

**CREDIT ADMINISTRATION AND FINANCIAL PERFORMANCE OF  
INSTITUTIONAL BASED SAVINGS AND CREDIT COOPERATIVE  
SOCIETIES LTD IN NAIROBI CITY COUNTY, KENYA**

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## **DECLARATION**

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## **DEDICATION**

This research is dedicated to the heavenly father for his sufficient grace and to my husband James Obosi, my sons Timothy, and Treavan, and my daughter Tabby who provided religious, moral, and financial support to me in completing it and to all who offered me support during the research.

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## **OPERATIONAL DEFINITION OF TERMS**

<b>Credit Administration</b>	This is a process of granting credit to customers and establishing terms for timely and complete repayment.
<b>Credit Cost</b>	This is the extra amount paid on the amount borrowed by the borrower.
<b>Financial performance</b>	This entails the rate at which an institution generates income by efficient and effective credit management of assets to generate revenue.
<b>Loan Repayment</b>	This entails the process of returning the loan amount periodically to the lender.
<b>Default management</b>	This is the process of default prevention, debt restructuring arbitration process, securitization process, and disputes and collection of credit issued.
<b>Return on asset</b>	This refers to the return on use of asset to generate income for the credit organization to reach its potential.
<b>Management of Security</b>	It the process by which a loan is adequately secured, in an event, the debtors defaults with the thought of recovering from guarantor or insured.

## **ABBREVIATIONS AND ACRONYMS**

<b>ACCOSCA</b>	Africa Confederation of Co-operative Savings and Credit Associations
<b>AGM</b>	Annual General Meeting
<b>BOSA</b>	Back office savings and credit society ltd activities
<b>KMFIs</b>	Kenya Micro-Finance Institutions
<b>KNFC</b>	Kenya National Federation of Cooperatives
<b>KUSCCO</b>	Kenya Union of Savings and credit Co-operative Societies
<b>SACCO</b>	Savings and Credit Societies Ltd
<b>SASRA</b>	Savings and Credit Society Regulatory Authority
<b>SME</b>	Small and Micro enterprises

## ABSTRACT

This study offers to determine credit administration and financial performance of Institutional-based SACCOs in Nairobi city County, Kenya. In Kenya, Savings and Credit societies have faced challenges and difficulties in achieving better financial performance despite Kenyan economic role. The risk that members will not meet contractual obligations seriously affects the smooth running of the business and thus experiences a downward trend, leading sometimes to their collapse. This study explored the credit administration and financial performance of Institutional based Savings and credit societies in City County Nairobi, Kenya. The study targeted indetermination of effects of loan repayment, credit costs, default management, and management of loan security on SACCOs` financial performance in Nairobi City County. This project tested a significance level of 0.005 null hypotheses. Study adopted Stewardship Theory, Credit Default Theory, Agency Theory, Information asymmetry theory, and 5Cs Credit Model. Explanatory research design was employed. The goal populace of the study compromised of 10 Institutional based SACCOs in Nairobi City County for the years 2017 to 2021. A census of the 10 SACCOs was done. The project used secondary panel from both annual and financial statements reports of numerous selected companies. Panel linear multiple regression analysis, descriptive statistics and correlation analysis were used in the research. This study showed, the loan repayment management affects significantly the financial performance ( $p=0.000$ ) credit cost management significantly affected financial performance ( $p=0.000$ ), default management significantly affected financial performance ( $p=0.000$ ), and last but not least, credit collateral management significantly influenced financial performance ( $p=0.000$ ). The research recommends that the institutional based SACCOs should enhance the collection policy through adoption of more stringent measures to a more lenient measure of effective debt recovery. The research also advises that the management of Institutional based SACCOs should boost or enhance customers` appraisal tools to be able to improve their financial performance. With the client appraisal tool, the Institutional-based SACCOs will be able to identify the credit worthy clients hence reducing non-performing loans. The management should also up their credit risks control to help reduce default levels and non-performing loans which will enable improved financial performance.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the study

Bettinger, (1986) emphasizes how financial performance of activities as having attracted the great attention of investors globally. The banking institution's products and services have faced new entrants' stiff competition and strict governing financial regulations on financial institutions (Bush, 1987). Sollenberg and Anderson, (1995) asserts that performance is a measurement of an organization's ability and effectiveness to maximize resources to achieve its primary goals. Some SACCOs operate inefficiently due to inefficient loan repayments (Hoque, 2004). Other related problem includes volatile liquidity, poor credit condition, and poor credit management that have never improved to keep up with current realities. Bibby and Shaw, (2005) commented that some SACCO members believe in ethical values such as responsibility, openness, integrity, and respect for others.

The SACCOs main core business is members' savings mobilization and providing members with a credit facility at affordable interest rates; thereby creating a common source of capital so that these members can lend at the highest profitability, used to cover operating expenses, SACCO contributes to capital provision and distributes final profits equitably among its members according to Cooperatives Digest, (2008). The lack of proper credit administration practices of business makes it difficult to do business. And that's why (Brigham & Houston, 2003), have shown that 60 % of CFOs' time will be spent managing the company's credit issues. Therefore, an important part of credit administration is to maintain adequate liquidity for the day-to-day business management to meet obligations (Eljelly, 2004).

Credit risk as referred by The Basel Committee on Banking Supervision (2001) as the possibility of losing part or all of the total balance of a loan due to default. With effective credit management, savings, and credit institutions will generate profits and support activities leading to stable and effective capital allocation in the future economy, Psillaki, Tsolas, and Margaritis, (2010). According to Kiiru, (2004), credit activity was introduced after the 11 world war Europe and moved to Africa, then to other continents of the world. The credit concept was not popular because banks in the United States charge high-interest rates, as observed by Ditcher (2003). Higher interest rates prevented many people from borrowing up to the economic boom of the United States in 1885 during the time the bank had a surplus of cash and had to use the excess as a loan. In the 1950s, credit became famous in Africa as most big banks gave the wealthy the priority to become the first customers to access credit, denying the poor this opportunity. Poor-performing customers in the 1990s led to interference.

