But in a country like Nigeria, the income standard is almost uncertain and leads to more consumption rather than saving. On the average East Asia saves more than 30 percent of gross national disposable income while Sub-Saharan Africa saves less than 15 percent. Regional differences have been rising: over the past three decades Saving rates have doubled in East Asia and stagnated in Sub-Saharan Africa and in Latin America and the Caribbean. By a hike in aggregate saving, the social value of saving can exceed its private value in many developing countries, mainly in the poorer countries with India as one of them. In India, as in many developing countries, most households are poor and do not save. Here, there is a requirement of mobilization of rural savings for financial growth. Aggregate saving in any economy depends on a number of determinants. In the Nigerian economy, the household sector contributes a lion's share of the total saving which needs to be stepped up.

The present study examined the thrift and credit as one the main determinants of the saving pattern among the cooperative members population of Kaduna state especially in the context of aggregate saving behavior. Nigeria is fast losing its status as a country of big savers, due to the persistence of inflation at a high average rate of about 18.4 per cent during last quarters of 2016 further atrophied to stave off the downward pressure on their real consumption or lifestyle (NBS, 2016). The changing pattern of Nigerian household thriftiness is the result of a number of factors. The household thriftiness in Nigeria has experienced a variety of changes over the past one or two decades as due to the changes in lifestyles and consumption models of the citizens. The economy has noticed a lot of rises and falls in the household thriftiness rate. This might have resulted due to the variable composition of savings over the passage of time.

Savings play an important role in the economic development of both developed and developing nations, due to its significant influence on the circular flow of income in the economy (Iyoha et al., 2003). Savings are important means of improving well-being, insuring against times of shocks, and providing a buffer to help people cope in times of crisis (Rutherford; Zeller & Sharma, cited in Akpan; Udoh, & Aya, 2011).

The sustenance of household savings increases the possibility of future investment both at the micro and macro- levels in the economy. Economic theory postulates that households' saving is the difference between households' income and consumption. Household income is aggregate income a household earns from all sources in a particular period. Consumption on the other hand, is the total amount of goods and services that is consumed by households during a particular period. Solow (1956) has suggested that savings influence growth of the economy, as higher savings lead to capital accumulation and hence economic growth. The agricultural sector's productivity for instance, is largely depended upon the proportion of income farmers save from their farming activities (Adeyemo et al., 2007; Adeyemo & Banire, 2005). In the same way, the agro-based industry sub-sector's productivity is influenced by the proportion of remuneration workers earn and save over time (Steven, , cited in Akpan; Udoh, & Aya, 2011). Wages and salaries in most developing economies like Nigeria are poor and this has resulted to a general decline in the labor well-being (CBN, 2008).

In Nigeria, saving mobilization among workers is low and this is evidence in inability of most workers' to provide for the basic needs of life during active service years (Birdsall et al., 1996; Adigbo & Izeke, 2009). This should be a source of concern to policy makers, since about 90% of Nigeria's population is poor (World Bank, 2010).

2.1.8.1: Determinants of Savings Rate

According to Nayak, (2013), the household's decision to consume present or in the future is influenced by the current or permanent income. The significance of 'incentives' as a determinant of savings is that although there has been a long footing fright about the effects of the level of per family income upon proportion of income that is saved, there has been no comparable concern about the effect of variation in the relative prices of new income streams upon savings

and investment. A number of factors determine the saving rate in an economy. Nayak (2013) highlighted some of the important determinants which are discussed as follows:

Real Per Capita Income: The real per capita income of the individuals proves to be a foremost determinant of saving rate. When the income of an individual increases the consumption pattern improves which in the sense some part is left out which goes to saving as to secure one's unforeseen future. As rightly pointed out by the neoclassical growth model that higher savings rate will lead to higher steady situation levels of income (or output) per capita, while the endogenous growth theory models imply that higher savings rates would lead to higher levels of growth of income per capita. The real (in stable domestic prices) Gross Domestic Product (GDP) per capita is used as an estimation of real income. These two indicators rightly give an outlay to the saving pattern (Nayak, 2013).

Demographic Features: The saving can be most often determined by the demographic features like the sex ratio, the age distribution, and the rate of dependant population. Saving is highly determined by whether the female's contribution towards saving is more or the male is contributing to its highest level. Again, if the problem of the age distribution in the family contributing to the saving is optimum then the saving rate is determined in a different perspective. Aggregate savings is exaggerated by the age distribution of the population. If the carve up of dependant population is high than the income earning groups, the savings ratio will be low. According to the life-cycle hypothesis, a larger working population next of kin to the older population contributes to raise the savings rate. In an instance if the income earning population is comparably high to that of the dependant population then the saving rate will experience a hike which in some way will lead to income propagation in a country in a long term basis (Nayak, 2013).

Share of Agriculture to GDP: The people are engaged in agricultural activity in which the concentration of the rural population is more. As because of some way or the other the production level decides the fate of the individual farmers which sometimes experiences a high production level will have more income and will automatically encourage the people to save more and if the production is less than the income will have a fall resulting in a sharp fall in the

saving rate. The rural or agricultural sector of the economy can display different savings behaviour than the urban/industrial sector, especially in the case of developing countries, with large agricultural sectors. The agricultural sector could have a different savings rate due to a lower access to the banking system and because of lower and unbalanced incomes in the agricultural sector and sometimes, lack of access to other financial institutions nearby also determines the saving rate. Proper awareness and education is needed to have a proper understanding of the saving rate of a country with a remarkable share in the GDP (Nayak, 2013).

Real Interest Rates: Every banking institution including other financial institutions encourages people to save with an expectation of giving a considerable amount of rate of interest on the saving amount. This rate of interest determines the saving rate of the individuals. When the rate of interest is high people are more interested to save rather than invest and when the rate of interest is low people are less inclined towards saving rather than they are likely to invest more in an expectation of getting more rate of return. There is a negative and an inverse relationship between savings and rate of interest. Critically, an increase in interest rates will have an indefinite effect on savings because of a positive substitution effect towards future consumption and a negative income effect due to increased real proceeds on saved wealth (Nayak, 2013).

Social Barriers: The society we live in is full of constraints likely due to variations and distinctness in the age, sex, culture, tradition, social taboos, and many more which by playing an important role determines the saving behaviour of any region, state or country. Income plays a major role in identifying the saving distinctness among different groups but income cannot always remove all the barriers for availing the opportunities because of the variations offered in the context of culture, gender, class etc. People belonging to diverse ethnic groups can have a refutation to the equal admittance to education, employment, and other basic services by the social and financial institutions as well as the investment opportunities available (Nayak, 2013).

Structure of Savings: domestic savings originate from three principal sectors namely: (i) household sector, (ii) Private-corporate sector and (iii) public sector. The household sector comprises of individual, non-corporate business and private collectives like temples, educational institutions and charitable foundations. The saving can be held in the form of increases in (a)

Liquid assets like currency bank deposits and gold (b) Financial assets like shares, securities and insurance policies and physical assets. The corporate sector includes joint stock companies in the private business sector, industrial credit and Investment Corporation etc., and cooperative institutions. Saving of the corporate sector is represented by the retained earnings of this sector. Government sector consists of the central and state government, the local authorities and various government and department undertakings; hence the saving of this sector relates to the budgetary surplus on current account of the central government, state government, local authorities, the current surplus of various government departments and retained projects of government undertakings.

2.1.8.2: Importance of Savings

Hussein and Thirlwall (1999) examined productivity growth in the progress of credit and insurance markets, and the changes in the social security system. In view of the fact that differences in growth and in fiscal policy cannot explain the facts fully, what other factors may explain the high saving rate. The time-series and cross-country verification suggests a strong positive connection between growth and aggregate saving. Based on that indication the yield slowdown, together with the retiring de-regulation of the credit and insurance markets and the changes in the social security system surveyed appears as the main candidate to account for the changes in saving rate. Similarly, kinyondo (2009) identified the factors that make household investment as occupation, expenditure, assets and saving. Any assessment or policy pertaining to finance and development by government, the private sector or financial institutions geared towards improving saving and investment must integrate these factors.

The factors that constrain household investment are occupation, expenditure, assets and saving. Chandra and Long (2003) examined the determinants of household saving in the process of economic development, in the beam of the Taiwanese experience for the duration of the period 1952–99. They found that the household saving rate rises with both the intensity and the rate of augment of household disposable income and that the real deposit rate has a significant affirmative impact on saving. Public saving they revealed seems to throng out private saving, but less than proportionately and that while both old- and young-dependency in population have a off-putting impact on the saving rate, the level of the impact of the former is far greater than with

the intention of the latter. Employing an active section study of the determinants of the household saving rate using a life cycle model and section data on Chinese provinces for the 1995-2004 period from China's household survey, Horioka and Wan (2007) established that China's household saving rate has been high and rising and that the main determinants of variations overtime and over space are the lagged saving rate, the income growth rate, the real interest rate and the inflation rate. However, they found that the variables relating to the age structure of the population usually do not have a significant impact on the household saving rate. These results they claimed provide mixed support for the life cycle hypothesis as well as the permanent income hypothesis, and that they (the results) are consistent with the existence of inertia or persistence, and imply that China's household saving rate will remain high for some time to come.

2.1.9: Concept of Loan

Loan plays a vital role in economic transformation and economic development. Loan is a crucial input required by co-operative members to establish and expand their businesses with the aim of increasing the income of the households and the nation in general while augmenting the individual borrower's ability to repay borrowed funds. . Access to credit is regarded as one of the key elements in raising agricultural productivity (Ojiako and Ogbukwa, 2012). For small-scale enterprises to grow up to medium and large-scale level, the need for formal credit source is indispensable because formal financial sector have the financial capacity to meet their growing credit demand, which the informal sector is incapable to supply (Gebeyehu 2002). Credit enables the poor farmers to tap the financial resources and take advantage of the potentially profitable investment opportunities in their immediate environment (Zeller and Sharma in Idoge, 2013).

According to Okonkwo (2010), CTCS serves as a mean through which members obtained loans to tackle their socioeconomic needs. The CTCS relieves the ministries and the parastatal from the burden of overdependence in quest for loan. Similarly, Berko (2001) conducted a study on the roles of credit societies towards improving people's life. According to him, some of the key roles include provision of loan able funds, serving as a medium for savings etc. when a credit society carries out functions as mentioned above, there is a tendency that such society will perform well. According to Nkwankwo (2004), a loan able fund promotes the existence and

activities of CTCS. Once members are able to save with society, the society will have enough to carry out its responsibilities. Agu (2007), conducted a study on impact of credits in Economic Development in Enugu State. According to him, credit is very crucial in every business for expansion and growth. However, the performance of any society could be determined to be the level of its growth. According to him, development can exist when there are means to bring it to place. With these evidence, it has been confirmed that savings is sine-qua-non to every society if they really want to perform effectively. It is through savings that loan able funds will emerge.

The use of credit has been envisaged as one way of promoting technology transfer, while the use of recommended farm inputs is regarded as key to agricultural development. While credit to the agricultural sector remains a veritable tool for agricultural transformation and economic growth, credit repayment is of paramount importance to have viable financial institutions. Despite the importance of credit, many of the farmers do not have sufficient access to credit from formal financial institutes. Their major source of finance, especially at the start up stage, is the informal sector (i.e. from friends, relatives, local money lenders, e.t.c.). This poor credit access from formal financial source, based on the experience of some developing countries, arises partly from biased government policy, due to the operational practices and procedures of the formal financial institutions and the internal problems of small scale enterprises themselves. Given the income level of the average cooperative members in Nigeria and the constraints in access to credit, it is believed that credit is an indispensable tool for achieving socio-economic transformation of the cooperative members household. If well applied, it would stimulate capital formulation and diversified agriculture, increased resource productions in farming, marketing efficiency and value addition while enhancing net farm incomes (Nwagbo in Idoge, 2013).

Despite the acclaimed importance of loan in businesses promotion in Nigeria, empirical studies have shown that their management and repayment have been burdened with numerous challenges. A study by Rhaji (2000) found that the lack of adequate accessible and affordable credit is among the factors that contribute to the decline in the contribution of the informal sector in Nigeria economy. On the other hand, the high rate of defaults among borrowers remained serious impediment. Awe (2010) reported that the high rate of default arising from poor management procedures, loan diversion and unwillingness to repay loans had threatened the

sustainability of most public credit schemes in Nigeria. Olagunju and Adeyemo (2007) in buttressing this fact, succinctly argued that the problem of default in loan repayment is one of the factors that militated against the development of the agricultural sector in Nigeria, because it dampens the willingness of the financial institutions to increase lending to the informal sector.

In addition to other factors of production credit is considered as more important because it determines access to most of the resources required by cooperative members. The provision of Loan can be regarded as an important mechanism for raising the incomes of rural populations mainly by organizing resources for more productive uses (Kuwornu et al., 2012). Credit within households is not only necessitated by the limitations of self-finance, but also by uncertainty pertaining to the level of output and the time lag between inputs and output (Dadson, 2012). To increase agricultural productivity and assist households in maintaining food security, many governments in developing countries initiated credit programmes so that farmers will have access to formal sources of credit without ‘bankable’ collateral, high administrative costs and perceived high risks associated with agricultural and small scale farmers (Dadson, 2012, Awe, 2010).

The Micro Finance Bank serves as a reliable source of credit to smallholder farmers and small scale entrepreneurs who do not necessarily have the assets required by credit institutions to serve as collateral since government provides some form of guarantee in terms of loans disbursed by the bank. This act by government saw many people acquiring loans to either purchase land, production loans and farm machinery such as tractors, ploughs and harvesters. The Bank is also faced with challenges of clients not honouring their contractual obligations on loan repayments. This negatively affects the bank’s loan book since its success is dependent on customers repaying their loans in accordance with the mutual agreements reached by both parties. There are small scale enterprises who no longer enjoy financial services from the Bank because of outstanding amounts from previous years. Such clients have to look for other sources of credit because the bank is restricted by the CBN to disburse loans to borrowers who willingly or unwillingly fail to repay their loans.

2.1.10: Factors That Facilitate Loan Repayment among Cooperative Members

In the past five decades, cooperative has evolved from an innovative idea into an important tool for improving development. The growth of cooperative society according to Berger and Barrera, (2007), has attributed to the competition from microfinance may lead to loss of economies of scale for informal lenders, as fixed costs have to be spread over a smaller volume of lending, causing screening and monitoring costs to rise (scale diseconomies); low risk borrowers, leaving high risk borrowers to be served by informal lenders; channeling formal credit through informal lenders (collusion) and inflexible and frequent repayment requirements of microfinance loans induce increased borrowings from informal lenders, raising demand on the informal market (crowding in). Roslan, and Karim (2009) found excessive lending due to overconcentration of microfinance contributing to rising delinquencies in Nicaragua, Morocco, Bosnia and Herzegovina, and Pakistan. These scenarios have implications for the repayment ability of the borrowers particularly smallholder farmers whose enterprises are climate dependent.

Roslan and Karim (2009) categorized loan repayment behaviours into three namely characteristics of the borrower-specific, enterprise-specific, and institutional variables. Hietalahti and Linden (2006) analysed the socio-economic impacts of microfinance and repayment performance: a case study of the Small Enterprise Foundation in South Africa and concluded that repayment problems were caused by group heterogeneity. According to Dadson (2012), the question of repayment of loan by farmers is one of the important issue since it influences access to credit by the farmers. Onyeagocha, Chidebelu and Okorji (2012) stated that one way to tackle the loan repayment challenges is to investigate the factors which affect the loan repayment. Bime, (2006) posits that as the number of loans for the poor increases, there should also be a positive relationship with recipients' income. Ajayi,(2012) revealed that Access to future loans becomes an important incentive for repayment when obtaining a new loan is perceived as being more beneficial than defaulting Copestake et al. (2005) firmly believe that microfinance is just but one of the factors that leads to increased income. In Ogun state Nigeria, factors that improves smallholder cooperative members loan repayment were age, level of education, farming experience, net farm income and loan size obtained, while in Abia state Nigeria, the amount of informal loan repaid was significantly influenced by gender, distance between home and source of credit, household size, interest rate and farm income Isitor et al., 2016; Osondu et al., 2015).

In Punjab province of Pakistan, Mahmud et al. (2007) reported that loan repayment was influenced by inadequate loan, supervision of bank employees, form of loan use, high interest rates, and changes in business and residence of the borrower. Chauke et al. (2013) found in the Capricorn District of South Africa that factors that loan repayment affect credit access. In Ghana transitional zone Abankwah et al. (2016) found that farmer's age, sex, household membership, income and farming systems significantly influence loan repayment capacity.

More so, “relatively low interest rate, post disbursement monitoring, moratorium and repayment schedule were institutional factors” found to influence loan repayment by smallholder farmers. Social capital can facilitate access to credit, but also affect repayment behaviour of borrowers (van Bastelaer, 2000). Yogendrarajah and Semasinghe (2015) found that decision making and control over assets significantly negatively influenced repayment. Loan repayment performance of Farmers groups in Techiman, Ghana were affected by group characteristics such as “polarization of religious background, number of married personalities in a group, size of a group, gender balance of a group and the variety of crops cultivated by the group” (Ayogyam et al 2016). Sharma and Zeller (1997) report that credit groups with higher percentages of women had significantly better repayment rates.

The ability of women to outperform men in terms of repayment in microfinance led the Grameen Bank in Bangladesh to switch to a nearly entirely female clientele (Armendariz and Morduch 2005). Hulme (1991) and Gibbons and Kasim (1991) reported that greater proportion of women than men paid on time in Malawi and Malaysia. Factors such as credit analysis regards leadership and human relations; commitment and confidence; internal locus of control; self-efficacy; calculated risk taking; need for achievement; and opportunity seeking were reported by Henning, and Jordaan (2016) as important indicators of the ability of potential borrowers to repay their loans. The comparison of repayment performance of farmers and non-farmers who borrowed credit in individual and group-based schemes from formal banks in the Mekong Delta (MD) in Vietnam using a Tobit model found that repayment in group schemes was positively affected by educational level and by loans to farmers, and negatively by the loan amount, while repayment by independent borrowers is positively affected by the loan amount, farmers as borrowers, and the gender of borrowers (Nam and Duy 2016).

According to Oladele and Ward (2016), repayment patterns were conceptualized as no repayment, partial repayment and total repayment. This was based on the amount of loan repaid less the amount received within the stipulated pay-back period which is the standard recovery period. Mafisa. Daff (2015) stated that “repayment should be in line with the income cycle of the specific enterprise. Clients may also use income from other sources to repay the loan. Capital and interest must be redeemed within the agreed loan period”. For the analytical purposes, no repayment was operationalized as inability to pay within the expected period; partial repayment was depicted as the repayment of certain proportion of the loan within stipulated period while total repayment was the full payment within the cycle of the enterprise.

According to Ojiako, Idowu, and Ogbukwa, (2014) loan repayment performance or non performance (default) and their determinants have been variously discussed in literature. Different analytical techniques/models have been applied. Included among the commonly used techniques is the ordinary least square regression analysis that defined the actual amount of money repaid or in default as a dependent variable (as in Oladeebo and Oladeebo, 2008). For some authors, the proportion or percentage of loan due for repayment that was actually repaid or not repaid was used as dependent variable instead (Oke et al., 2007). Other works have used the logit model, with the proportion of credit repaid or in default as a dependent variable (Gebeyehu, 2002), the logit/probit analysis, using dummies assigned 1, if borrower repaid in full and 0, if otherwise as dependent variables (Oni et al., 2005; Kohansal and Manosoori, 2009; Roslan and Karim, 2009).

However, in the case of Afolabi (2010) a linear discriminant analysis was used to discriminate the socio-economic characteristics of defaulters and non-defaulters in the south western Nigeria. The underlying explanatory factors can be basically classified under four headings, namely, individual/borrower, firm, institutional/lender, and loan characteristics affecting repayment performance (Nawai and Shariff, 2010). The identified individual borrower’s characteristics have included the age of borrower, gender, level of education, farming experience, farm size, household size, credit use experience, household farm income, non-farm income, type of business activity, and amount of business investment. The characteristics of the project include ownership structure, type of project, and distance between project location and the lending bank.

The loan size, repayment period, collateral value, number of installments, and application costs are among the identified loan characteristics while the institutional/lender factors had included the time lag between loan application and disbursement, interest rate, access to business information, access to training on loan use, cooperative membership and penalty for lateness to group meetings (Ojiako, Idowu, and Ogbukwa, 2014).

An alternative classification by Roslan and Karim (2009) identified three broad categories as characteristics of the borrower, characteristics of the project, and attributes of the loan. The analyses had led to mixed conclusions. For example whereas Oni et al. (2005) reported a negative influence of individual borrower's level of education on loan repayment performance, Oladeebo and Oladeebo (2008) reported a positive influence. Also, the amount of loan approved or received, that is loan size, could have a positive effect on repayment performance (Oke et al., 2007; Kohansal and Manosoori, 2009) but Roslan and Karim (2009) also reported a negative effect of the variable. There is an inexhaustible list of works on determinants of loan repayment behaviours of borrowers (Ojiako and Ogbukwa, 2012; Afolabi, 2010; Nawai and Shariff, 2010; Kohansal and Mansoori, 2009; Papias and Ganesan, 2009; Roslan and Karim, 2009; Acharya, 2006; Oni et al., 2005; Oladeebo, 2003; Gebeyehu, 2002; Rahji, 2000).

According to Ojiako, Idowu, and Ogbukwa (2014), as a step towards enhancing loan repayment performance and curtailing loan defaults among farmers, cooperative movements were introduced. Under the cooperative membership model, people were encouraged to become members of cooperatives associations, which would be registered, have elected officials, and be holding regular meetings with documented minutes. The belief was that working under such associations and groups, farmers would be empowered to speak and act with one voice and, consequently, it would become easier to process credit requirements through financial institutions and also facilitate the recovery of credit granted to members. It becomes imperative to investigate the loan repayment capacity of the smallholder cooperative farmers with a view to determining the factors that influenced it (Ojiako, Idowu, and Ogbukwa, 2014).

2.1.11: Loan Default and Its Implication on Cooperative Performance

Nicholas (2010) explained that default occurs when a debtor has not met his or her legal obligations according to the debt contract, e.g. has not made a scheduled payment, or has violated a loan covenant (condition) of the debt contract. A default is the failure to pay back a loan. Default may occur if the debtor is either unwilling or unable to pay his or her debt.

This can occur with all debt obligations including bonds, mortgages, loans, and promissory notes. Defaulting on debt obligation can place a company or an individual in financial trouble. The lender will see a default as a sign that the borrower is not likely to make future payment. Njiru (2006) carried a study on a list of non-performing loans including all relevant details which he assessed case by case basis in order to determine if the situation is reversible exactly what can be done to improve repayment capacity and whether or not worked out collections plans have been used, provision level should be used to determine SACCOs capacity to withstand loan default. Gachara (1990) studied investment practices of reserve funds in SACCOs, the study found out that the criteria of investing on reserve funds could affect the performance of SACCOs by reducing the financial problem and risk brought about by the defaulters.

Loan repayment performance is an important concept for all the lending institutions. It is a measure of whether loans are settled up in full according to the loan contract or not. The higher loan repayment performance leads to the higher probability of the collecting interest revenues and lower loan losses in a lending institution (Okurut and Kinyondo, 2009). On the other hand, the poor loan repayments have a harmful impact on institutions capital, earning as well as in realizing its objectives and may even lead to a financial institution collapse. For instance, failure to manage loan repayment performance results in losses and high delinquency management costs (Ledgerwood, 2000). The higher expenses are for closer monitoring, more frequent portfolio and legal fees for pursuing seriously delinquent loans. Such costs adversely affect the generated income, and, in general, the operations of the lending institution, thus, the institution becomes unsustainable (Njanike, 2009).

Recently, the issue of credit risk management has become hot. Microfinance institutions like thrift and credit cooperative societies prove to be highly vulnerable to poor loan recovery

(Oguntoyinbo, 2011; Ayayi and Sene, 2010; visits to borrowers, more extensive analysis of the loan Arvelo et al., 2008). The point is that Micro-financial institutions have information opaque about their borrowers, and this plays a greater role in their failure in Credit Risk Management (Hermes and Lensink, 2007). Due to their weak institutional and managerial capacity they are not easily able to quantify quality project which means they suffer from adverse selection problem. Also, they cannot ensure that the loan issued not channeled in an alternative project that was not the reason for receiving credit which indicating moral hazard problem (Berger and Udell, 2002).

Similarly, cooperative financial institutions cannot detach themselves from loan recovery problem. The issue is, as other microfinance institutions provide credit that lacks collateral to the poor. In cooperative, the repayment is complicated and requires keen understanding and more innovative strategies in dealing with it. The reasons are; firstly, co-operative institutions has mixed objectives to fulfill (Royer, 2014; Lagat et al., 2013). One, as a business entity, they have a financial objective of delivering services in a way that ensures the generation of income. To cover the cost of funds, other operational costs, and surplus for recapitalization purposes. Two, as co-operative, they focus on social objectives, for instance, enable members to save their money and access credit easily and at a lower costs. Three, they have to mobilize savings and to repack the savings received to issue loans at a favorable price that benefits the members of the institution. Indeed, the second and third objectives are contradicting with the first which is focusing on sound financial stability. The reason is that the second and third objectives are likely to increase the adverse selection and moral hazards problems that, therefore, results in poor credit management.

Secondly, many stakeholders take for granted that thrift and credit cooperative have a worthy portfolio, given the fact that these institutions play as cooperatives and have their standards of operations. In this case, the assumption lies in the three traditional methods of credit risk management in thrift and credit cooperative that bonded to the cooperative attributes. First, as other “savings and credit” institutions, thrift and credit cooperative use members’ savings deposits as security to minimize financial risks (Absanto and Aikaruwa, 2013; Huppi and Feder, 1990). A member-borrower should borrow depending to his/her savings such that in case of

default, the member's savings could recover the loan. Second, principally thrift and credit cooperative are formed and serve persons with a similar field of membership/common bond. That means members know each other, as well as members, have the same focus, which then increases trust and eventually maximizes loan security (McKillop and Wilson, 2011). Third in their management structures, they have credit committees that have the task of implementing credit policy, especially in evaluating and monitoring loans.

Despite these noble practices and theoretical expectations, the current experiences do not concur with the premise that thrift and credit cooperative are risk-free institutions. The current situation signals the possible severe and unrestrained financial risk problem in thrift and credit cooperative.

According to Johnson & Scholes (2007), many managers find a process for developing a useful set of performance indicators for their organizations difficult. One reason for this is that many indicators give a useful but only partial view of the overall picture. Also some indicators are qualitative in nature, whilst the hard quantitative end of assessing performance has been dominated by financial analysis. In an attempt to cope with this very heterogeneous situation, balanced score cards have been used as a way of identifying a useful, but varied set of key measures. Balanced score cards combine both qualitative and quantitative measures, acknowledge expectations of different stakeholders and relate an assessment of performance to choice of strategy. Employee based thrift and credit cooperatives have low delinquency because the employer guarantees loan recovery and remittance. The biggest challenge in credit management is to up sustainable and cost effective system of loan recovery and default control. Van (1995) the firms credit policies are the chief influence on the level of debtors, measuring the manager position to invest optimally in its debtors to be able to trade profitably with increased revenue.

2.2: Empirical Review

Different studies have been conducted on the performance of thrift and credit societies. Ojiako, Idowu, and Ogbukwa, (2014) examined Loan repayment performances of cooperative members in Yewa area of Ogun State, Nigeria. A multistage random sampling technique guided the

selection of 110 respondents on whom data were collected using structured questionnaire. Data were analyzed using descriptive statistics, correlation, and multivariate regression analytical techniques. Results revealed that the average age of respondents was 44.7 years with 36.4% falling into the 20-40 years active working population. Loan distribution showed that 67.3% of respondents received cooperative credit while the remainder received loan from other sources. Only 74.0% of all loans was fully repaid at due dates. Respondents' average credit use experience was 9 years.

A negative association was found between age and repayment performance, suggesting that younger farmers were better performers. From regression results, repayment performances were positively influenced by non-farm income ($p < 0.05$) but negatively affected by loan size ($p < 0.01$). Rates of response were inelastic for all variables: a 100% increase in loan size caused a 27.7% decrease while corresponding increase in non-farm income resulted to a 14.5% increase in repayment performance. Decomposed elasticity revealed that a small change in each variable resulted to a relatively higher change in the elasticity of repayment intensity than it had in elasticity of probability to repay by borrowers that have started repaying. The synergy between repayment performance and non-farm income underscored the strength of livelihood strategies and diversification in boosting economic activities of rural farmers. Loan packages that recognize this synergy and educate borrowers on befitting complementary livelihood options would likely achieve less rates of default from beneficiaries.

Ndubisi (2014) examined the performance of Cooperative thrift and credit societies in Enugu metropolis. A survey research method was used for the study. The population consisted of the members 38 registered Thrift and Credit Cooperative Societies in Enugu metropolis. Out of a total population of 850 members, 272 members were involved in the study using Taro Yamani formula. Data were gathered from some CTCS through questionnaires distribution, journals, textbooks etc. Data used for this study were collected from both primary and secondary sources. Primary sources of data were oral interview with the societies' officers and administration of structured questionnaire to the members.. Data were analyzed and three hypothesis were tested. Results revealed that Cooperative Thrift and Credit Societies as a form of business entity has numerous potentials towards economic growth and development. Some of these potentials

include poverty reduction, employment generation, rural development and many others. It is only the societies that performed creditably that will achieve the above mentioned potentials. The result showed that performance of CTCS in savings mobilization was in terms of ability to attract savings deposits from members. Meanwhile, the major assumption of this study is that the performance will to a large extent depend on the socioeconomic profile of the members:

Specifically, the study is designed to study the socioeconomic characteristics of the members, examine savings activity and assess the volume of credit applied for, approved, disbursed and repaid by members. It is shown that most members who borrowed between N50,000 and N400,000 repaid while other members who borrowed between N401,000 and N1,601,000 found it difficult to repay the loan to their society. Such attitude deprived others from having access to the fund thereby hampering the society's growth. Aggregate savings from the societies studied was enough to alleviate financial problems of the members. Although, some societies made very low savings within the period under consideration, the volume of loan disbursed were not enough for business expansion.

The study of Hassan (2011) sought to determine the performance of Credit and Investment cooperative societies in selected Local Government Areas of Kano State. Data were collected from 80 randomly selected Credit and Investment cooperative societies. Descriptive statistics were used to analyze data emanating from the research questions while multiple regression analysis was used to test the hypotheses generated. Research results showed that most of the Credit and Investment cooperative societies were newly established, some were not more than two years old with small memberships of between 20 to 30 members. The sources of funds of the cooperatives were largely internal and include share capital, reserves and savings deposit of members. Most of the responding cooperatives were not well capitalized which might be due to the problem of obtaining loan from other external sources to supplement the internally generated funds available. An examination of the number, type and value of industrial establishments by the cooperatives Findings equally showed that most of the cooperatives owned just one or two industrial establishments. The study also showed that capitalization, age and revenue were important determinants of small scale investment nature of cooperatives in the area. Capitalization and age show positive relationship with small scale industrial investments.