According to Modurch, (1999), microfinance institutions adopted the credit management concept towards the end of the 1990s, which did not help control loan default to date. According to Pandey (2004), loans have been ranked as the main cost solution for business financing and working capital. Gijselinckx and Devetere, (2007) observed that loans lead to the development of financial institutions to maintain economic and financial stability. Credit is an event in which an asset or service is provided to recover it at a specified future time and a cost on mutually beneficial terms agreed upon by everybody (Myers and Brealey, 2003). A large number of loans disbursed by SACCO defaulted, which affected performance (Mwaura, 2005). To achieve its goals, SACCO must improve its financial performance and increase lending profits, sufficient to increase capital reserves and institutional capital and distribute profits to shareholders. According to Nzotta, (2004) Credit administration

greatly affects the institution success and failure. Ofei, (2001) observed collecting savings and lending to members of well-managed SACCO help them achieve their goals.

According to SACCO Times, (2016), the SACCOs in Kenya have succeeded in mobilizing savings of more than 230 billion Kenyan shillings or 43.1 % of National Savings. The downside of the lending policy is the risk of financial loss in the event of loan default. Nnanna, (2005) defines credit default risk as the possibility that the borrower will not meet his obligation under loan repayment conditions. The goal of collateral management is to reduce the level of risk that any financial institution should strive to limit (Nnanna, 2005). To this extent most research has not targeted credit administration and financial performance of institutional based SACCOs in Nairobi City County, Kenya.. This study purposed to address gaps in credit administration and financial performance of institutional based SACCOs in Nairobi City County.

### **1.1.1 Financial Performance**

Financial performance according to Metcalf and Titard (1976) is the behavior of performing a financial activity to achieve a financial goal within a specified period. He also defined it as a process of monetary quantification of the outcomes of a company`s policies. The financial performance of institution is all about the use of financial instruments in order to determine the extent to which objectives will be achieved, the involvement of financial resources, and the provision of investment opportunities by the bank (Flamini, Valentine, McDonald & Liliana 2009). Financial performance of organization is the process of determining profit and loss for a given period of time. These measures include ROE and ROA (Hempel, Coleman & Simon,

1994). Financial performance analysis is an interpretation of an organization's financial situation.

Financial health is an important goal for business owners, regardless of the type of organization. Indeed, the financial position of companies is a major determinant of a company's well-being and it continues to exist (Onduso, 2013). Various studies on organizational goals try to put more effort into ensuring maximum shareholder wealth. Therefore, the management of the organization is interested in continuously increasing the shareholder wealth for the benefit of the organization and the growth of ROA and ROE growth. The improved organization shows an indication of effective performance and efficient use of performance (Naser & Mokhtar, 2004). The main challenge of financial management is to ensure a balance between liquidity, profitability, and solvency (Lazaridis & Tryfonidis, 2006). Profitability examines the extent to which an organization derives a profit from its productive activities, including the management of labor and capital (Coff & Kryscynski, 2011).

SACCO is a member-owned and controlled financial institution that works together to promote savings encourage low-interest rates and provision to members of other financial services. Financial performance involves achieving a company's financial goals and objectives which are realized when a company maximizes its resources efficiently to generate more revenue in its daily operation. Financial performance measures the financial strength of companies according to Kiaritha, (2015), at a given time and for comparison between companies, (Ene & Bellow, 2016). According to Al-Matari-Al Swidi and Adzil, (2014). Financial performance is an essential measure in business management, especially for profitable companies. Financially successful company shareholders are always rewarded for their investments; hence their investments grow leading to economic growth. Key ratios to measure financial

performance include return on equity, profit margin, and sales ratio (Al-Matari-Al Swidi & Fadzil, 2014).

Johnson and Scholes, (2007) summarize two reasons why an organization should measure its performance that is the preparation of financial statements when the time is needed and the need to analyze the information generated from the results. According to Jared, Charles, and Willy (2013), funds raised by SACCO members should be lent to maximize dividend yield, increase the liquidity of the organization and further develop the business. Gartner, (2006) observes that wealth growth is sustainable if the profits generated are sufficiently distributed and can be retained to replenish the capital reserves for future use and sustainability of the organization. He also discovered that SACCO`s institutional capital is made up of the growth of the organization`s capital.

The growth of a business is driven by the growth of organization capital, retained earnings, deposits and increased membership, attractive dividends, and interest rates ( Khrawish 2011). Wen (2010) pointed out that asset return (ROA) is the ratio of the SACCOs revenue to total assets. According to Wen (2010), a higher rate of return on assets indicates that SACCO is operating efficiently. Fraser et al (1974) assert liquidity ratio as a measure of company capability to pay its current liabilities when they fall due. Point out, that liquidity ratio is a measure of capability of a company to pay its current liabilities being currents asset over current liabilities. Wen (2010) pointed out that return on assets, or profit, is the ratio of SACCO's revenue to total assets.

### **1.1.2 The Credit Administration**

Myers and Brealey (2003) assert that Credit administration is a strategy adopted by organizations to maintain optimal performance. He calls credit administration an element of financial management related to credit analysis of loan repayment capacity, credit rating, cost of capital, credit classification, and reporting because good credit management will reduce debtor maturity and minimize default. Edward (1993) pointed out that unless the seller successfully recovers the costs by charging interest, any account due will affect the profit. He points out that companies can be tempted by increased business prospects in a competitive market to extend additional credit when the additional benefit of increased sales is substantial compared to operating costs to avoid a business full of pitfalls.

A good credit policy is a company blueprint for communicating with its customers, Pike and Neale, (1999). Scheufler (2002) finds that the credit and collection department is a vital organizational contributor, hence when a credit policy is established should be understood and applied at all levels of the financial institution to avoid unnecessary risks leading to the correct assessment of the development opportunities of the business. Stern and Feldman (2014) argue that the success of a business mainly depends on several factors including a good loan repayment period, which is important for all lending institutions. On the other hand, Arsyad, (2006) asserts that defects are harmful to the revenue and capital of the organization, they prevent companies from achieving their goals leading to the collapse of the organization. Nkusu (2011) and Crowley (2007) define interest as the additional amount paid by a borrower for borrowed money. Saunder (1995) observed that interest rates affect overall economic activity around the world.