Constraints militating against small scale industrial development by cooperatives were found to include low capitalization, lack of extension contact, inadequate access to loans, lack of visionary leadership, and low level of education.

Oke, Adeyemo, and Agbonlahor (2007) did an empirical analysis of microcredit repayment in Southwestern Nigeria. Multi-stage stratified random sampling procedure was used to collect data from 200 members of microfinance institutions (MFIs) in the study area. Linear multiple regression was used to determine the variables that affected microcredit repayment. The mean weekly contribution of the members of microfinance nongovernmental organizations (NGOs) in groups was ₦ 772.62 and the mean borrowing was ₦ 23, 55.25 per annum. On the average, they pay 90 percent of their microcredit as at when due. The F-values indicated that the microcredit repayment model had good fit ($p = 0.01$) with an adjusted R of 0.36. The variables that significantly influence repayment: income, distance between dwelling place and bank, amount of business investment, socio-cultural expenses, amount of loan borrowed, access to business information, penalty for lateness to group meetings, membership of cooperative society, number of days between loan application and disbursement and poverty indicator were analyzed. Poverty was found to hamper repayment. Nevertheless, the study supports findings that members of microfinance groups are creditworthy.

Chirwa (1997) specified a probit model to assess the determinants of the probability of credit repayment among smallholders in Malawi. The model allows for analysis of borrowers as being defaulters or non-defaulters. Various specifications of the X-vector were explored by step-wise elimination. However, only five factors (sales of crops, size of group, degree of diversification, income transfer and the quality of information) were consistently significant determinants of agricultural credit repayment. The explanatory power of the model is plausible with the log likelihood statistically significant at 1- percent. Four independent variables – gender, amount of loan, club experience and household size were not statistically significant in various specifications.

Okechukwu, Umebali, and Ugeh (2016) evaluated the performance of co-operative societies in Delta State focusing on the degree of adoption and application of internal control systems. Poor

performance and eventual collapse of most co-operative societies in Delta State has been attributed to either non-adoption or ill application of internal control measures inherent in the organizations. The study specifically examined the various Internal Control systems in use by co-operative societies, determined members' perception of the effectiveness of their internal control system and the challenges of implementing effective internal control systems in co-operatives. Primary data were collected using well-structured and pretested questionnaires, scheduled interviews and panel discussions. Multi stage random sampling technique was used to select 60 co-operative societies. The data collected were analyzed using descriptive statistics such as frequency counts, means and percentages as well as inferential statistics like ANOVA, Pearson coefficient and multiple regressions. The result of the study revealed that internal control system has significant influence on the performance of co-operatives, the internal control system being used by co-operatives are majorly physical control, financial authorization, arithmetic and accounting, There is a significant difference between perception of the effectiveness of internal control of co-operatives in urban areas and those in rural areas, lack of written procedures, poor and inexperienced management are the major challenges of the use of effective internal control system.

Njihia and Muturi. (2015) established the factors affecting the financial performance of savings and credit cooperative societies in Kiambu County. The objectives of the study that were used were loan default, dividend policy and membership size of the savings and credit cooperative societies. Their research involved the use of a descriptive design. The research focused on all the 12 Sacco's in Kiambu County licensed by SASRA the regulatory body by the end of 2014. The study was based on data published from the audited annual reports of the Sacco's and covered a period of 5 years from 2010-2014. Quantitative data collected was analyzed by use of descriptive statistics and inferential statistics using SPSS version 17 and presented through percentages, mean, standard deviation with the key independent variables being Return on Assets and Return on Equity. The study found out that dividend policy and membership affected positively the financial performance of Sacco's whereas loan default negatively affected the financial performance. The linear regression analysis shows a relationship, $R = 0.713$ and $R^2 = 0.509$ which means that 50.9% of the corresponding change in Return on Assets can be explained by Membership, loan default and dividend policy. The beta coefficients indicated the relative

importance of each independent variable (Membership, loan default and dividend policy) in influencing the dependent variable (ROA). Dividend policy was the most important in influencing Return on Assets since it has the highest beta value (beta= -0.458). The second most influential is the Loan default with a beta value (beta= -0.385). Membership had the weakest influence on ROA with a beta value (beta=0.201).

Sangali (2013) compared the financial performance of employee and community based saving and credit cooperatives societies in Kisarawe district. Indicators of financial performance were size of a SACCO, capital, operating expenses, liquidity, and loan to members' ratios. The population was a sample of eight SACCOs operating in Kisarawe district; three of them are employee-based while the remaining five are community-based SACCOs. The researcher employed secondary data method of data collection. Secondary data included annual SACCOs' reports and only audited financial statements for individual SACCOs for the period 2008-2011 were used. The findings of the study revealed that E-SACCOs exploit more efficiently economies of scale than C-SACCOs that is, the former enjoy more cost advantage which arises with increased output of total assets than the later and thus E-SACCOs perform better financially than C-SACCOs. E-SACCOs have smaller amount of cash to lend to members, that is smaller working capital than C SACCOs and therefore the former perform better financially than the later. C SACCOs have a better sound capital position and are able to pursue business opportunities more effectively and have more flexibility to deal with problems arising from unexpected losses, thus achieving more increased profitability than E SACCOs. Therefore E-SACCOs performed better financially than C-SACCOs in terms of size of a SACCO, operating expenses and loan to members, but C-SACCOs performed better financially than E-SACCOs in terms of liquid investment and capitalization.

In the same vein, Gebeyehu; Beshire, and Haji, (2013) compared defaulters and non-defaulters in terms of different explanatory variables and determine the extent of default in the repayment of loan offered to smallholder farmers in the study area were assessed. Primary data were collect from 130 randomly selected borrowers using semi-structured questionnaire. In addition, secondary data were collected from different organizations and pertinent publications. A two-limit tobit regression model was employed to identify factors influencing loan repayment and

intensity of loan recovery among smallholder farmers. A total of 14 explanatory variables were included in the empirical model and out of these, six variables were found to be statistically significant. These are total land holding size of the family (hectare), total livestock holding (TLU), expenditure on social festivals, number of years of experience in agricultural extension services, purpose of borrowing and source of credit. Regarding the sign of the significant variables, expenditure on social festivals has a negative and significant effect on loan recovery rate while the remaining five variables have a significant and positive effect. Variance inflation factor were calculated to detect multi co- linearity and association among all explanatory variables. Therefore, consideration of factors affecting loan repayment performance is vital because it provides information that would enable to undertake effective measures with the aim of improving loan repayment performance and hence helped lenders such as microfinance institution, nongovernmental organization and policy makers to have knowledge as to where and how to channel efforts to minimize loan defaults.

Ndiege; Mataba, Msonganzila and Nzilano (2016) conducted their study on determinants of loan repayment performance of smallholder farmers in Kalu District, South Wollo Zone, Amhara National Regional State, Ethiopia. Using financial statements data for the year 2012, from 36 SACCOS in Kilimanjaro Region, Tanzania, and using descriptive statistics and regression models in the analysis, this study examines the relationship between financial performance and loan repayment capacity. It thus examines the extent by which SACCOS are capable of recovering the loan issued and also the financial ratios that explain loan repayment capacity in SACCOS. The study depicts that there is a severe financial risk management problem among Tanzanian SACCOS. Focusing on sustainability is significant for improvements of loan repayment, but focusing on profitability in SACCOS results to an adverse loan repayment. The study asserts that the primary focus of SACCOS should not be profit but member's wealth maximization and sustainability of the institution.

Jalo, Onu, Dire, and Margwa,(2015) analyzed savings among cooperative farmers in Numan and Demsa local Government Areas of Adamawa State, Nigeria. Data were collected using a structured questionnaires administered to sixty eight (68) registered cooperative farmers. The data collected were analyzed using both descriptive and inferential statistics. Multiple

regressions were used to infer the determinants of savings among the cooperative farmers. The results revealed that, about 55.88% borrowed between N 31,000 – N60, 000, 55.88% of the respondents supported that the interest charged on loan collected were high, and affect their savings. Also 59% of the respondents saved their money at home, because of the distance to the nearest bank(s).The average propensity to save (APS) by respondents was 0.43 (43.42%). In conclusion, the findings of the study shows that, interest charge on loans collected and duration of loan repayment are significant at the probability level of 1% and 5% respectively.

Keitany (2015) reviewed the relationship between loan default and the financial performance of Savings and Credit Cooperative Societies (SACCOs) in Kenya. The research design used was descriptive design. The design was appropriate because the study involved in depth information on the relationship between loan default and the financial performance of SACCOs. Data was collected from the census of 45 SACCCOs in Nairobi County using secondary data from SASRA, which is the regulatory body thus the study concentrated on 20 SACCOs. The data was reviewed, and analyzed using (SPSS version 18) both descriptive and inferential statistics. The study findings indicated that there is strong negative relationship between the loan default and the profitability of these SACCOS. The tests showed that the overall regression model is a good fit for the data as the independent variables statistically and significantly predict the dependent variable. The regression model is a good fit of the data. Personality types are predisposed to loan default why credit markets may fail.

Oni (1999) studied the proportion of loan repayment by smallholder farmers in Osun State. His explanatory variables were: amount of loan collected, expenditure on farm, interest rate, extent of farmers contact with bank, disbursement lag, cultivated land area and years of experience in farming. The result of linear and log form equations showed that the regression coefficients associated with amount of loan (+), disbursement lag (-) and extent of farmers' contact with banks (+) had expected signs and were statistically significant at 5 per cent. This study was undertaken to critically examine the factors that influence microcredit repayment among members of microfinance institutions in Southwestern Nigeria.

Kassali, Adejobi and Okparaocha, (2013) conducted a study on the analysis of cooperative financial performance in Ibadan Metropolis, Oyo State, Nigeria. Their study examined the financial performance of agricultural cooperative societies in Ibadan Metropolis, Oyo State; this as a way of ensuring impact on members and the communities of location. Primary data were collected from thirty (30) cooperatives through interview of principal officers using well structured questionnaire while secondary data were from the cooperatives annual reports. The analytical techniques used include descriptive statistics applied to financial aggregates and ratios and regression analysis. The financial aggregates analysed include current assets, current liabilities, cash and account receivable, and owners' equity. The financial ratios were current ratio, acid test, equity to assets, debt to equity, debt to assets and current debt to equity. Cooperative's structural and financial elements were hypothesized as determinants of cooperative financial performance. All variables except cooperative size had significant effect on financial performance. But years of operation, and number of loans beneficiaries only had negative effect on performance.

Idoge, (2013) regionalized loan repayment capacity of Small holder cooperative farmers in Nigeria where he exploring South-South Nigeria. His paper examined the repayment capacity of small holder cooperative farmers in South-south region of Nigeria. A composed sample of ninety-six respondents randomly selected from sixteen cooperatives from eight local governments in Bayelsa and Delta states made up the sample. Descriptive statistics and multiple regression analysis were used to achieve the study objectives. The result shows that age, education level, loan size, repayment period, net farm income, loan supervision, engagement in other jobs as well as farm size has positive influence on loan repayment capacity. Also, gender, marital status, household size and the amount expended on hiring equipment have negative influence on loan repayment capacity.

Tesfamariam, (2012) identified and saving behaviour and determinants of saving mobilization by the rural co-operators in Southern Tigray Ethiopia. The input for the study was obtained from randomly selected 120 rural household savers from six purposively selected rural savings and credit cooperatives. The result of the study using least squares method showed that savings mobilized is determined by household annual income, amount of loan borrowed and year of

member stay in the cooperative. These factors therefore have to be considered in designing strategies aimed at improving the saving mobilization of cooperative members in the study area. Besides, economically feasible cooperative societies in the region should be encouraged among the rural households by supporting them with revolving funds as they are more effective and efficient in mobilizing rural savings and provide collateral plus guarantor-based loans with low default rate.

Oladele and Ward (2016) examined the determinants of loan repayment patterns among Micro Agricultural Financial Institution of South Africa beneficiaries in North West Province, South Africa. A simple random sampling technique was used to select 273 respondents from a total of 344 beneficiaries. A structured questionnaire was used to collect data which was analysed using the Statistical Package for Social Sciences (SPSS) with frequencies, percentages and probit regression. The results show that respondents were predominantly male (84%); married (95%); Christians (94%); having secondary school education (72%) with a mean age of 55.5 years, mean production expenditure of R1251.43, mean personal expenditure of R 1168.50; mean income from livestock as R 121333.00 and mean income from crops as R 19468.00. In terms of repayment 29.3% did not repay, 44% made partial repayment and 26.7% total repayment. Significant determinants of no repayment pattern were natural capital after ($t = 2.08$), gender ($t = 1.84$), marital status ($t = -2.26$), membership of organisation ($t = -2.31$) while the significant determinants of partial repayment were farm expense ($t = 3.80$) gender ($t = -2.07$) age ($t = 2.33$), membership of organisation ($t = -3.04$), frequency of contacts with extension ($t = -5.16$). The significant determinants of total repayment were human capital after ($t = 1.85$), gender ($t = -2.92$), marital status ($t = -3.60$), dependents ($t = -3.78$), males in household ($t = 2.90$), females in household ($t = 3.63$) and frequency of extension contact ($t = -1.75$).

Ijioma and Osondu (2015) focused on agricultural credit sources and determinants of credit acquisition by farmers in Idemili Local Government Area of Anambra State with specific objectives to: describe socio-economic characteristics of rural farmers; identify sources of agricultural credit available to rural farmers; determine socio-economic factors that influence agricultural credit acquisition of farmers; ascertain reasons for any credit misappropriation and identify problems that constrain farmers from agricultural credit acquisition. Ninety farmers were

randomly selected by multi stage random sampling technique. Semi-structured questionnaire was used to elicit data for the study. Descriptive statistics and multiple regression models were used in achieving the objectives. Results indicated that 74.44% of respondents were males with a mean age of 45 years. Majority (76.67%) were married with large house hold sizes. Majority (93.33%) received different level of education, with sources of credit from friends/relatives (30.00%), cooperative societies (43.33%), money lenders (14.44%), and cumulatively from formal sources (12.22%). The result of the multiple regression analysis revealed age, household size, membership of cooperative societies, marital status, education level, farm size and amount of loan repaid at varied signs and levels as significant predictors of amount of agricultural credit acquired by farmers. The most common reason given among the respondents (55.89%) of those who misappropriated acquired agricultural credit, was meeting nonfood needs of the household. The farmers encountered problems of high interest rate (78.89%), lack of collateral (75.56%), long distance from source of credit (50.00%), poor harvest (37.78%), moratorium (33.33%) and delay in loan approval/disbursement (44.44%) as constraints to acquire credit.

Akpan, Udoh, & Aya, (2011) determined factors that affect household saving of rural agro-based firm workers in the south-south region of Nigeria. Two-stage least squares method of simultaneous equation model was used in the analysis. Cross-sectional data were collected from 250 randomly selected workers of five agro-based firms in the study areas. The results of the analysis revealed that income, tax, job experience, education, family size and membership of a social group influence saving attitude of workers.

Anigbogu, Onugu, Onyeugbo, & Okoli (2014) examined the determinants of loan repayment among cooperative farmers in Awka North L.G.A of Anambra state, Nigeria. The study provides empirical evidence on the farmers' socio-economic characteristics as well as determine which of the characteristics that influence loan repayment, the range of amount of loan applied for, amount received and amount repaid by the cooperative farmers and organizational factors affecting the farmers' credit repayment ability. Findings revealed that the joint effect of the explanatory variable in the model account for 91.9% of the variations in the factors affecting the farmers' credit repayment ability. Four coefficients (educational qualification, farm size, , loan application cost, and collateral value) are significant at 5%, 1% respectively. Age, membership

duration and income of the farmers were not significant but it shows a positive relationship with loan repayment. There is a significant difference between the amount of loan received and amount repaid by the cooperative farmers. All the Organizational factors affecting the farmers' credit repayment ability are significant at 0.000 significant levels.

Anigbogu; Onugu; Igboka and Okoli (2015) examined factors affecting cooperative farmers' access to agricultural credit from micro-finance banks in Awka North L.G.A of Anambra state, Nigeria. Findings revealed that there is a significant difference between the amount of loan applied for and the amount disbursed by the microfinance banks to the cooperative farmers. The joint effect of the explanatory variable in the model account for 96.1% of the variations in the socioeconomic factors influencing cooperative farmers access to agric credit from Microfinance banks; Institutional factors of the cooperative farmers have significant influence in the accessing of agric credit from Microfinance banks.

Isitor, Otunaiya, Adeyonu, & Fabiyi, (2016) studied determinants of loan repayment among small holder cooperative farmers in Remo division, Ogun State. Their study investigated the factors that are crucial in improving small holder cooperative farmers' loan repayment. Primary data used for the study were collected with the aid of well-structured questionnaire. Multi-stage sampling techniques were used to select the 120 respondents. The data were analyzed using descriptive statistics and probit regression model. The results of the descriptive analysis showed that about 56% of the respondents were able to repay their loans promptly while the rest were not. The respondents' mean age stood at 47 years, the majority of them are males and married with fair level of education. The majority of smallholder farmers in the study area had been farming for more than 20 years, while the household size for the majority of them was 4-6 members with average family size of 5. The results of the probit regression analysis revealed that age, level of education, farming experience, net farm income and loan size obtained were the major factors that increase the likelihood of loan repayment, while the number of family dependants reduces the probability of repayment.

Akerele, Aihonsu, Ambali and Oshisanya (2014) focused on the investigation of factors affecting loan repayment performance among members of Cooperative Thrift and Credit Societies in

Yewa North Local Government Area of Ogun State. The study drew a sample of hundred and four smallholder agricultural credit users who are members of Cooperative Thrift and credit society identified through a multi stage random sampling techniques. Relevant information on socio-economic characteristics, sources of loan preferred, payback period, factors affecting loan repayment of cooperators and constraints in obtaining loan were collected using structured questionnaires with personal interview and data collected were analyzed using descriptive statistics and multiple regressions. The results of the study revealed that a total of 78.8 percent of the respondents was within the age range of 31-60 years showing that majority of the respondents are within their active and productive ages. The study also revealed that 89.5 percent of the respondents have formal education which facilitates their access to loans through informal sources and with Cooperative Thrift and Credit Societies being the most popular source, and credit was made available and utilized, and cooperators' annual income rose significantly. The results of the regression showed that amount of loan collected by farmers, level of education and year of experience and labor used were the major factors that positively and significantly influence loan repayment.

2.3: Summary and Appraisal of the Reviewed Literature

The related literature of various authors and scholars were reviewed, and these literatures provide more knowledge and insight on the performance of cooperative society in savings mobilization; loan approval; amount of credit disburse; time lag in disbursement, repayment and other credit delivery services. Empirically, the literature reviewed revealed that cooperative play a significant roles in providing credit to millions of people who do not have access to conventional financial intuitions like commercial banks due to the fact that the borrower lack security to secure such loan from the bank and more especially the high interest and other hidden fees charged by these banks.

Based on the related literatures reviewed, evidence shows that a gap exist between the existing literatures and the current study. The vacuum (gap) was created as most of the available and existing literatures did not specifically focus on how thrift and loan cooperative societies perform in mobilizing saving among its members; disbursement of credit; repayment in Kaduna state. Meanwhile, most of the reviewed literature show the relationship between cooperative

performance and loan repayment, and other credit delivery services, but these studies were all conducted in other part of the country most especially in west, east and southern part of Nigeria as well as sub Sahara Africa while no single study on the subject of the matter was conducted in Kaduna state. As a result of this, vacuum exist the current literatures which the researcher is determining to fill the gap.

2.4: Theoretical Framework

The stakeholder and system theory was adopted for the study.

2.4.1: Stakeholder Theory

Stakeholder theory' is a managerial conception of organizational strategy and ethics (Phillips, 2003). The central idea is that an organization's success is dependent on how well it manages the relationships with key groups such as customers, employees, suppliers, communities, financiers, and others that can affect the realization of its purpose. The manager's job is to keep the support of all of these groups, balancing their interests, while making the organization a place where stakeholder interests can be maximized over time. The identification of stakeholder groups is currently among the central debates in the scholarly and popular literature (Phillips, 2003). But most scholars would include employees, customers, suppliers, financiers, and local communities, at a minimum.

2.4.1.1: Tenets for Stakeholder Theory

The focus of stakeholder theory is articulated in two core questions (Freeman 1994). First, it asks, what is the purpose of the firm? This encourages managers to articulate the shared sense of the value they create, and what brings its core stakeholders together. This propels the firm forward and allows it to generate outstanding performance, determined both in terms of its purpose and marketplace financial metrics.

Second, stakeholder theory asks, what responsibility does management have to stakeholders? This pushes managers to articulate how they want to do business specifically, what kinds of relationships they want and need to create with their stakeholders to deliver on their purpose. Today's economic realities underscore the fundamental reality we suggest is at the core of stakeholder theory:

2.4.1.2: Theoretical Exposition

Economic value is created by people who voluntarily come together and cooperate to improve everyone's circumstance. Leaders/Managers must develop relationships, inspire their stakeholders, and create communities where everyone strives to give their best to deliver the value the firm promises.

Certainly shareholders are an important constituent and profits are a critical feature of this activity, but concern for profits is the result rather than the driver in the process of value creation. Many firms have developed and run their businesses in terms highly consistent with stakeholder theory. Whereas all these firms value their shareholders and profitability, none of them make profitability the fundamental driver of what they do. These firms also see the import of values and relationships with stakeholders as a critical part of their ongoing success. They have found compelling answers to the two core questions posed by stakeholder theory, which underscore the moral presuppositions of managing— they are about purpose and human relationships. Stakeholder theory begins with the assumption that values are necessarily and explicitly a part of doing business, and rejects the separation thesis (Freeman 1994). The separation thesis begins by assuming that ethics and economics can be neatly and sharply separated. In this context, the challenge of doing business ethics or improving the moral performance of business becomes a Sisyphean task because business ethics is, by definition, an oxymoron. Many proponents of a shareholder, single objective view of the firm distinguish the economic from the ethical consequences and values. The resulting theory is a narrow view that cannot possibly do justice to the panoply of human activity that is value creation and trade, i.e., business. In our view, Sundaram and Inkpen (2004) exhibit their commitment to such a narrow interpretation of the shareholder ideology in their paper

2.4.1.3: Relevance of the Stakeholder Theory to the study

The Stakeholder theory is most appropriate theory for this study because it focuses on managerial conception of organizational strategy and ethics of the thrift and loan cooperative society. The central idea is that thrift and loan cooperative society success is dependent on how well it manages the relationships with its members who are equally the owners and users of the cooperative. The stakeholder theory recognizes the management committee members' job as to keep the support of all of cooperative members, balancing their interests, while making the

organization a place where members' interests can be maximized over time, and the interest of members in thrift and loan cooperative society is to have access to reasonable amount of money in form of loan/credit.

The stakeholder theory also encourages management committee/ cooperative leaders to articulate the shared sense of the value they create, and what brings its members together. This propels the cooperative forward and allows it to generate outstanding performance, determined both in terms of its purpose and marketplace financial metrics.

Stakeholder theory also pushes management committee/ cooperative leaders to articulate how they want to do business in terms the amount of credit to disburse to the members, at what time should the money be disburse, as well as how to facilitate loan repayment among its members.

2.4.2: Theory of collective Action

Collective action according to Pandolfelli, (2007) refers both to the process by which voluntary institutions are created and maintained and to the groups that decided to act together. Collective action can assume various forms ranging from voluntary self-help groups to formal organizations that aim to manage communities' natural resources to advocate for political change at the national or global level.

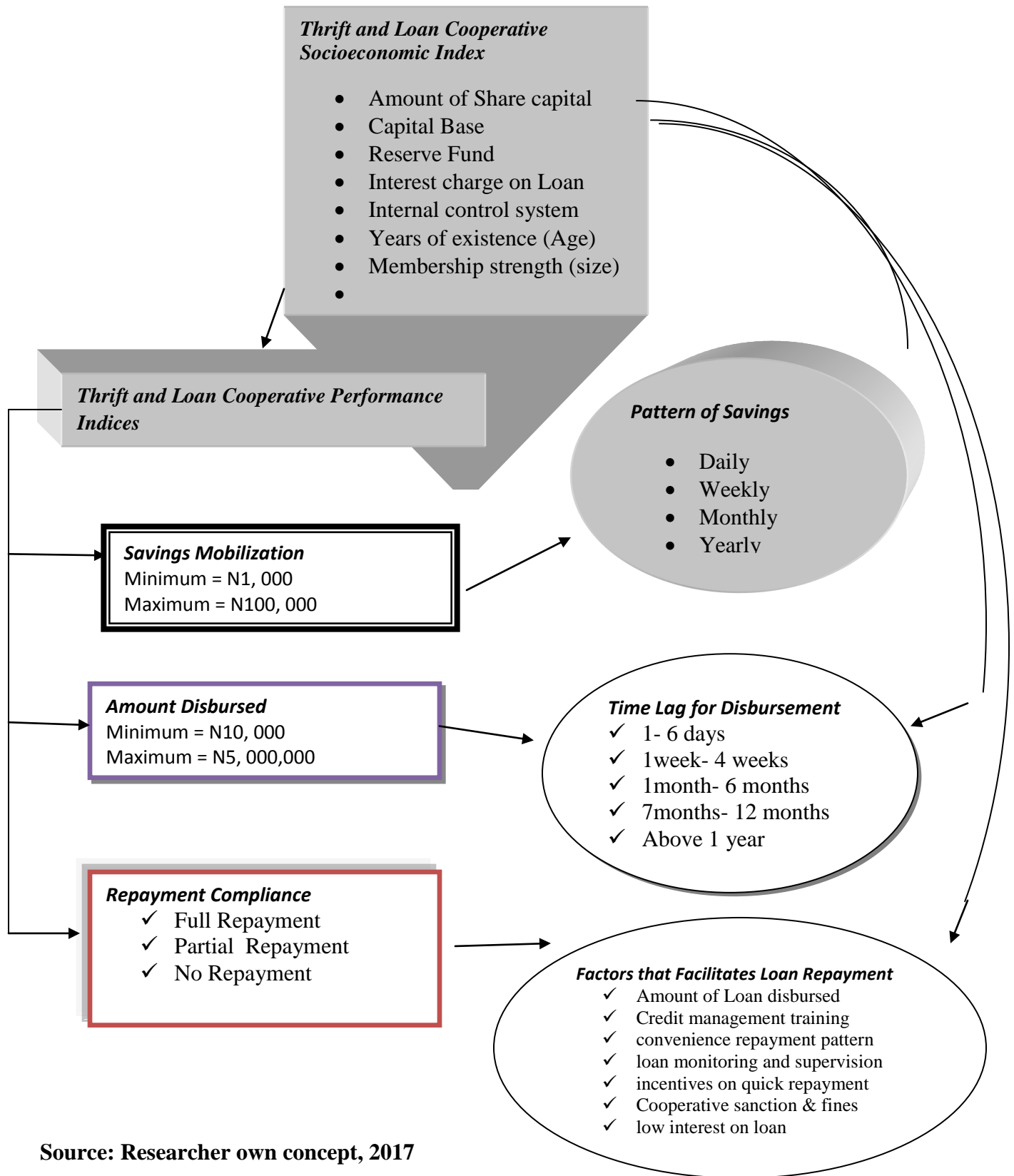
In his own understanding, Mashall (1998) defines collective action as an action taken by a group either directly or on its behalf through an organizational in pursuit of members' perceived shared interests. Meinzen-Dick (2004) while acknowledging a plethora of other saw it as joint action for the same goal and actions to achieve a common objective, when the outcomes depend on interdependence of members. They further added that what most definitions have a common is that collective actions requires the involvement of a group of people, it requires a shared interest within the group and it involves some kind of common action which works in pursuit of that shared interest. Examples of collective actions according to Meinzen-Dick (2004) include collective decision-making group and designing management rules, implementing decisions and monitoring adherence to rules. Members can contribute in various ways to achieve the shared goal, money labour or in kind contributions (food, wood).

The action can take place directly by members of a group, or on their behalf by a representative or even employee. The coordinator can take place through an informal organization or, in some cases through spontaneous action. Thus, an organization may contribute to collective action, but the two concepts are not the same Meinzen-Dick (2004). Collective action theory is relevant and appropriate to the study of cooperatives since the main idea behind cooperative is people helping themselves through their collective efforts. The principal agent or agency theory would be followed to explain and analyze the financing in relation to economic behavior and cooperative.

Emelianoff (2000) and Philips 2003) Pioneered the extension of principal agent relationship in providing insight in the understanding of cooperative. Emelianoff concluded that cooperative represented aggregate of economic units. In other words, he developed a conception of cooperative as a pure agency with members as principals. Philips (2003) in explaining further observed that when a group of individuals forms a cooperative association, they agree mutually to set up a plant and operate it jointly as an integral part of each of their individual firms. The cooperative has no more economic life or purpose apart from that of participating individual plants of large multi-plant firm. Conning (2000) had used the principal agency theory to explain the governance structure of cooperative societies. In these theories, it was clearly fundamental to members of cooperative to remain the primary beneficiary of their group action and not become the “residual” claimant in the sense of crumbs left after all other agent groups receive their due. Expectedly, the reason for cooperative existence is to serve the interest of their members in terms of enhancing the performance of their individual enterprises. Therefore members as principals in the organizational effort of their cooperatives are clear and unambiguous in the conception of agency theory.

The envision of cooperative as agency for delivering financial services to her member clients is widely acknowledge in the literature, (Berko 2001, Olomola 2000 and FGN 2001). The impact of this widely acknowledge approach on members’ income and the repayment performance, are necessary for evaluating efficacy. Che (2002) identified cooperatives role efficacy and members perception of them as same as the critical success variables in this agency relationship. It is therefore on this theoretical paradigm that the study conceives and analyzes members as principals in the agency roles of analysis of performance of cooperative thrift and loan societies.

Fig: 1: Conceptual Framework: Operationalisation of study variables



2.5.1: Conceptual Framework Exposition

The above framework (fig 1) is a performance conception of thrift and loan cooperative societies in credit delivery services (savings mobilization; credit disbursement and loan repayment strategies). The central idea is that, thrift and loan cooperative society's success is dependent on how well it manages the savings mobilization; credit disbursement and loan repayment strategies, and others that can affect the realization of its purpose.