According to research by Nicholas (2010), default starts when the loanee fails on his obligations under the debt contract, such as failing to pay on time or breaching a loan agreement. According to research by Uboun (1998), SACCOs lend money based on savings of the members, of which the loan maybe more or less than savings of the borrowers. Loans below the member`s savings are guaranteed and repayable. Steam (1991) shows how the choice of borrower and the amount given to each borrower determine the degree of default. Failing to perform a task skillfully can put a business or individual in financial difficulty. Van's (1995) corporate credit policy has a large influence on debtors` levels, measuring the position of managers to optimally invest in their debtors so that the firm can be profitable.

Gitman, (2003) points out that collateral uses, involve requiring a security equivalent to 100 percent or more than issued loans. According to Etemesi (2017), collateral gives the financial institution a claim on tangible assets, thereby reducing the risk factor. Aghison and Bolton, (2008) state that collateral is a tool to deal with moral hazard issues in Institutional Based SACCOs in Nairobi City County.

### **1.1.3 Institutional Based SACCO in Nairobi City County**

According to SACCO Times, (2016) in Kenya, there are more than 300,000 people who have worked for the movement cooperative. The Cooperative movement provides self-employment to many other people. Institutional-based SACCO is also known as Employee-based SACCO. The annual income generated by the SACCO movement in Kenya is about kes. 440 billion or 43% of the whole country's GDP Institutional-based SACCOs is a SACCO in which all or the majority of its members come from a single employer and its affiliates. Most of these SACCOs are located in the city. Most loans granted by Institutional-based SACCO are guaranteed by the employer, Birchall, (2004). Kiragu, (2015) argues that SACCOs in Kenya have a vital

role and serve 81% of Kenya's population. SACCOs in Kenya have collected more than Kes. 200 billion or 31% of total national savings (Central Bank of Kenya-CBK, 2011).

## **1.2 Statement of the problem**

There are adequate writings or literature indicating that credit administration affects financial performance. Chelogoi, (2013), assert that the SACCOs financial performance is influenced or affected by Credit administration challenges. Moronge (2014) notes that the poor financial performance of a SACCO has led to the disappearance of several national SACCOs, that is according to the supervisory reports, (SASRA 2015). In 2015, six SACCOs received temporary operating licenses while others were suspended or re-issued. Poor Credit administration is paramount to the managers and shareholders of a given SACCO (Kariuki, 2010). A situation in which either variable is greater than a certain criterion can lead to operational difficulties. SACCOs are sometimes unable to make new loans or lend at high-interest rates. This may be due to high risk and credit risk ( Kibui& Moronge,2014). In a study on the impact of funding strategies on SACCO equity in Nairobi County, Muthoni (2014) found a correlation between the liquidity of credit and strategies of funding where the increased liquidity ratio prompted some improvement in operational efficiency. Furthermore, research shows that companies with effective strategies have a high return on investment, which ultimately affects the performance of SACCOs.

There are so many difficulties in financial institution credit risk management leading to low liquidity and low loanable capital; the SACCOs are forced to lose their profits. Continued dependence on external borrowings can lead to the n collapse of

institutions. Effective and efficient use of funds is a major concern of regulators as well as governing bodies of SACCOs. Much research has been conducted on SACCOs such as Odhiambo (2012), which indicates that for optimal financial performance, there should be efficient working capital. According to Mbatha (2016) there is a positive correlation between the dividends paid to members and the financial performance of institutional based SACCOs in Nairobi city county, Kenya. Gisemba (2010) assert that the SACCO administrators were involved in credit administration through the standardization and processing of loan applications. Gaitho (2010) commented that credit administration practices are applied by SACCOs. Njiru (2003) assessed the Kenyan bank relationship between credit rating risk and bad debt levels while Vikuru (2008) evaluated practices of credit management on KPLC Company in Kenya and Kabee (2009) evaluated the credit administration practices in the manufacturing industries' credit management practices in the manufacturing industries. Sufficient data are available on the extent to which loan repayment rates, interest rates, credit costs, default management, and loan guarantee have affected the Institutional-based SACCO of Nairobi City County financial management.

The credit administration practices and financial performance of Institutional-based SACCOs in Nairobi City County are neither clear nor conclusive. Much of the research that has been done has mainly focused on financial performance without attributing it to Credit administration, but this is the subject of many SACCOs. In the past, many attempts have been made to study SACCO loans in Kenya, with more emphasis on the impact of SACCO on poverty reduction, without any direct research on credit administration and financial performance of institutional based SACCOs, a gap which the researcher intended to fill. Hence, given the above background the research intends to evaluate the effects of Credit administration and financial

performance of Institutional based SACCOs in Nairobi City County, Kenya.

### **1.3 Research Objectives**

This study sought to identify the following objectives.

#### **1.3.1 General Objectives**

Determination of the effects of Credit administration and financial performance of Institutional –based SACCOs in Nairobi, City County.

#### **1.3.2 Specific Objectives of the study**

**This study sought to;**

- i. Assess the loan repayment effects on financial performance of Institutional based SACCOs in Nairobi City County, Kenya
- ii. Determine impact of credit cost on financial performance of Institutional based SACCOs in Nairobi City County, Kenya.
- iii. Determine the impact of default management on financial performance of Institutional based SACCOs in Nairobi City County, Kenya.
- iv. Understand impact of loan security management on financial performance of Institutional based SACCOs in Nairobi City County, Kenya.

### **1.4 Research Hypothesis**

The following null hypotheses were tested:

**H<sub>01</sub>:** The management of Loan repayment has no significant effect on financial performance of Institutional based SACCOs in Nairobi city county, Kenya.

**H<sub>02</sub>:** The credit cost has no significant effect on institutional based SACCOs in Nairobi City County, Kenya.

**H<sub>03</sub>:** The management of default has no significant effect on institutional based SAACs financial performance in Nairobi city county, Kenya.

**H<sub>04</sub>:** Loan security management has no significant effect on the financial

performance of institutional based savings and credit society in Nairobi County, Kenya.

### **1.5 Study Scope**

This research focused on effects of credit management on financial performance of institutional based SACCOs in Nairobi City County, Kenya. The research focused on four components of credit administration namely: loan repayment, credit costs, default management, and loan security management. The study was limited to Nairobi County as a geographic location. The study was done on 10 institutional-based SACCOs operating in Nairobi County. The target population was 150 employees or board members. This study carried out covered five years from year 2017 to 2021.