The savings mobilization is one of the indices to measure how cooperative perform in credit delivery that is, how they are able to encourage their members to make regular savings either daily, weekly, monthly or yearly. Also, the amount of credit disbursed is another index, in this case, cooperative performance was measure in terms of how much they are able to approve and disburse to their members as well as if the amount disbursed was timely disbursed and meet the members' needs. Similarly, performance on loan repayment strategies focuses how the cooperative were able to encourage their members to have full repayment for their loans. Meanwhile the loan repayment was encourage by the cooperative society members were encouraged with various enhancement factors like credit management training, monitoring and supervision; etc. Finally, the performance of fthe thrift and credit cooperative society on amount and pattern of savings mobilization; amount and time lag for credit disbursement and loan repayment strategies are been influence by the socioeconomic characteristics of the thrift and credit cooperative societies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This study analyzed the performance of Cooperative Thrift and Loan Societies in Kaduna State. To this end, this chapter describes and discussed the design of the study, population of the study, sample and sampling procedure, as well as the research instrument used for data collection. Also discussed in this chapter are the validity and reliability of the instrument, procedure for the administration of the instrument, method of data presentation as well as the statistical analysis.

3.2 Research Design

A survey method was used for this study. The choice of this design stems from the fact that the study involves a large population of Cooperative thrift and Loan societies in scattered locations of the selected Local Government Areas of Kaduna State. The design thus enabled the researcher to discover relative incidence and distribution on the characteristics of the population in relation to the performance of Cooperative Thrift and Loan Societies. Thus, it was possible to gather the needed data from a sample of the population and to generalize the findings obtained from the analysis of the sample to the entire population (Afolabi, 2010). Similarly, Osuala (2001) stressed that survey research studies both large and small populations by selecting and studying samples chosen from the population to discover relative distribution and interrelations of sociological and psychological variables. So, since the study involved a large population, it thus meant that a large amount of data would be generated from many separate respondents in a uniform, comparatively economical, systematic and potentially quantifiable form.

3.3 Study Area

Kaduna usually referred to as Kaduna State to distinguish it from the city of Kaduna, is a state in Northwest Nigeria. Its capital is Kaduna. The state is located at the Northern part of Nigeria's High Plains. The vegetation cover is Sudan Savannah type, characterized by scattered short trees, shrubs and grasses. Soil type is mostly loamy to sandy type. Substantial amount of clay is found also.

The word 'Kaduna' is said to be a corruption of a Gbagyi word/name for a river. Another version of the etymology of the name is a narrative linked to the Hausa word for crocodile - but this is

contested by the Gbagyi people known to have lived in the area for centuries. It is therefore indicative that the name, Kaduna, was taken-up by Lord Frederick Lugard and his colonial colleagues when they moved the capital of the then Northern Region from Zungeru to Kaduna in 1916. This move of the colonial office to Kaduna started 1912-1918/20 with the initial effort having been made in 1902 from Jebba to Zungeru.

At the start of British colonial rule in northern Nigeria the people groups who live in the area became 'Northern Nigerians'- a construct which continues even till date. By 1967 these people groups again were carved into 'North Central State' and this was the case until 1975 that 'Kaduna State' was formerly created by the then military leader, Gen. Murtala Mohammed, with all distinct identities amalgamated into one state without a referendum. The state hence is the successor of the old Northern Region of Nigeria, which had its capital at Kaduna which is now the state capital to about 6.3 million people (NPC, 2006).

It was from the old Northern Region that in the year 1967 gave birth to six states in the north, leaving Kaduna as the capital of North-Central State, whose name was changed to Kaduna State in 1976. Meanwhile, Kaduna was further divided in 1987, creating Katsina State. Under the governance of Kaduna is the ancient city of Zaria, Kafanchan, and Nok, the area one of Africa's earliest civilizations is recorded to have been excavated. The most intriguing aspect of this area is that the colonial construction and its post-colonial successor call 'Nigeria' hardly documented the history or the method of how Kaduna state's people groups encompassed in these constructs define and identify themselves as such the people groups who populate the area have lived in near oblivion or obscurity as they often are thought of as Hausa people.

Kaduna State consists of twenty-three (23) Local Government Areas. They are: Birnin Gwari; Chikun; Giwa; Igabi; Ikara; Jaba; Jema'a; Kachia; Kaduna North; Kaduna South; Kagarko; Kajuru; Kaura; Kauru; Kubau; Kudan; Lere; Makarfi; Sabon Gari; Sanga; Soba; Zangon Kataf; Zaria.

Kaduna State, north central Nigeria, is politically classified as belonging to the now 'North - West' zone of the current six (6) Geo - political zones of Nigeria. It is populated by about 59 to 63 different ethnic groups if not more with the exactitude of the number requiring further

verification through a genuine field work (Hayab, 2014). Hausa and Fulani are the dominant ethnic groups followed by at least 60 others. These groups include: Adara (dubbed Kadara), Akurmi (labelled Kurama by the Hausa), Anghan (dubbed Kamanton by the Hausa), Amo, Aruruma (named Ruruma by the Hausa), Atachaat (dubbed Kachechere), Atyab (dubbed Kataf by the Hausa), Ayu, Bajju (dubbed Kaje by the Hausa), Bakulu (Ikulu by the Hausa), Bhazar (named Koro), Bur (Sanga), Binawa, Dingi, Fantswam, Fulfulde, Gbagyi (Gwari in Hausa), Gure, Gwandara, Gwong (Kagoma in Hausa), Ham (dubbed Jaba in Hausa which is a derogatory name), Hausa, Jangi (dubbed Gwari by the Hausa), Kaibi, Kahugu, Kanufi, Kigono, Kinugu, Kitimi, Kiwafa, Kiwollo, Kono, Kuvori (call Surubu), Kuturmi, Lemoro, Mada (Mardan) Mada must have migrated during colonial rule, Nandu, Nduyah, Numana, Nindem, Ningeshe, Ninkyop, Ninzo, Nyenkpa (Yeskwa), Oegworok, Pikal, Pitti, Ribang, Rishuwa, Rumada, Ruruma, Rumayya, Shemawa, Sholio (Dubbed Marwa), Siyawa (Bauchi state?), Takad, Tarri, and Tsam (Chawai), Tuku (Atuku by the Hausa)

Kaduna is one of the education centers in Nigeria, with many colleges and the most recognized university in Nigeria, Nigerian Defence Academy, Ahmadu Bello University, Zaria, Nuhu Bamalli Polytechnic, Zaria, Kaduna State University, Federal Polytechnic, Kaduna, Nigerian College of Aviation Technology, Zaria, College of Education Gidan Waya-Kafanchan, Shehu Idris College of Health Health Sciences And Technology-Makarfi, College of Nursing-Kafanchan, Institute of Leather Research-Zaria, Federal College of Education, Zaria, National Open University of Nigeria, National Water Resources Institute, Kaduna, Nigerian Institute of transport technology, Zaria, National Teachers Institute, Kaduna School of Midwifery Kaduna.

3.4 Population of the Study

The target population of interest is thrift and loan cooperative societies in Kaduna state. Therefore, according to information from the office of the Director of Cooperative Society in Kaduna State there are so many registered thrift and loan cooperative societies in the state but it was very few of them that are functional and up to date. Thus for the purpose of this study the researcher consisted those viable societies that have up to date records. As such, the population of this study consists of 17 thrift and loan societies with total membership strength of 1,173. In the same vein these 17 thrift and loan societies are highly concentrated in Kaduna metropolis, and Zaria.

Table 3.1: Distribution of Cooperative thrift and Loan societies in Kaduna State

S/N	LGA	Name of CTLS	Mem. Size
A	Kaduna north LGA	Min. of Agric CTLS	95
		Natural Coop. Society	101
		Ahmed Bello Coop. Society	80
		Goslaya CTLS	72
		Gurmusu CTLS	67
		Arewa Coop. Venture	81
B	Kaduna north LGA	Kurbusu CTLS	70
		Nagari-Kowe CTLS	95
		Gwari Thrift & Credit Society Ltd.	60
		Sabon Gaya Investment and CTLS	65
		Dambo Thrift & Credit Coop. Society	102
		Dakace Invest. & credit coop. Society	30
C	Zaria LGA	Sambo microfinance CTLS	75
		Savanah Forestry CTLS	70
		Abdulkadir CTLS.	30
		Modern Day Women CTLS	29
		Min. of Education CTLS	51
		Total	1, 173

Source: Office of the Director of Cooperative, Kaduna State, 2016

3.5 Sample Size Determination and Sampling Technique Procedure

Since the study population is 17 CTLS with membership size of 1,173 members. Meanwhile, the study was based on society (organizational) level, that is the parameter of interest (respondents) was 17 viable cooperative Thrift and Loan Societies in Kaduna State. Thus the researcher adopted multistage sampling method to determine the sample.

At the first stage, non random sampling technique of judgemental sampling technique was used to select all the available and viable 17 thrift and loan cooperative societies in Kaduna state. The judgmental sampling technique was used based on the facts that the population size is not too large thus the researcher considered it to be manageable and convenient to used all of functional and viable thrift and loan cooperative.

At the second stage, the researcher adopted simple random sampling technique to select 5 management committee members from each thrift and loan societies. Thus, total of 85 management committee members were randomly selected for the study.

3.6 Source of Data Collection

The data were sourced from both the primary and secondary sources. The primary data are those first hand data and information gotten from the management committee members through the use of structured questionnaires. While secondary sources are those data and information other than first hand and this were sourced from the annual financial reports of the cooperative (5 years); members ledger; balance sheet; loan record book use of journal, library, textbooks, research reports as well as the internet.

3.7 Description of Research Instrument

The instrument that was used for this study was a structured questionnaire developed by the researcher. The questionnaire was designed to obtain data that cannot be obtained from the secondary sources. The content of the two sets of questionnaire were however not quite distinct from each other. The instruments were designed and structured into five (5) sections with measurement scales of Likert on 5 points analysis. Section A was structured to obtain information regarding the pattern in which the societies adopt to mobilize savings among its members. Section B was also structured to obtain data on loan disbursement time lag. Similarly, section C was also structured to obtain data on the loan repayment pattern of the members. While the section D was designed to obtain data on the factors that influence loan repayment. Finally the section E was structured to identify the factors that hindered the performance of cooperative Thrift and Loan Societies in Kaduna State.

3.8 Administration of the Research Instrument

For the administration of the instrument, four (4) enumerators who are Higher National Diploma (HND) students of the Department of Cooperative Economics and Management, Kaduna Polytechnic were trained as research enumerators during their long vacation. They were trained in the specifics of the investigation. The training was geared towards their in-depth understanding of the content of the instrument and the method of their administration. This was meant to enable them effectively assist the researcher in administering the questionnaire and collecting them for analysis. The researcher worked collaboratively with the Divisional Cooperative Officers (DCOs) of the selected Local Government Areas and the four research assistants to ensure proper administration of the questionnaires to the management committee

members. The questionnaires were hand-delivered and followed up for completion by the research assistants and the DCOs. Each questionnaire was returned within a week of its administration. All the questionnaires were returned completed.

The respondents were sought through a detailed transmittal letter. The letter explained the purpose and significance of the study and earnestly implored them to cooperate and participate in the study. The participants were given five days to fill out and return the questionnaire. Within this period, the researcher and the assistants kept their lines of communication with the respondents by phone opened for possible inquiries.

3.9 Validation of Research Instrument

The validation of research instrument was deemed necessary to determine which questions actually elicit the purpose of the study, so as to enable the researcher achieve the study objectives. Therefore the questionnaire was subjected to validity test through the scrutiny and modifications by the supervisor, and 3 other research experts, 2 in the faculty of management sciences and 1 from statistic department; they were be given copies of the questionnaire for them to judge the appropriateness, comprehensiveness and clarity of items in the questionnaire. Their inputs were appropriately effected sequel to the approval of the researchers' supervisor.

3.10 Reliability Test of Data Collection Instrument

In order to ensure reliability of instrument, test -re -test method was adopted, to achieve this, 20 copies of structured questionnaire were administered to the management committee members of thrift and loan society in Ministry of Agriculture Cooperative Thrift and Loan societies in Kaduna North Local Government Area. The questionnaire were filled and returned. Then another set of 20 questionnaires were administered to the same set of management committee members. Therefore, their responses were subjected internal consistency test with Cronbach's Alpha at 5% level of significance. In this study, Cronbach's Alpha was adopted as it has ability to determine the strength or importance of each item in the research tool and the result is presented in the table below

Table 3.2: Result of Cronbach's Alpha Reliability Test Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N
.796	.904	20

Decision

From the result on table 3.2, the Alpha level is greater than conventional threshold of 0.6 which indicated high level of internal consistency of the research instrument. Therefore, the value of Alpha is ≤ 0.60 and this was considered to be strong (**0.796**) at 5% level of significance. As such, there no much discrepancy in the responses as the respondents are consistent with their opinion, thus, the research instrument is highly reliable for decision making.

Methods of Data Analysis

Both descriptive and inferential statistical analytical techniques were used to analyze the data collected for the study. Descriptive statistics which include mean, percentages and frequency were used to analyze the pattern of savings, loan disbursement time lag, repayment pattern; factors that influence repayment and constraints that limit cooperative performance in loan services delivery.

The inferential statistics was used to make affirm or reject the hypotheses of the study. As hypothesis one was analyzed with both simple and multiple regression models. Regression was used to ascertain the effect of socio-economic (X) attribute of the performance of the cooperative. The dependent variables (Y) were, average amount of savings mobilized over period of 5 years; average amount of loan disbursed over 5 years period; and loan repayment pattern were explained by the regression line

$$Y = a + b_1 + \mu$$

Equally multiple regression analysis is a statistical tool for evaluating the relationship between one or more independent variable x_1, x_2, \dots, x_n

This model explains the influence and relationship between the dependent variable (Y) and the independent variable (X). The model specifies the performance of CTLS in saving mobilization; loan disbursement; loan repayment and socioeconomic profile of the thrift and loan society. The

cooperative socioeconomic characteristics are an indicator which can significantly influenced the performance in savings mobilization; loan disbursement and loan repayment. The influence of socio-economic characteristics on performance was considered using regression model.

Thus the functional equation for the model is stated as:

Model specification: CTLS socioeconomic profile (X) Vs Average amount of savings mobilized (Y₁); Average amount of Loan disbursed (Y₂) and repayment pattern (Y₃)

The model in the implicit form is specified as:

$$Y = \beta_0 + \beta_i X_i + \mu \dots\dots\dots (1)$$

Where: Y = Dependent variable

β_0 = Constant term of the regression

β_i = Coefficient of X_i input X_i = Independent Variables

μ = Error Term

The explicit form of the model is:

$$Y = \beta_0 + \beta_1 YRO_1 + \beta_2 MES_2 + \beta_3 IRC_3 + \beta_4 SHC_4 + \beta_5 ANNS_5 + \beta_6 RSF_6 + \beta_7 DTS_7 + \beta_8 INW_8 + \beta_9 FCA_9 + \mu \dots\dots\dots (2)$$

Where:

Y_i = Average Amount of disbursed in Naira over 5 years period

YRO_1 = CTLS Age (years of operation)

MES_2 = Membership Size in number of persons

IRC_3 = Interest Rate charge on loan (in percentage %)

SHC_4 = Share capital (amount in Naira)

$ANNS_5$ = Annual surplus (amount in Naira)

RSF_6 = Reserve fund (amount in Naira)

DTS_7 = Dividends on thrift savings (amount in Naira)

INW_8 = Investment worth (amount in Naira)

FCA_9 = Fixed and current assets worth (amount in Naira)

μ = Error Term

$\beta_1 - \beta_9$ = Regression coefficient

β_0 = Constant term

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1: Presentation of Data

The data obtained from the field of survey were statistically analyzed and were accordingly presented based on the study research questions. The presentations are as follows;

4.1.1: The Socioeconomic Status of the Cooperative Thrift and Loan Societies for five (5) years

Table 1: Distribution of the Socioeconomic Characteristics Data Extracted from the Cooperative Thrift and Loan Societies Financial Reports of five (5) years

CTLS Socioeconomic Profile Indicators	2011 AVG Mean (x)	2012 AVG Mean (x)	2013 AVG Mean (x)	2014 AVG Mean (x)	2015 AVG Mean (x)
Years of Operation (Years)	14.71	16.42	18.08	19.85	20.44
Membership size (Persons)	44.5	49.61	57.88	57.92	84.37
Share Capital (₦)	11,005,28.07	14,578,257.08	24,868,433.04	38,078,755.0	60,078,7550
Annual surplus (profit) (₦)	22,847,962.66	21,148,213.79	19,596,824.79	22,613,143.08	35,270,607,.88
Reserve fund (statutory) (₦)	7,883,648.03	9,680,725	9,921,934.66	14,843,993.81	17,844,693.52
Dividend on thrift savings (₦)	708,342.66	950,447.20	681,409.44	3,003,937.64	4,422.601.08
Interest charges on loan (%)	13.42	11.64	14.02	12.11	10.61
Amount spent on education and capacity building (₦)	96,344.01	64,864.33	49,526.44	89,784.28	200.336
Employee capacity (Persons)	2.6	2.9	4.5	3.2	4.8
Investment worth e.g share in commercial banks (₦)	1,622,002.45	1,985,944.20	10,427,396.87	13,247,626.77	24,528,725.87
Fixed assets worth e.g landed properties (₦)	44,681,376.44	51,338,694.62	86,105,385.04	122,600,348.08	185,644,071.57
Current assets worth (₦)	19,489,138,.41	97,804,499.34	284,723,497.66	305,501,476.31	435,483,528.45

Source: Extracted from CTLS Financial Reports of 5 years, (2011; 2012; 2013; 2014 & 2015)

4.1.2: The Socioeconomic Status of the Cooperative Thrift and Loan Societies Influence on Savings Mobilization; Loan Disbursement and Loan Repayment

Table 2: Regression results showing influence of CTLS socioeconomic characteristics on their capacity to mobilize savings

<i>Model</i>	<i>Standard co-efficient (Beta)</i>	<i>T</i>	<i>Sig</i>
(constant)	-	4.782	.001
YRO ₁	2.289		.013*
MES ₂	.299		.0471*
IRC ₃	2.859		.588
SHC ₄	-418		.844
ANNS ₅	-30		.039*
RSF ₆	1.207		.066
DTS ₇	-1.311		.015*
INW ₈	0.761		.521
FCA ₉	.645		.268

- a) Dependent variable: Amount of savings mobilize
b) Predictors: (Constant), YRO₁; MES₂; IRC₃; SHC₄; ANNS₅; RSF₆; DTS₇; INW₈; FCA₉

R = 0.637
R₂ = 0.405
Adj. R² = 0.374

Multiple correlation coefficient $R^2 = 0.405$ indicated the extent which the dependent variable is explained by the independent variables. This implied that 41% of variations in the amount of savings mobilize is explained by the socioeconomic characteristics of the CTLS. While the adjusted R^2 0.374 showed 37% variation in participation was caused by changes in independent variable

4.1.3: Savings Pattern of CTLs

Table 3: Distribution of Responses on the Savings Pattern of the Cooperative Thrift and Loan Societies Members

s/n	Pattern of Saving	Frequency n= 85	Percentage %
i	Daily savings pattern	09*	10.58
ii	weekly savings pattern	65*	76.47
iii	monthly savings pattern	85*	100
iv	yearly savings pattern	00	00
v	savings at will pattern (any time)	54*	63.52

Source: Field Survey August, 2016

**Multiple Responses*

4.1.4: Amount of Savings Mobilize

Table 4: Distribution of Data Extracted from CTLs Members Savings Ledger for 5 years

Name of Society	2011 Savings Mobilized	2012 Savings mobilized	2013 Savings mobilized	2014 Savings mobilized	2015 Savings mobilized
Min. of Agric CTLS	₦ 29,728,301	₦ 34,536,680	₦ 39,786,614	₦ 46,774,254	₦ 59,042,803
Natural Coop. Society	₦ 118,337,249	₦ 196,258,384.28	₦ 273,571,188	₦ 341,824,664	₦ 408,587,192
Ahmed Bello Coop. Society	₦ 89,236,307	₦102,078,268	₦ 121,276,389	₦ 138,806,311	₦ 152,044,383
Goslaya CTLS	₦ 42,895,756	₦ 66,084,388	₦ 90,917,344	₦ 112,182,444	₦ 136,046,270
Gurmusu CTLS	₦ 22,474,682	₦ 26,027,354	₦ 29,916,809	₦ 35,146,309	₦ 41,006,182
Arewa Coop. Venture	₦ 88,013,093	₦ 92,006,159	₦ 107,791,354	₦ 122,909,688	₦ 141,048,303
Kurbusu CTLS	₦14,146,412	₦ 22,911,309	₦ 27,826,115	₦ 32,841,388	₦ 38,116,749
Nagari-Kowe CTLS	₦ 77,988,973	₦ 82,973,664	₦ 102,016,354	₦ 123,946,354	₦ 136,344,344
Gwari Thrift & loan Society Ltd.	₦ 24,589,122	₦27,798,310	₦ 31,003,143	₦ 36,231,244	₦41,095,378
Sabon Gaya Investment and CTLS	₦ 52,004,603	₦ 55,112,790	₦ 63,556,284	₦ 67,883,253	₦ 79,141,445
Dambo CTLS	₦ 249,146,352	₦ 299,682,223	₦ 308,432,947	₦ 339,946,354	₦ 412,668,346
Dakace Invest. & Loan coop. Society	₦ 1,944,940	₦ 2,908,927	₦ 5,806,442	₦ 7,08,746	₦ 10,106,287
Sambo microfinance CTLS	₦ 82,004,606	₦ 96,827,314	₦ 129,044,471	₦ 135,652,814	₦ 141,038,398
Savanah Forestry CTLS	₦ 18,268,602	₦ 26,866,093	₦ 31,016,159	₦ 45,775,125	₦ 61,988,442
Abdulkadir CTLS.	₦ 12,309,882	₦ 14,117,095	₦ 18,916,809	₦ 21,226,939	₦ 25,106,199
Modern Day Women CTLS	₦ 2,946,354	₦ 4,030,826	₦ 4,494,625	₦ 4,975,882	₦ 5,248,382
Min. of Education CTLS	₦ 52,334,243	₦ 66,027,311	₦ 79,088,341	₦ 85,446,399	₦ 93,306,177
Average for all CTLS for Each Year	121,624,709.5	150,491,338.8	169,227,816.8	198,193,528.0	978,36,947.7

Source: Extracted from CTLS Members Savings Ledger of 5 years, (2011; 2012; 2013; 2014 & 2015)

4.1.5: Amount of Loan Disbursed

Table 5: Distribution of Data Extracted from CTLSs Financial Reports Based on the Amount of Loan Disbursed to the members within the period of 5 years

Name of Society	2011 Loan Disbursed (₦)	2012 Loan Disbursed (₦)	2013 Loan Disbursed (₦)	2014 Loan Disbursed (₦)	2015 Loan Disbursed (₦)
Min. of Agric CTLS	10,8789,000	24,968,500	22,936,390	17,848,500	28,492,590
Natural Coop. Society	67,894,000	48,755,000	101,588,500	158,539,000	138,905,500
Ahmed Bello Coop. Society	14,800,000	10,990,500	71,895,550	59,550,500	48,939,100
Goslanya CTLS	13,590,850	28,080,755	52,605,100	39,359,000	47,856,550
Gurmusu CTLS	3,969,500	12,109,600	10,085,000	17,889,555	14,843,000
Arewa Coop. Venture	36,934,810	29,872,900	77,284,500	61,479,000	89,850,500
Kurbusu CTLS	6,843,400	4,816,500	7,579,000	23,084,500	18,820,000
Nagari-Kowe CTLS	54,820,000	62,570,000	39,668,000	34,843,500	75,692,800
Gwari Thrift & loan Society Ltd.	6,173,000	11,850,000	16,751,000	14,820,000	22,845,000
Sabon Gaya Investment and CTLS	27,906,500	37,584,700	43,985,000	38,562,000	51,684,000
Dambo CTLS	141,308,550	107,988,200	98,966,900	139,046,555	274,548,500
Dakace Invest. & Loan coop. Society	305,000	851,000	1,950, 000	3,685,000	4,585,000
Sambo microfinance CTLS	48,548,000	96,827,314	81,454,000	93,850,500	66,980,000
Savanah Forestry CTLS	11,850,000	18,520,500	24,752,000	16,721,500	61,988,442
Abdulkadir CTLS.	4,955,500	8,561,500	13,725,000	11,824,000	18,523,500
Modern Day Women CTLS	746,550	2,851,000	2,527,600	1,845,500	2,885,000
Min. of Education CTLS	41,721,000	48,185,500	39,543,300	59,486,000	75,852,100
<i>Yearly Average of CTLSs loan Disbursed in Naira</i>	<i>167,654,134.1</i>	<i>203,353,647.0</i>	<i>248,427,524.1</i>	<i>274,496,866.3</i>	<i>320,814,991.2</i>

Source: Extracted from CTLS Financial Report of 5 years, (2011; 2012; 2013; 2014 & 2015)

4.1.6: Loan Disbursement Time Lag

Table 6: Distribution of Responses on the Loan Disbursement Time Lag of the Cooperative Thrift and Loan Societies

s/n	Disbursement Time Lag	Frequency n= 85	Percentage %
	1 – 7 days after application	05	5.88
	1 week – 4 weeks after application	14	16.47
	1 month – 3 months after application	46	54.11
	4 months – 8 months after application	15	17.64
	9 months – 12 months after application	05	5.88
	above 1 year after application	00	00

Source: Field Survey August, 2016

4.1.7: Loan Repayment Pattern

Table 7: Distribution of Responses on the Loan Repayment Pattern of the Cooperative Thrift and Loan Societies

s/n	Loan Repayment Pattern	Frequency n= 85	Percentage %
	full repayment	69*	81.17
	partial repayment	85*	100
	zero (no) repayment	13*	15.29

Source: Field Survey August, 2016

4.1.8: CTLS factors that facilitates loan repayment

Table 8: Distribution of Responses on the CTLS factors that Facilitates Loan Repayment

	CTLS factors that facilitates loan repayment	Mean	Decision
<i>i</i>	Loan monitoring and supervision	2.850	Disagree
<i>ii</i>	Incentives on quick and timely repayment	2.751	Disagree
<i>iii</i>	Attachment and auctioning of defaulters' property	3.780	Agree
<i>iv</i>	Deduction from members' savings	3.662	Agree
<i>v</i>	Low and moderate interest charges on loan	3.589	Agree
<i>vi</i>	Cooperative strict sanctions and fines on loan defaulters	3.442	Agree
<i>vii</i>	Deduction from salary (applicable to civil servant)	3.681	Agree
<i>viii</i>	Strict policy on revolving loan	3.293	Agree
<i>ix</i>	Penal interest charges on loan default	3.881	Agree
<i>x</i>	Credit management training	3.521	Agree
	Grand Mean (<i>x</i>)	3.443	Agree

Source: Field Survey August, 2016

4.1.9: Challenges that Hindered the Performance of CTLS in Kaduna state

Table 9: Distribution of Responses on the CTLS Factors that Facilitates Loan Repayment

	Challenges Indicators	Mean	Decision
<i>i</i>	Inadequate fund to disburse as loan to the members	.3.86	Agree
<i>ii</i>	high rate of loan default among the members	3.097	Agree
<i>iii</i>	corruption and embezzlement among cooperative officials	3.244	Agree
<i>iv</i>	poor management and incompetence among staffs	2.762	Disagree
<i>v</i>	high rate loan diversion	3.25	Agree
<i>vi</i>	High interest rate on loan obtained from other source	3.68	Agree
<i>vii</i>	low patronage and commitment by the members	3.35	Agree
<i>viii</i>	poor internal control system	3.28	Agree
<i>ix</i>	poor record keeping and accounting within cooperative	3.61	Agree
<i>x</i>	unviable cooperative investment	3.44	Agree

Source: Field Survey August, 2016

4.2: Test of Hypotheses of the study

4.2.1 Test of Hypotheses One (H_{01})

H_{01} : The savings patterns of members (x) have not significantly affected on the amounts of savings mobilize (y) by the cooperative thrift and loan societies.

H_{a1} : The savings patterns of members have significantly affected the amounts of savings mobilize by the cooperative thrift and loan societies.

From the hypothesis, the dependent variable (y) is amount of savings mobilization while the independent (x) is savings patterns of members. Therefore, simple regression analysis was used to determine nature and how significant the relationship between the two variables is.

Meanwhile, data used for this analysis were obtained from average amount of savings mobilized by the CTLSS over 5 years' period (y) in table 4 and responses on the savings pattern (x) in table 3. Thus, the regression model analysis is as follows;

Available data

S/N	Savings Pattern (x)	AVG Amount (N) Mobilized (y) over 5 years
1	09	978,36,947.7
2	65	121,624,709.5
3	85	150,491,338.8
4	00	169,227,816.8
5	54	198,193,528.0

Regression Outputs:

Correlations		AM	SP
Pearson Correlation	AM	1.000	.151
	SP	.151	1.000
Sig. (1-tailed)	AM	.	.405
	SP	.405	.
N	AM	5	5
	SP	5	5

The correlation between the variables Amount Mobilized (AM) and Savings Plan (SP) is 0.151 which can be interpreted as positive but insignificant relationship. it is positive in the sense that the probability (P)

value of 0.405 is far higher than the threshold of 0.05 but this not significant factor to determine savings mobilized by the CTLS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.151 ^a	.023	-.303	4.48945E8

a. Predictors: (Constant), SP

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.403E16	1	1.403E16	.070	.809 ^a
	Residual	6.047E17	3	2.016E17		
	Total	6.187E17	4			

a. Predictors: (Constant), SP

b. Dependent Variable: AM

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.406E9	3.292E8		4.271	.024
	SP	1.616E6	6.125E6	.151	.264	.809

a. Dependent Variable: AM

Decision Rule: Accept the null hypothesis if the P-value of model formation is less than 0.05, otherwise, reject.

Model Interpretation: The multiple regression coefficient table results show that the independent variable (x = savings pattern) have positive correlation with the (y) amount of savings mobilized (dependent variable) by the CTLSs. The coefficient of independent variable

(x) is 0.151. The implication of this result is that there is positive relationship between the two variables (x & y) but they are not significant at 5% level since their probability (p) value is higher than the threshold of 0.05.

Therefore, R-Square of 0.023 is considered being weak and this implies that the independent variable (Savings Pattern) can only explain 23% of the fluctuation in the dependent variable (Savings Mobilized). That is, savings pattern can account for 23% of increase in the average amount of saving mobilized by the CTLs. Thus, 1% change in savings pattern will influence amount mobilize from members savings by 23%.

The Analysis of variance (ANOVA) model result shows that the model not significant (P Value = 0.809) at 5% level of significance since the P value is greater than the conventional threshold of 0.05. Conclusively, there was sufficient evidence to accept the null hypothesis while the alternate hypothesis was rejected. This means that, the savings patterns of members (x) have not significantly affect on the amounts of savings mobilize (y) by the cooperative thrift and loan societies.