### **1.6 The significance of the study**

The results of this study forms part of the SACCOs activities body knowledge. Particular focus is placed on strengthening and improving SACCOs overall management capacity and good governance. SACCO members are essentially owners and their main concern is how unit will function in their absence. Therefore, the study shows the current and potential SACCO members with insight into credit administration and financial performance. The outcome of research helps in management of Kenya SACCO industry by giving information concerning how their credit policies are reviewed and enforced.

The research outcome helps other researchers, as well as academics, in future surveys and further studies on the topic. Researchers in the field of credit administration field are able to compare themselves with the study. Policy formulation and implementation are areas where this study found its relevance. In this study, different credit procedures and financial performance are explored. The results are intended to

help policymakers improve existing systems to enhance their performance. In addition, the study points out the research gaps to be worked on by future researchers. Through this research, there is new insight encouraging the study of other aspects of credit administration and the financial performance of the economy.

The research serves the regulators (SASRA) with information to help generate new policies which leads to efficient use of members' funds, generating more income and further stimulating the general economy within the country.

The research results help in theory development, particularly the theory of credit administration and the theory of financial performance. Most studies done in developed economies concentrate to Deposit taking SACCOs hence this study will help close the gap between various studies done regarding credit administration and financial performance. The findings enable policy formulation and inform the considerations for the Institutional based SACCOs' management team to develop best practice policy for implementation and use of the concept.

The government as well, may find the information useful in diagnosing problems and providing management solutions to SACCOs in Kenya.

### **1.7 Study Organization**

This study consists of the following: first chapter introducing research background, research problem, research questions, the hypotheses, purpose and significance. Chapter 2 introduces literature review, including theoretical and empirical analysis. Chapter three outlined the methodology, approaches, procedures and guidelines for conducting field studies. The fourth chapter analyzed the findings and interpretation of the study while chapter five covered summary, conclusion and recommendations.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter is composed of literature reviews or writings done by many researchers and authors on credit administration and the financial performance of SACCO. In addition, it discussed several credit rating theories drawn from the existing literature. Elements of this chapter included a conceptual framework, a summary of reviewed theoretical literature, empirical literature and research gaps.

#### **2.2 Theoretical review**

Theoretical review of the study focuses as claimed by Swanson, 2013 on the philosophical underpinnings and connection between practice and theoretical research areas. This work focuses on the following consideration theories about variables and general research.

##### **2.2.1 Theory of stewardship**

According to Zahra et al, (2009) stewardship theory states that the manager acts in a beneficial direction and performs actions that are beneficial to the principal. Odhiambo, (2012) argues that a manager will protect and maximize shareholder wealth through corporate performance, hence maximizing manager utility functions. He describes stewards as administrators who work to protect the shareholders common interests. Davis, Schoorman, and Davidson, (1991) point out that the Stewardship theory give special importance to the managers function being stewards and how they achieve their goals in the institutions, while also emphasizing that the position of employees is more empowered to maximize shareholder returns. The cost of monitoring and controlling employee behavior can be reduced. This theory is

closely related to SACCO`s compliance and liquidity management. Managers must comply with laws, regulations, and policies to keep their business running and ensure better financial performance. In addition, as organizational administrators, must minimize the extent of delinquent loans. Owner representatives should evaluate the type of manager they are hiring and implement appropriate management structures to maximize management effectiveness and improve organizational performance.

According to Galbraith (1973), Lawrence and Lorsch (1967) SACCOs should always employ managers that will establish institutional structures and mechanisms that support their actions to meet the organization's needs and improve performance. According to Horne (2003) and Mudibo (2005), financial management aims to enhance and maintain the value of SACCO and to meet the needs and interests of its members. Therefore, financial managers are expected to provide information to support the capital investment decision of SACCO. Daly et al, (2003) have shown that leaders, as managers, should ensure that financial performance and shareholder returns are maximized. The theory acknowledges the structures` functions that bring empowerment of agents which allows managers to be autonomous based on trust (Donaldson & Davis, 1991). The theory will help define the role of the treasurer and manager in linking the financial activities of SACCOs` financial performance with credit administration.

### **2.2.2 Credit Default Theory**

Keenan, (1999) states that when an organization is unable to meet its financial obligation on time is called credit default. The theory explains well on loan default causes and effects. This theory, therefore, establishes a direct link between macroeconomic effects on the development of funding terms. Fieldman (1997) argued that the credit score is a way of assigning a different score to the borrower, offering

all the future benefits of the borrower. Techniques of credit scoring are used to estimate the probability of default based on credit history and characteristics. When a customer demographics score exceeds the threshold score in a small business setting, the application will be reviewed by a specialized small business division for further evaluation. The credit scoring models used for loans from SACCO and microfinance institutions are more complex than those used for consumer loans (Feldman 1997). They probably place a lot of importance on factors related to the business owner's financial history. In a framework study, Srinivasan and Woolsey (2001) found that the inclusion of disadvantaged borrowers in credit scoring increased overall lending.

The theory applied in this study is based on the idea that if SACCOs implemented processes and systems such as loan assessment, customer characteristic assessment, income level, and credit history, this could reduce defaults. Consistent consideration of the three types of risk is an important condition for successful credit administration. Although considerable progress has been made in developing the concept of market risk assessment, methods of measuring credit risk and operational risk remain incomplete due to limited historical data as asserted by Bhunia & Sarkar (2011).

The expected loss is the expected probability of a borrower's default and default risk minus the recovery rate (Aasen, 2011). Expected losses should be included in the standard cost of risk in credit risk. This current theory provides a systematic understanding of the direct causes and consequences of credit defaults, thereby guiding financial performance. It is also associated with independent variables in defaulters' management studies.

### **2.2.3 The Theory of Agency**

The theory of Agency was introduced by Jensen and Meckling in 1976. According to Clarke, (2004) assert that the theory is divided into agents and stakeholders. A clear line is established between agents and owners. The principal's purpose is fulfilled by the agent for the benefit of principal and at his cost. According to Judge & Stahl (1995). Theory of Urgency is a management tool. The SACCO members use this theory to advocate for policy creation which serves as a model of management in the running of financial institutions and the performance of assigned tasks for the benefit of other institution employees and the interests of shareholders as asserted by Padilla (2002). This theory also identifies various interest groups' roles concerning control and ownership as asserted by Bhimani, (2008).