4.2.2 Test of Hypotheses Two (H_{02})

H_{02} : The time lag after loan application (x) has no significant relationship with the amount of loan disbursed (y) to the member by the cooperative thrift and loan societies.

H_{a2} : The time lag after loan application (x) has significant relationship with the amount of loan disbursed (y) to the member by the cooperative thrift and loan societies.

From the hypothesis, the dependent variable (y) is the average amount of loan disbursed by the CTLs over 5 years while the independent (x) is the period in between when the loan applied for and the period when the loan was approved and disbursed. Therefore, simple linear regression analysis was used to determine extent of influence and relationship between the two variables. Meanwhile, data used for this analysis were obtained from average amount of loan disbursed by the CTLs over 5 years' period (y) in table 5 and responses on the time lag (x) in table 6. Thus, the simple linear regression model analysis is as follows;

Available data

S/N	Time Lag (X)	Average Amount (Y) of Loan Disbursed (Y) by CTLs over 5 years accounting period
1	05	167,654,134.1
2	14	203,353,647.0
3	46	248,427,524.1
4	15	274,496,866.3
5	05	320,814,991.2

Regression Output

Correlations

		AD	TL
Pearson Correlation	AD	1.000	.64
	TL	.64	1.000
Sig. (1-tailed)	AD	.	.471
	TL	.471	.
N	AD	5	5
	TL	5	5

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.64 ^a	.041	.33	6.90313E8

a. Predictors: (Constant), TL

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.955E15	1	2.955E15	.146	.042 ^a
	Residual	6.072E16	3	2.0239E16		
	Total	6.367E16	4			

a. Predictors: (Constant), TL

b. Dependent Variable: AD

Regression Model Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.402E9	4.647E8		5.170	.014
TL	1.609E6	2.043E7	.045	.079	.042

a. Dependent Variable: AD

Decision Rule: Accept the null hypothesis if the P-value of model formation is less than 0.05, otherwise, reject.

Model Interpretation: The simple Linear regression coefficient table results show that the independent variable (x = time lag) have positive correlation with the (y) amount of loan disbursed over the years (dependent variable) by the CTLs. The coefficient of independent variable (x) is 0.042. The implication of this result is that there is positive relationship between the two variables (x & y) which is equally significant at 5% level as the probability (p) value is higher than the threshold of 0.05.

Therefore, R-Square of 0.064 is considered being strong which implies that the independent variable (Time Lag) can explain 64% of the fluctuation in the dependent variable (Amount of Loan disbursed). That is, period between loan applications, approve and disbursement (Time Lag) accounted for 64% increase in the average amount of loan disbursed by the CTLs their members in a given period. Thus, 1% change in the time lag will influence amount of loan disbursed to the members by 64%.

In the same vein, The Analysis of variance (ANOVA) of the regression model result shows that the model is significant (P Value = 0.042) at 5% level of significance since the P value is less than the conventional threshold of 0.05. Conclusively, there was sufficient evidence before the researcher to reject the null hypothesis while the alternate hypothesis was accepted. This means

that, the time lag after loan application (x) has significant positive relationship with the amount of loan disbursed (y) to the member by the cooperative thrift and loan societies..

4.2.3 Test of Hypotheses Three (H_{03})

H_{03} : The performance (x) of cooperative thrift and loan societies in facilitating loan repayment among its members has not significantly influence loan repayment pattern (y).

H_{a3} : The performance (x) of cooperative thrift and loan societies in facilitating loan repayment among its members has not significantly influence loan repayment pattern (y).

In order to accept or reject the above statement of hypothesis simple regression analysis was used to determine if the independent variable (x) influences the dependent variable (y) or otherwise. Therefore, data were obtained from CTLSS factors that facilitate loan repayment (y) in table 8 and responses of the loan repayment pattern (x) in table 7. Thus, the simple linear regression model analysis results are presented as follows;

Simple Linear Regression Model Output

Descriptive Statistics			
	Mean	Std. Deviation	N
LRP	3.7807	.10000	3
P	55.6667	37.80653	3

Correlations			
		LRP	P
Pearson Correlation	LRP	1.000	.050
	P	.050	1.000
Sig. (1-tailed)	LRP	.	.101
	P	.101	.
N	LRP	3	3
	P	3	3

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.950 ^a	.903	.807	.04397

a. Predictors: (Constant), P

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.018	1	.018	9.345	.001 ^a
	Residual	.002	1	.002		
	Total	.020	2			

a. Predictors: (Constant), P

b. Dependent Variable: LRP

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.641	.052		69.548	.009
	P	.003	.001	.950	3.057	.001

a. Dependent Variable: LRP

Decision Rule: Accept the null hypothesis if the P-value of model formation is less than 0.05, otherwise, reject.

Model Interpretation: The multiple regression coefficient table results show that the independent variable (x = repayment facilitation) have positive relationship with the (y) repayment pattern (dependent variable). The coefficient of independent variable (x) is 0.001. The implication of this result is that there is positive relationship between the two variables (x & y) but they are significant at 5% level since their probability (p) value is equal to the threshold of 0.05.

Therefore, R-Square of 0.0903 is considered being very strong and this implies that the independent variable (repayment facilitation) influence 90% of the fluctuation in the dependent variable (repayment pattern). That is, repayment pattern can account for 93% of increase in the by the CTLSSs loan repayment facilitation factors like cooperative strict sanctions and fines on loan defaulters; penal interest charges on loan default etc. Thus, 1% changes in these loan facilitation efforts will influence pattern in which the members adopt to repay their loan by 93%.

However, Analysis of variance (ANOVA) from the model result shows that the model is significant since the P Value = 0.809 at 5% level of significance which is greater than the conventional threshold of 0.05. Conclusively, there was sufficient evidence to reject the null hypothesis while the alternate hypothesis was accepted. This means that, the performance of cooperative thrift and loan societies in facilitating loan repayment among its members has not significantly influence loan repayment pattern.

4.2.4 Test of Hypotheses Four (Ho₄)

Ho₄: the cooperative thrift and loan society's socioeconomic profile (x) have not significantly influence their performance in savings mobilization (y₁); loan disbursement (y₂) and loan repayment (y₃).

Ha₄: the cooperative thrift and loan society's socioeconomic profile (x) have significantly influence their performance in savings mobilization (y₁); loan disbursement (y₂) and loan repayment (y₃).

In order to accept or reject the above statement of hypothesis Multivariate regression model analysis was used to determine the influences of the independent variable (x) on the dependent variables (y₁; y₂ & y₃). Therefore, data were obtained from CTLSSs socioeconomic profile (x) in table 1 and saving mobilize (y₁) in table 4; amount of loan disbursed (y₂) in table 5 and loan

repayment pattern (y_3) in table 7. Thus, the multivariate regression model analysis results are presented as follows;

Available data

Socio-Economic Profile (x)	Amount Disbursed (Y)	Amount mobilized (y)	Loan Repayment Pattern (y)
135882704.6	1676541341	978369477	3.881
24295350.44	2033536470	1216247095	3.78
12034999	2484275241	1504913388	3.681
1953347.604	2744968663	1692278168	3.662
12.36	3208149912	1981935280	3.589

Output

Multivariate Regression Model: AM AD LRP = SEP

Equation	Obs	Parms	RMSE	"R-sq"	F	P
AM	5	2	4.08e+08	0.6507	5.588657	0.0490
AD	5	2	2.67e+08	0.6547	5.687012	0.0472
LRP	5	2	.0613756	0.7808	10.68666	0.0468

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+-----						
	AM					
SEP	-8.423847	3.563336	-2.36	0.099	-19.76397	2.916278
_cons	2.72e+09	2.21e+08	12.33	0.001	2.02e+09	3.43e+09
-----+-----						
	AD					
SEP	-5.552713	2.32843	-2.38	0.097	-12.96282	1.85739
_cons	1.67e+09	1.44e+08	11.56	0.001	1.21e+09	2.13e+09
-----+-----						
	LRP					
SEP	1.75e-09	5.36e-10	3.27	0.047	4.64e-11	3.45e-09
_cons	3.657622	.0331864	110.21	0.000	3.552008	3.763236

Dependent variables (Y): Amount Disbursed (AD); Amount Mobilized & Loan Repayment Pattern (LRP)

Independent variable CTLSs Socioeconomic Profile (SEP)

Statistical tool: Multivariate Regression Analysis. The tool can be used to determine nature and extent to which independent variable influences two or more dependent variables.

Decision Rule: Accept the null hypothesis if the P-value of model formation is less than 0.05, otherwise, reject.

Conclusion: The P-values are values are less than 0.05 which implies models formulated are significant and can be used for decision making. On the other hand, the P-value less than 0.05 is an indication of existence of enough evidence to reject the null hypothesis and conclude that the cooperative thrift and loan society's *socioeconomic profile* have significantly influence their performance in *savings mobilization; loan disbursement and loan repayment pattern*.

4.2.5 Test of Hypotheses Five (H_{05})

H_{05} : The challenges faced by the thrift and loan cooperative societies do not significantly influence their performance in loan disbursement

H_{a5} : The challenges faced by the thrift and loan cooperative societies significantly influence their performance in loan disbursement

Statistical tool: Simple Regression Analysis was adopted. The tool was used to determine effect of the challenges faced by the CTLs on the average amount of loan disbursed to their members.

Decision Rule: Accept the null hypothesis if the P-value of model formation is less than 0.05, otherwise, reject.

Available Data

S/N	Challenges (<i>table 5</i>)	Amount of Loan Disbursed (<i>table 9</i>)
1	3.24	1676541341
2	3.66	2033536470
3	3.81	2484275241
4	3.75	2744968663
5	3.96	3208149912

Output

Descriptive Statistics

	Mean	Std. Deviation	N
ALD	2.4295E9	5.98446E8	5
Challenges	3.6840	.27116	5

Correlations

		ALD	Challenges
Pearson Correlation	ALD	1.000	.903
	Challenges	.903	1.000
Sig. (1-tailed)	ALD	.	.018
	Challenges	.018	.
N	ALD	5	5
	Challenges	5	5

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Challenges ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: ALD

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.903 ^a	.816	.755	2.96216E8

a. Predictors: (Constant), Challenges

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.169E18	1	1.169E18	13.326	-.035 ^a
	Residual	2.632E17	3	8.774E16		
	Total	1.433E18	4			

a. Predictors: (Constant), Challenges

b. Dependent Variable: ALD

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	-4.916E9	2.017E9		.093
	Challenges	1.994E9	5.462E8	-.903	-.035

a. Dependent Variable: ALD

Model Interpretation: The multiple regression coefficient table results show that there is an inverse (-0.035) relationship between the two variables (x & y) which is significant at 5% level since their probability (p) value is less than the threshold of 0.05.

Therefore, R-Square of 0.0816 implied that the challenges (e.g. inadequate fund; loan defaults; corruption etc) faced by CTLs account for 81% of decrease in the average amount of saving mobilized by the CTLs. Thus, 1% change in challenges will influence the amount of loan disbursed to members by 81%. As such, there is enough evidence to reject the null hypothesis and conclude that challenges faced by the thrift and loan cooperative societies have significantly influenced the amount of loan disbursed.

4.3: Discussion of Findings

The data obtained were subjected to statistical analysis thus; result from the analysis of data presented revealed some findings which are discussed as follows;

4.3.1: The data presented in the table 1 result showed the socioeconomic characteristics of the CTLS that were studied in Kaduna state. The data were extracted from the secondary source which is the CTLSs financial reports of five years (2011 – 2015). Therefore, evidence from the data obtained shows that most of the CTLS in Kaduna state have in operation for quite reasonable years (minimum average 14.71 years & maximum average of 20.44years). Similarly, the CTLS socioeconomic indicators like membership size; share capital; annual surplus; reserve fund and dividends paid on the thrift savings increase as the years of CTLS operation increases.

In the same vein, evidence from the result of table 2 showed CTLS socioeconomic characteristics have positive influence on the amount of savings mobilize from their members. As it was revealed from the result table 2, the years of operation; membership size; annual surplus; and dividends paid on thrift savings are very important indicators that influence the amount of savings mobilize by the CTLS

More so, the result of the hypothesis four (H_{04}) also strengthen the result of table 2 as the regression model ($P\text{-value} = 0.0490$) affirm that the socioeconomic characteristics of the CTLS have the significant influence on the average amount savings mobilize by the CTLS within a specific period of time.

In a similar result from the study conducted by Njihia and Muturi (2015), evidence from their established that socioeconomic characteristics influence the financial performance of savings and credit cooperative societies. The linear regression analysis in their study shows a relationship, $R = 0.713$ and $R^2 = 0.509$ which means that 50.9% of the corresponding change in performance be explained by membership size, dividend policy and other socioeconomic factors.

Also, Kassali, Adejobi and Okparaocha, (2013) conducted a study on the analysis of cooperative financial performance in Ibadan Metropolis, Oyo State, Nigeria. Cooperative's structural and

financial elements were hypothesized as determinants of cooperative financial performance. All variables except cooperative size had significant effect on financial performance. But years of operation, and number of loans beneficiaries only had negative effect on performance.

4.3.2: The result of table 3 shows the savings pattern adopted by the CTLS in mobilizing savings from their members. Evidence from the result table revealed that majority (100%) of the CTLS monthly savings pattern, while some (76.47%) of the CTLS encourage their members to have weekly savings pattern and 63.52% of the responses indicated that CTLS also mobilize savings from those members who want save at will.

Therefore, based on the savings pattern used in mobilizing savings the table 4 shows the amount of savings that is been mobilize by various CTLS in Kaduna state in the past five years (2011 – 2015) which was extracted from the members personal ledger account. Then from the average amount of saving mobilize each year it was revealed that CTLS in Kaduna mobilize the highest amount of savings in 2015 with average of N 978,369,477 while recoded the lowest savings in 2011 with average of ₦ 121,624,709.5. As such, evidence from the result table indicated that that CTLSs saving mobilization capacity increases on a yearly basis.

The result of hypothesis one (*H₀₁*) also strengthen the result of the table 4 as the hypothesis result determined the extent of relationship between saving mobilization pattern and the amount of saving mobilized in a given year. As such, the hypothesis one result indicated that there is positive relationship between the saving mobilization pattern and the amount money mobilized b ut this relationship is not really significant to the average amount of savings mobilized as the P value (0.809) of the regression model is far higher than the threshold of 0.05 and the R- square also indicated that the savings mobilization pattern only contributed to 23% increase in the amount of saving mobilized. This result also correlated with the result of Ndubisi (2014) which showed that performance of CTCS in savings mobilization was in terms of ability to attract savings deposits from members. Meanwhile, the major assumption of his study is that the performance will to a large extent depend on the saving pattern of the members

4.3.3: the table 5 shows amount of loan disbursed data extracted from the financial reports of CTLSs that covered accounting period of five years. Evidence from the table 5 data indicated that the CTLSs that have been in existence for long period of time and has large membership size disbursed big amount of loan to their members when compared to those that have small membership size. it was also revealed that the amount of loan disbursed varied from one CTLS to another and from year to year.

Similarly, the responses from the table 6 descriptive statistics result show the time lag between application for loan period and disbursement period. As, such, the loan approval mostly (54.11%) matured within 1 month to three months for disbursement to the members.

in bid to, strengthen the result of table 6 the hypothesis two (H_{02}) examine the nature and extent of relationship between the amount of loan disbursed and time lag and the evidence from the result of the hypothesis two indicated that amount of loan disbursed to members can be influence by the time lag by 64%. That is, there is a strong relationship between the loan disbursement time lag and the amount of loan disbursed to the members.

4.3.4: the descriptive statistics result table 7 shows the multiple responses on the pattern of loan repayment in the CTLS and there are three main patterns which are full; partial and zero pattern. Meanwhile evidence from the table indicated that partial repayment pattern are mostly common (100%); while full repayment is also realized among most (81.17%) CTLS. But zero repayment pattern is very rare (15.29) in CTLS.

Similarly, table 8 result table shows that the CTLS in Kaduna state has some factors that facilitate loan repayment among its members, as the respondents (management Committee members) agreed to most of the indicators that facilitates loan repayment among its members. Some of these factors indicators include penal interest charges on loan ($x=3.881$); auctioning of defaulters properties ($x = 3.780$); deduction from members savings ($x= 3.681$).

More so, the hypothesis three (H_{03}) result also help to affirm that the CTLS factors that facilitates loan repayment have significantly influence loan repayment pattern. As the regression model result shows factors that facilitate repayment account for 93% change in repayment pattern.

This result corroborate the empirical result of Oke, Adeyemo, and Agbonlahor (2007) as their variables significantly influence repayment. Also, Keitany (2015) findings indicated that there is strong relationship between the loan default and the performance of cooperative. The tests showed that the overall regression model is a good fit for the data as the independent variables statistically and significantly predict the dependent variable. Finally; Oladele and Ward (2016) examined the determinants of loan repayment patterns among micro agricultural financial institution like cooperative and in terms of repayment 29.3% did not repay, 44% made partial repayment and 26.7% total repayment. Significant determinants of no repayment pattern were nature capital while the significant determinants of partial repayment fine and sanctions.

4.3.5: Finally, the result of the table 9 shows the extent of various challenges that limit the performance of CTLS in Kaduna state. Evidence from the table result 9 revealed that the performance of CTLS is been hindered by various constraints which range from inadequate fund for disbursement ($x=3.86$); loan default ($x= 3.097$); poor recording keeping ($x = 3.61$) as well as poor internal control system ($x = 3.28$).

This also corroborates the study of Okechukwu, Umebali, and Ugeh (2016) evaluated the performance of co-operative societies in Delta State focusing on the degree of adoption and application of internal control systems. Poor performance and eventual led to the collapse of most co-operative societies an the result of their study revealed that internal control system has significant influence on the performance of co-operatives

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

This study analyzed the performance of Cooperative Thrift and Loan Societies in Kaduna State. Five objectives with five corresponding null hypotheses were generated to guide the study. In this chapter, the summary of the findings, conclusion drawn from the findings and recommendations that could enhance the robust performance Cooperative Thrift and Loan societies in Kaduna State is as follows;

5.1 Summary of Findings

The data obtained were subjected to statistical analysis thus; result from the analysis of data presented revealed some findings which are discussed as follows;

5.1.1: Finding from the study result revealed that CTLSs financial reports of five years (2011 – 2015) revealed that majority of the CTLS operating in Kaduna state have in an existence for quite reasonable number of years (minimum average 14.71 years & maximum average of 20.44years). Similarly, findings revealed that CTLS in Kaduna state perform better with their age. That is the older the years of operation the better their socioeconomic indicators like membership size; share capital; annual surplus; reserve fund and dividends paid on the thrift savings increase as the years of CTLS operation increases. In the same vein, evidence showed CTLS socioeconomic characteristics have positive influence on the amount of savings mobilize from their members annually.

5.1.2: Evidence from the findings revealed that majority (100%) of the CTLS monthly savings pattern, while some (76.47%) of the CTLS encourage their members to have weekly savings pattern and 63.52% of the responses indicated that CTLS also mobilize savings from those members who want save at will. Therefore, As such, it was revealed from the result that there is positive relationship between the saving mobilization pattern and the amount money mobilized but this relationship is not really strong as the savings mobilization pattern only contributed to 23% increase in the amount of saving mobilized.

5.1.3: More so, findings revealed that the amount of loan disbursed varied from one CTLS to another and from year to year. As such, the time lag between application for loan period and disbursement period matured mostly (54.11%) within 1 month to three months for disbursement to the members and the findings from the result revealed the nature and extent of relationship between the amount of loan disbursed and time lag as the result indicated that 64% increment in the amount of loan disbursed to members can be influence by the time lag. That is, there is a strong relationship between the loan disbursement time lag and the amount of loan disbursed to the members.

5.1.4: Furthermore, findings from the study revealed that partial repayment pattern are mostly common (100%); while full repayment (81.17%) is also realistic among most CTLS Kaduna state. Base on this findings revealed that the CTLS in Kaduna state has some factors like auctioning of defaulters properties; penal interest charges on loan and deduction from members savings all these factors are put in place to encourage and facilitates loan repayment among its members. It was further revealed that the CTLS factors that facilitates loan repayment have significantly influence loan repayment pattern. As the regression model result shows that these factors boost the chances of loan repayment by 93%.

5.1.5: Finally, the findings from the study revealed the extent of various challenges that limit the performance of CTLS in Kaduna state. Evidence from the study shows that the performance of CTLS is been hindered by inadequate fund available for disbursement; loan default; poor recording keeping; corruption; as well as poor internal control system.

5.2 Conclusion

Based on the findings from the study, it is concluded that the cooperative thrift and loan societies in Kaduna state have really perform significantly well. As they are able to be in the operation for a long period of time to satisfy the needs of their members in terms of mobilizing saving and help them with micro credit. The determinant factors that determine the performance of CTLS in satisfying the financial needs of its members is the ability of the CTLS to effectively mobilize

savings, and loans disbursement within shortest period of time as well as encouraging the members to repay their loan as at when due.

5.3 Recommendations

Recommendations are necessary in order to enhance the performance of Cooperative Thrift and Loan Societies in Kaduna State which the members will be at the receiving end and continue to benefit. As such the following recommendations are made necessary:

1. The CTLSs in Kaduna State should ensure that they conduct a regular credit/financial management training to educate; re-orient and sensitize the CTLS members on the importance of savings mobilization. This will help to enhance the financial intelligence of the members and equally, it will enable the cooperative societies (CTLS) generate more funds to meet the loan requirements and satisfy other credit needs of its members.
2. Each Cooperative thrift and loan society in the State should put appropriate performance evaluation measures in place to determine their achievements and failures. This will help them to be proactive and be able to take urgent actions against factors affecting their cooperative society. This could be achieved through regular internal control system in Cooperative thrift and loan societies. Performance in CTLS could be measured in area of member satisfaction, service delivery and value addition etc.
3. Adequate measures should be put in place on how to control the disbursement and recovery of loans given to the members. It is always a big challenge when members default in repaying part of the credit given to them by the society. This may affect the performance of such society.

4. The management of CTLS should also diversify their investments and also source for the external sources of funds for instance grants from the government and some international bodies and loan from other financial institution. This will enable the CTLS to have enough funds to meet up with the credit needs of its members. More so, this will equally reduce the time lag between period of loan application, loan approval and the period when the will be disbursed. This will be achieving if there are enough fund in the cooperative.
5. The CTLS in Kaduna state should also design a strategy that will enable them monitor and supervise loans disburse. This will enable and enhance productive utilization of loan obtained by its members. This will facilitates timely repayment of loan and reduce the rate of loan default among its members.

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Appendix 1

Department of Cooperative Econs & Mgt
Faculty of Management Sciences
Nnamdi Azikiwe University Awka
Anambra State
24th January 2014

Dear Respondents,

I am a Ph.D candidate in the above named department. I am conducting a study on the above topic in partial fulfillment of the requirements for the award of Doctor of Philosophy in Cooperative Economics and Management, Nnamdi Azikiwe University Awka, Anambra state.

I humbly request you to please respond to the questionnaire attached by ticking the option that best represent your opinion. I promise that the information you provide will be treated confidentially and solely for the purpose of this academic activity.

Thanks for your anticipated cooperation.

Yours faithfully

Salamatu I. Attahiru

QUESTIONNAIRE

Instruction: Please kindly tick (✓) the option that best represents your opinion.

SECTION A: Pattern of Savings

Mode of Savings of Members of Cooperative Thrift and Loan Societies in Kaduna

- a) Daily savings pattern ()
- b) Weekly savings pattern ()
- c) Monthly savings pattern ()
- d) Annual saving pattern ()
- e) Savings at will (any time) pattern ()

SECTION B: Loan Disbursement Time Lag

- 1 – 7 days after application ()
- 1 week – 4 weeks after application ()
- 1 month – 3 months after application ()
- 4 months – 8 months after application ()
- 9 months – 12 months after application ()
- above 1 year after application ()

SECTION C: Pattern of loan repayment and CTLS Factors that Facilitates Loan Repayment

- i. Full loan recovery compliance ()
- ii. Partial loan recovery ()
- iii. No loan recovery at all ()

b. What are the measures taken to recover overdue unpaid loans?

S/N	CTLS Factors that Facilitates Loan Repayment Indices	SA	A	UN	D	SD
i	Loan monitoring and supervision					
ii	Incentives on quick and timely repayment					
iii	Attachment and auctioning of defaulters' property					
iv	Deduction from members' savings					

<i>v</i>	Low and moderate interest charges on loan					
<i>vi</i>	Cooperative strict sanctions and fines on loan defaulters					
<i>vii</i>	Deduction from salary (applicable to civil servant)					
<i>viii</i>	Strict policy on revolving loan					
<i>ix</i>	Penal interest charges on loan default					
<i>x</i>	Credit management training					

SECTION D: Challenges that Hindered CTLS Performance

The Constraints Confronting that Hindered CTLS Performance

What is your perception on the challenges faced by the CTLS? Use the 5- point scale (1-5) to measure your perception on the under listed challenges strongly Agree (SA)

S/N	Constraints indices	SA	A	UN	D	SD
<i>i</i>	Inadequate fund to disburse as loan to the members					
<i>ii</i>	high rate of loan default among the members					
<i>iii</i>	corruption and embezzlement among cooperative officials					
<i>iv</i>	poor management and incompetence among staffs					
<i>v</i>	high rate loan diversion					
<i>vi</i>	High interest rate on loan obtained from other source					
<i>vii</i>	low patronage and commitment by the members					
<i>viii</i>	poor internal control system					
<i>ix</i>	poor record keeping and accounting within cooperative					
<i>x</i>	unviable cooperative investment					

Appendix 2

Regression

[DataSet0]

Descriptive Statistics

	Mean	Std. Deviation	N
ALD	2.4295E9	5.98446E8	5
Challenges	3.6840	.27116	5

Correlations

		ALD	Challenges
Pearson Correlation	ALD	1.000	.903
	Challenges	.903	1.000
Sig. (1-tailed)	ALD	.	.018
	Challenges	.018	.
N	ALD	5	5
	Challenges	5	5

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Challenges ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: ALD

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.903 ^a	.816	.755	2.96216E8

a. Predictors: (Constant), Challenges

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.169E18	1	1.169E18	13.326	.035 ^a
	Residual	2.632E17	3	8.774E16		

Total	1.433E18	4		
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a. Predictors: (Constant), Challenges

b. Dependent Variable: ALD

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.916E9	2.017E9		-2.438	.093
	Challenges	1.994E9	5.462E8	.903	3.651	.035

a. Dependent Variable: ALD

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
LRP	3.7807	.10000	3
P	55.6667	37.80653	3

Correlations

		LRP	P
Pearson Correlation	LRP	1.000	.950
	P	.950	1.000
Sig. (1-tailed)	LRP	.	.101
	P	.101	.
N	LRP	3	3
	P	3	3

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	P ^a		Enter

a. All requested variables entered.

b. Dependent Variable: LRP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.950 ^a	.903	.807	.04397

a. Predictors: (Constant), P

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.018	1	.018	9.345	.201 ^a
	Residual	.002	1	.002		
	Total	.020	2			

a. Predictors: (Constant), P

b. Dependent Variable: LRP

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.641	.052		69.548	.009
	P	.003	.001	.950	3.057	.201

a. Dependent Variable: LRP

Descriptive Statistics

	Mean	Std. Deviation	N
LRP	3.7807	.10000	3
P	55.6667	37.80653	3

Correlations

		LRP	P
Pearson Correlation	LRP	1.000	-.954
	P	-.954	1.000
Sig. (1-tailed)	LRP	.	.097
	P	.097	.
N	LRP	3	3
	P	3	3

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	P ^a		. Enter

a. All requested variables entered.

b. Dependent Variable: LRP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.954 ^a	.910	.820	.04242

a. Predictors: (Constant), P

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.018	1	.018	10.117	.194 ^a
	Residual	.002	1	.002		
	Total	.020	2			

a. Predictors: (Constant), P

b. Dependent Variable: LRP

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.921	.050		77.651	.008
	P	-.003	.001	-.954	-3.181	.194

a. Dependent Variable: LRP

Regression

[DataSet0]

Descriptive Statistics

	Mean	Std. Deviation	N
AD	2.4295E9	5.98446E8	5
TL	17.0000	16.89675	5

Correlations

		AD	TL
Pearson Correlation	AD	1.000	.045
	TL	.045	1.000
Sig. (1-tailed)	AD	.	.471
	TL	.471	.
N	AD	5	5
	TL	5	5

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	TL ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: AD

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.045 ^a	.002	-.331	6.90313E8

a. Predictors: (Constant), TL

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.955E15	1	2.955E15	.006	.942 ^a
	Residual	1.430E18	3	4.765E17		
	Total	1.433E18	4			

a. Predictors: (Constant), TL

b. Dependent Variable: AD

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.402E9	4.647E8		5.170	.014
	TL	1.609E6	2.043E7	.045	.079	.942

a. Dependent Variable: AD

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
AM	1.4747E9	3.93282E8	5
SP	42.6000	36.65106	5

Correlations

		AM	SP
Pearson Correlation	AM	1.000	.151
	SP	.151	1.000
Sig. (1-tailed)	AM	.	.405
	SP	.405	.
N	AM	5	5
	SP	5	5

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	SP ^a	.	Enter

a. All requested variables entered.

b. Dependent Variable: AM

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.151 ^a	.023	-.303	4.48945E8

a. Predictors: (Constant), SP

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.403E16	1	1.403E16	.070	.809 ^a
	Residual	6.047E17	3	2.016E17		
	Total	6.187E17	4			

a. Predictors: (Constant), SP

b. Dependent Variable: AM

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	
1	(Constant)	1.406E9	3.292E8		4.271
	SP	1.616E6	6.125E6	.151	.264

a. Dependent Variable: AM

Output

Mvreg: AM AD LRP = SEP

Equation	Obs	Parms	RMSE	"R-sq"	F	P
AM	5	2	4.08e+08	0.6507	5.588657	0.0490
AD	5	2	2.67e+08	0.6547	5.687012	0.0472
LRP	5	2	.0613756	0.7808	10.68666	0.0468

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
AM						
SEP	-8.423847	3.563336	-2.36	0.099	-19.76397	2.916278
_cons	2.72e+09	2.21e+08	12.33	0.001	2.02e+09	3.43e+09
AD						
SEP	-5.552713	2.32843	-2.38	0.097	-12.96282	1.85739
_cons	1.67e+09	1.44e+08	11.56	0.001	1.21e+09	2.13e+09
LRP						
SEP	1.75e-09	5.36e-10	3.27	0.047	4.64e-11	3.45e-09
_cons	3.657622	.0331864	110.21	0.000	3.552008	3.763236