Agency theory suggests that there must be an appropriate collaboration among agents represented by the board and the company's shareholders to facilitate their efforts towards a common given goal. The Theory protects and defends the interest of its members to improve the SACCOs activities without sacrificing the agents' interests that must be enhanced to achieve intended goals as Abdullah & Valentine, (2009). Daly et al., (2003) assert that management has to ensure the organization's performance is perfected, the financial performance improved, and it contributes to the stakeholders' interests. According to Donaldson Davis (1991), the theory of agency should emphasize the validity of efficient structural procedures to empower managers and enable trust-based autonomy.

This theory addresses professionalism in business conduct to reinforce accountability as an essential factor in business success (Abdullah & Valentine 2009). In times of economic urban centers and intense competition agency theory suggests dealing with economic conditions professionally (Zetsche, 2007). This theory helps management

develop credit policies that help manage credit, thereby improving the company's overall performance. It also helps define the roles of the organization's financial improvement of her SACCO. This research is consistent with research suggesting that the nature of consulting offers an opportunity to control agency costs. Board structures prevent the organizational management from engaging in investment activities that may hinder optimal returns. Well-functioning boards and audit committees incur costs associated with preparing meetings and producing reports that can be used to manage potential financial emergencies.

#### **2.2.4 Information Asymmetry Theory**

Myers founded Asymmetric Information Theory in 1984. Information asymmetry arises when proprietors or management understand more regarding their company's prospects and hazards than creditors (PWHC, 2002). The theory outlines a situation in which everyone participating in a venture is unaware of vital information.

Within the loan market, statistics asymmetry takes place when a person who takes a loan knows better the viable risks and benefits related to unstable projects for which finances are supposed, while the lenders lack enough information at the borrowers, financial reputation (Edward & Turnbull, 2004). Financial companies experience two issues as a result of information asymmetry scenario: moral risk and undesirable selection. Lenders struggle to address these issues since it will not be cost effective spending resources for monitoring and evaluation where small sum is involved. This is due to information required to evaluate applications and track borrowers is not readily available when lenders need it prior to granting loans to their customers. As a result, while evaluating lending applications, many SACCOs suffer information asymmetry as per Binks & Ennew,(2004).

The borrower has to be vetted by lenders using credit evaluation as asserted by Derban, Binner and Mullinex(2005). According to asymmetric information theory, gathering trustworthy information from potential loan applicants becomes crucial in achieving efficient screening. Although both qualitative and quantitative methodologies may be used to evaluate borrowers, one key disadvantage of employing qualitative models is their personal character. In the work of Derban et al. (2005), qualitative models are used to analyze borrower's qualities which can be allocated numbers based on total values in comparison to threshold. The strategy will save costs of processing and will reduce subjective judgements and potential biases. If rating methods identify changes in the predicted degree of credit loan loss, they will be useful. Brown (2008) came to the conclusion that quantitative indicators allow for the numerical determination of what variables have significance in describing the risk of default, the evaluation of the relative significance of each factor, the improvement of credit risk default pricing, the process of screening out of bad applicants for financing, and the calculation of any reserve required to cover anticipated future losses on loans. The theory was important to the study as it informed the baseline management variable.

### **2.2.5 The 5 C`s of the Credit Model**

Using the 5 C`s is part of the methodology banks use to evaluate loan applications. The 5C`s are character, capacity or ability, capital and collateral according to Wachira, (2017) & Afram & Mills-Robertson, (2014). These factors are commonly used in credit checks to control the borrower`s risk level. Wachira (2017) assert that Loans are most likely to fail when banks make lending decisions. Owusu Dankwa and Gyamfi (2013) assert that banks in Ghana have used 5c`s model to evaluate borrowers' credit worthiness and influence the loan portfolios quality. Addae

Korankye (2014) conducted a study in Ghana which suggests that low credit scores are also the cause of default. The quality of 5Cs credit ratings influences the probability of default (Ojala & Otieno, 2015). Stricheck (2000) asserts that 5cs credit analyses are ranked in order of their importance. Credit scoring in this model is trusted to reduce exposure to bad debt.

Abbadi and Karsh, (2013) ranked credit risk analysis in another study in Palestine based on 5 cs in ascending sequence of collateral, capacity, capital, characteristics and conditions which suggests that there is a geographical effect on evaluation application that implements 5cs, and that is why this study is important. According to Sharma& Kalra (2015), capacity assessment involves determining the ability of the borrower to borrow. The financial information provided will help to determine borrowers' ability to borrow. Kabir, Jahan, Chisty and Hasin, (2010) observed that Capacity is arrived at by comparing the amount of cash generated to repay the loan. Subjective assessment made to examine the borrower integrity and credibility according to the borrower ( Abbadi Karshi, 2013)is referred to personality. One's loan history can be evaluated to check the integrity of loan repayment. Kabir, Jahan, Chisty & Hasin, 2010 assert that discriminatory observations may appear in existing credit bureaus and borrower records, and references.

Collateral is a fall back repayment source in an event of default and is also available to cover the financial risk and as such, must have appropriate negotiable and sufficient value equivalent to loan. Sharma& Kalra (2015) assert that collateral quality is assessed by loan value ratio which target analyses, political environment and industry. Moti, Masinde& Sindani (2012) assert that these conditions must be taken into consideration before the loan is approved by observing all stages of daily politics, power and agency with their effect on domestic business. An industrial analysis is

important as it measures the external obstacles that will hinder loan repayment (Kabir, Jahan, Chisty & Hasin, 2010). This theory is useful for research as it guides the SACCO in determining potential borrowers' credit worthiness leading to business viability. Any attempt to improve getting finances need to address various trouble associated with access to capital and collateral. This model supported the pre-borrowing valuation variables and bad debt management variables.

### **2.3 Empirical Review**

This section analyzed several writings or studies to identify research gaps. Different studies have been carried out at local, regional, and global levels regarding the Credit administration and financial performance of SACCOs. The information came from previous research done by other researchers which was found in public and academic libraries. The materials were knowledge-based research articles, reviews, and working articles.

#### **2.3.1 Loan repayment and financial performance of SACCOs**

The role of credit was to bridge the gap between business owner's financial assets and business owner's financial needs. Persistent imbalances in the business world forced them to borrow. In Kenya, the increasing number of SACCOs leads to limited credit access to credit and less than 100% repayment capacity, Besley and Coate (2005). Organized financial lenders always use deposits, while unorganized sector lenders mainly use funds to prepay borrowers, where the borrower is allowed to access financial capital within an agreed period and if loan repayment is unsuccessful, the result is bankruptcy. This study did not directly extend the finding at SACCO.

In Africa, loan repayment performance is poor. Bagachwa (1997) found in his research that loan repayment in Africa is not enough. As per Besley (2003), the main

difference in rural lending markets in developing countries is lending coercion. However, research has not yet focused on SACCO. Kimani (2007) investigated inefficiencies in credit management and the causes of inefficiencies at Chuna SACCO, Kenya. He observed that they had insufficient competent staff that lacked proper training, lacked inadequate internal control systems, experienced liquidity problems, and lagged in technology; he also observed that administrative boundaries were insufficiently defined for the credit management committee and staff to manage credit policy.

Montana (2012) points out an alarming trend of debt collection failures and states that its development seems unstoppable. This growth was mainly due to the worsening economic conditions affecting the global markets. Therefore, he recommends that SACCOs must individually develop a new strategy to improve debt collection, have a favorable payment plan, suitable for customers to deal with the late payments, reduce interest rates and allow open discussion with members. The study recommends that SACCOs seek and raise more capital for loans through active membership mobilization. By borrowing outside while allocating capital to profitable investments, having qualified professional staff, attractive loan products, corporate reorganization, teamwork, training stakeholders' engagement, investing in the latest technology, engaging in corporate social responsibility, competing with other financial institutions, and building brands. The research did explore in totality credit management practices on SACCOs financial performance leaving a gap for this study to complete.

### **2.3.2 The Credit Costs and financial performance of SACCOs**

We had a wide range of documents on lending activities of different depository banks,

some based on factors of willingness to grant bank credit to certain economic sectors and other literature focusing on the effect of credit extension on productivity. Felicia (2011) studied the behavior of Nigerian banks. Research shows that the interest rate charged affects lending behavior. Study of effect of loan rates on Kenya micro finance institution was done by Mawngi (2014) who analyzed his data using a multivariate regression model. He observed that loan interest rates and financial performance of microfinance institution correlation was very positive and that microfinance institutions were established for the purpose of lending to poor cheaply, which is not feasible as the microfinance were accessing the same amount of credit at high interest rates.

Ridder (2010) investigated whether interest rates charged by microfinance institutions are out of reach of the poor. It is revealed that the high operating costs of microfinance institutions force them to charge high-interest rates to cover expenses. Ridder (2010) disagrees by pointing out that charging high interest detracts from the main purpose of serving the poor. The conclusion is that imposing high-interest rates does not lead to increased microfinance profits as it leads to high default rates leading to high operating costs. The study objective was to find a correlation on interest charges and financial performance of institutional based SACCOs in Nairobi City, County Kenya. The study of the impact of interest rates in Naivasha Sub-County Kenya, lending activity was studied by Kariuki and Ngahu (2016) who observed a strong correlation on interest rates and loan repayment of SACCOs and correlation of default with interest rates.

Clients are shy to pay for short-term loans due to high interest rates charged as compared to long-term loans. Chikalipah (2014) studied the effect of the cost of loans from Microfinance Institutions in Sub-Saharan Africa. It uses disproportionate data

from a group of 292 microfinance institutions for the years 2003 to 2011. The results show that financing costs, operating costs, profitability ratios, and inflation are influential factors in the performance of micro-organizations rather than lending rates. Rasheed (2010) prefers to use the rational model to study interest rates. He observed that the financial sector being more interested and focused on the international market result to high returns on foreign assets which play a vital role in domestic interest rates determination. This research was conducted on SACCO, which was the subject of the study.

### **2.3.3 The Default management and financial performance of SACCOs.**

Gisemba (2010) located the link in risks of credit administration practices and SACCOs financial performance and concluded that they have extraordinary methods to threat identity and evaluation before granting credit score to manipulate default charges. This involves initiating capacity, and terms, using, and interviewing borrowers to manage and minimize default. He stated that SACCO can reduce the default rate through a careful review of procedures. Nduwayo (2015), while assessing the influence of Kigali bank lending practices and financial performance, found a link on loan management practice and financial performance. The research indicates that a loan is well managed through having knowledgeable professional credit bureau officers with high independency on loan review and by abiding by conditions and procedures on loan issuance.

Ajiambo (2013) analyzed the extent of link on lending policy and financial performance of institutional based SACCO in Nairobi City County, which he observed substantial link on the policy of credit and institutions financial performance. He advised that the SACCOs systematically consider reviewing and updating credit policies to enable the processing of proper loan applications to ensure

efficiency in loan granting.

Ajiambo (2013) also recommends that SACCOs should ensure that loans are disbursed on time for efficient loan recovery and minimizing administrative costs, thereby increasing SACCOs. In addition, SACCOs should have sufficient provisions to cover overdue loans and to extend bad loans to protect their funds and enable smooth loan asset recording to avoid cashbook overwriting. The government should review the regulatory framework to have SACCO conditions that enable reasonable lending policies that will bring about sound financial performance.

Kinuthia (2007) found that default results in losses for SACCOs thereby affecting members' wealth. He recommended that SACCOs introduce regulation on loans and extend credit terms for members and integrate SACCO information systems for employers. A study conducted by Akyoo and Karumana (2011) on factors influencing loan repayment found out that the factors were a result of loan tracking management inadequacy, a bad repayment system, and inadequate verification of security or collateral.

Nnanna, (2005) defines loan collateral requirement as the process of using security to get a loan. Guarantor shipping to loans improves the security of loans while verifying the extent of default. The issuance of loans by SACCOs is dependent on members' shares and deposits except where the loan borrowed is equivalent or equal to shares and deposits (Frenzyied, 2013). The total amount of loan applied. Salary and integrity is the main guarantee of a SACCO member as opposed to banks which require collateral like a title deed which is involved to obtain Ouma (1987). This took place in 2001 when the Commercial banks introduced unsecured loans to potential SACCO members. Ndungu, (2008) pointed out that the loan is required to be equal to or less

than the shares, In case it is larger than the share, it must be fully guaranteed by the guarantors who is member of SACCO, banks have no such terms.

Gaitho (2010) investigated the credit safety measures adopted by the SACCOs in the county of Nairobi and found that most of them use credit risk management methods to hedge risk and manage risks of credit discretion measures regarding Credit Managers ability as opposed to a written standard of credit administration practices. However, according to Mutua (2016), SACCO should ensure that they have well-defined forms covering all loan terms, including the role of guarantor in the event of default by the borrower. The SACCO administrator should ensure that the form is duly signed by the borrowers and guarantors. The study aim is to fill up the gap in securing the loan in addition to having a guarantor.

According to Nizar and Javed (2007), Islamic economists have offered a theoretical explanation that since profit and loss sharing arrangements, such as equity financing, involve sharing of risk, they also circumvent collateral requirements because they argue, that it improves the efficiency of credit markets. Surprisingly, most studies on the performance of SACCOs have focused on credit rather than loan security policies. In addition, findings from the Council of Credit Unions, (2009) show that SACCOs in rural areas are inefficient as they largely face challenges in the operating environment, and to the high-interest rates on loans to refinance themselves, they are avoided by borrowers. Therefore, urgent solutions were needed by proposing research on loan security management

#### **2.4 Literature Review and Gaps Summary**

Literature review summary helped in existing gaps identification on the study topic of Credit administration on institutional based SACCO's financial performance in

Nairobi City County. Several aspects of the knowledge gap were identified, including the context gap, the empirical gap, the conceptual gap, and the methodological gap. We had gaps because most of the research done did not yield a comprehensive assessment of credit administration about loan repayment, credit costs, default management, and loan security management. Several studies had investigated the credit administration and the financial performance of institutional-based SACCOs with bias in both respects thus limiting the scope of these findings. These shortcomings came to light when many previous studies on the topic were compiled at a foreign institution, leaving little empirical evidence available locally.

Other studies in the context of timeline shortcomings were targeted by some researchers but the global trade environment keeps on changing thus requiring a current study. Shortcomings are brought to attention when some studies rely solely on descriptive statistics in their analysis without admitting inferential statistics that improve generalizability. The empirical gaps arise because some previous studies have been found to favor sales growth, ignoring other aspects of corporate growth that have not been fully addressed. There have been methodological shortcomings as many studies have relied on quantitative data factoring qualitative aspects for the credit administration and financial performance may have been overlooked in the previous study's analysis. In doing so, important qualitative aspects of credit administration and financial performance may have been bypassed in the previous study analysis. Very little research had been done on the credit administration of institutional-based Nairobi City County SACCOs of Kenya. The study intends to fill the gap of establishing credit administration effects on SACCOs financial performance in Nairobi City County.

**Table 2.1: Summary of literature review and research gaps.**

<b>Author</b>	<b>Purpose/ General Objective</b>	<b>The Key findings</b>	<b>Research Gaps</b>	<b>How the research filled the Gap</b>
Okibo and Karagu (2014)	Circumstances influencing the financial performance of SACCOs as observed by Okibo (2014)	Improving Internal audit and control and investment decision	The Influence of credit administration on SACCO Performance	This study focused on credit administration and financial performance.
Simeyo (2016)	He studied the relationship between microfinance in managing liquidity risk in Kenya and financial performance.	Improved liquidity risk management on credit administration and SACCOs financial performance	Impact of credit administration on SACCO financial performance	This research centered on credit administration and SACCO's financial performance.
Nduwayo (2015)	Initiated the impact of credit administration on Institutional SACCOs.	Positive relation in Credit administration and financial performance.	Effect of Credit Administration and the financial performance of SACCOs.	This study looked at institutional based SACCOs in Nairobi city County.
Mutua (2016)	Initiated impact of credit administration on institutional based SACCO financial performance.	It was found that good loan security management has very interesting results on growth and profitability	Abstract gaps arise as the researcher took care of a narrow framework of loan security management leaving out another important aspect	The research concentrated on Institutional based SACCOs in Nairobi City, county

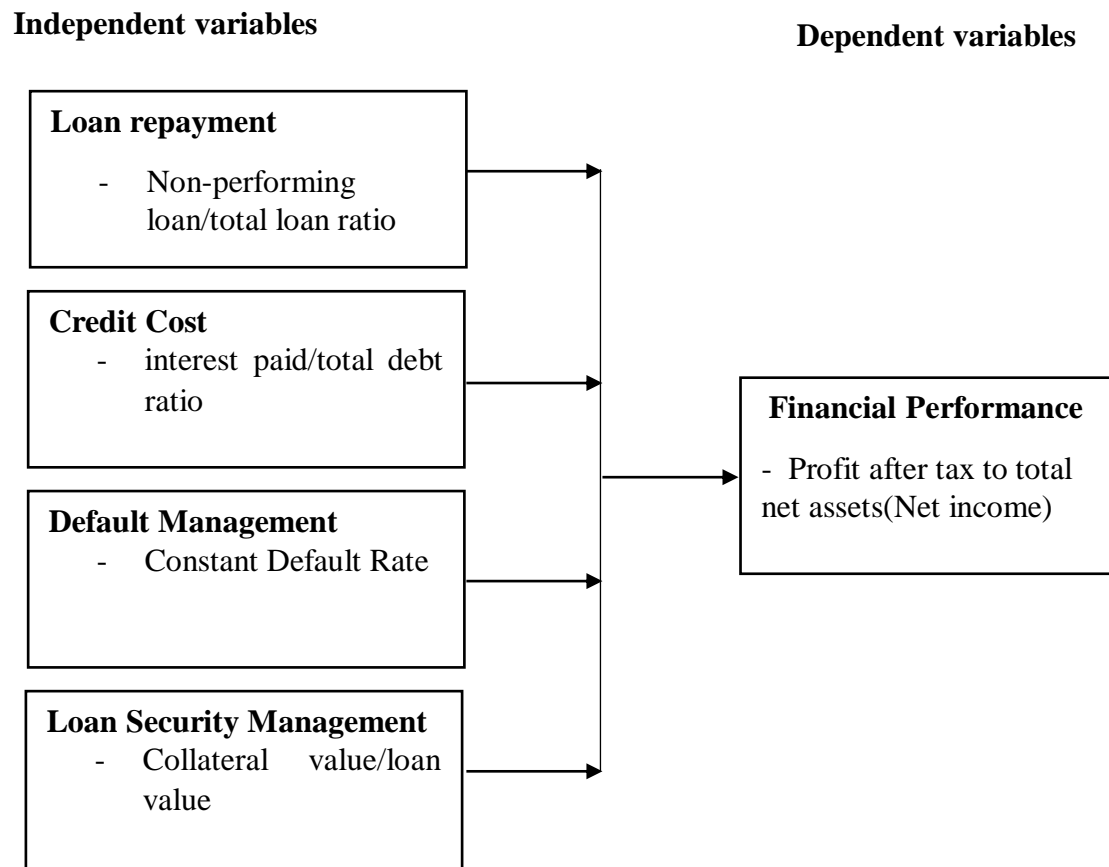
Gaita (2007)	The non-performing loans effect on SACCOs growth.	SACCO failure was linked to lending	The credit administration effect on SACCOs financial performance	The research was on Nairobi City County Institutional based SACCOs
Chen and Pan, (2012)	Effects of credit administration on financial performance were established	There's a positive correlation between fund cost and financial performance.	Credit administration effect on SACCO financial performance.	Research provided for the loan administration and financial performance.
Besley (2003)	Pinpointed loan repayment effect on financial performance.	SACCO's failure was a result of loan repayments	Impact of credit administration on SACCOs financial performance	The research covered Institutional based SACCOs in Nairobi County, Kenya in the current period
Kimani (2007)	Pinpointed ineffectiveness and inefficiency in the credit administration	The Ineffectiveness and inefficiency were caused by incompetent staff who had inadequate skills	The relation between credit administration and financial performance in other SACCO, particularly in Nairobi county.	The investigation pointed out link on credit administration and Institutional based SACCOs financial performance of Nairobi City County.
Wachira, 2017	To air out the loan default effect on SACCO's financial growth.	SACCOs failures was related to loan default	Credit administration effects on SACCOs financial performance.	Research catered loan administration and financial performance.

**Source: Empirical literature Reviewed (2023)**

## 2.5 Conceptual Framework

As stated by Smyth (2004), an informative conceptual framework aids in explaining the likely connections between the study variables.

Figure 2.1 shows graphical representation of conceptual framework.



**Figure 2.1: Conceptual Framework**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter defined methodology used in the research in achieving study objectives. Specified approaches, tools and process of research design which helped the study to achieve its objective, target population, data type used, methods of data collection, analysis of data, presentation of data and ethical issues were factored.

#### **3.2 Research Design**

Bell, Bryman, and Harley (2018) observed the explanatory research designs as being effective to explain why a certain condition exists. It shed light on cause-and-effect relationships between the particular variables being studied. Blumberg, Cooper, and Schindler (2011) further predicted that an explanatory study helps explain the relationship between the variables of interest. This design was central to the study having highlighted credit administration effects on financial performance of Institutional based SACCOs in Nairobi City County.

#### **3.3 Research Philosophy**

Positivist paradigm was used as the study foundation. The kind and strategy adopted when doing research are reflected as paradigm of the research. Research purpose and method of achieving varies amongst research philosophies. Gephart (1999) distinguished three conceptually diverse research paradigms: interpretivist, positivism, and critical post-modernism. The positivism is based on theoretical notion being there's an actual reality that can be discovered by the person conducting study, provided appropriate procedures are used, the positivists observed that there is one

objective in reality, which may be evaluated by employing standard tools as asserted by Saunders, Lewis & Thornhill (2009).

In addition, two research theories, social constructivism and positivism could act as foundations for study. Positivism asserts that reality is steady and can be viewed and described objectively. According to Dedes (2010), in the positivist paradigm, the researcher perceives himself as objective, unbiased and his understanding is quantified. Saunders et al. (2009) assert that the positivism is an epistemological perspective. The study adhered to epistemology viewpoint concerned with the way people think of knowledge. Additionally, outcome was generalizable while the researcher had no direct control over the factors.

### **3.4 Empirical Model**

Panel regression model guided the investigation, which comprised establishing the effect of credit administration practices (loan repayment management, credit cost management, default management, and management of loan security) on institutional based SACCO financial performance. Multiple Regression tests, as stated by Ticehurst and Veal (2000), are acceptable when there are at least three variables and there is a linear association between at least two variables. Multiple regression analysis attempts to predict outcome variable due to predictor variable changes. Linear panel regression were calculated by the the method provided by Baltagi (2005) since the data had both time series and cross-sectional items.

The following are general investigation empirical model.

$$(Y_{it}) = \beta_0 + \beta_1 x_{1it} + \beta_2 x_{2it} + \beta_3 x_{3it} + \epsilon_{it} \dots\dots\dots (3.1)$$

Where in

$Y_{it}$  is the enterprise financial performance.  $I$  at time  $t$

$i$  represent organization performance,  $i=1, 10$

$t$  is the length  $t=2013 \dots \dots \dots 2023$

$X1$  represents business loan repayment  $I$  in length  $t$

$X2$  represents the vector for dealing with duration firm credit cost  $t$ .

$X3$  represents vector for employer default control, even in duration  $t$

$X4$  represent factor for handling company loan security in duration  $t$

$\epsilon$  it is the composite error that describes changes that occur due other factors not involved in financial performance.

$\beta_0$ - a constant term describing success or satisfaction level,  $Y$ , when all parameters ( $x_1, x_2, x_3$ ) are zero level  $\beta_1, \beta_1$  and  $\beta_1$  are coefficients representing status of the independent

variables are coefficients representing the **status** of the independent variables relative to **the** dependent variable.

Equation for financial performance was measured by ROA.  $ROA_{it} = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \epsilon_{it} \dots \dots \dots (3.2)$

The link between credit management and financial performance

$$Y_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 CC_{it} + \beta_3 DM_{it} + \beta_3 LSM_{it} + e \dots \dots \dots (3.3)$$

Subscript  $I$  represent the fixed section size and represent the 10-year time series size.

The  $Y_{it}$  difference on the left represents the difference in the company structure financial performance.

$X_{it}$  has the descriptors specified in the prediction model,  $\beta_0$  is a constant, and  $\beta$  represents the coefficient;

Where:

$Y_{it}$  is financial performance (dependent variables):  $Y_{it}$  is each company's ROA in year I and t

ROA means Return on Total Assets

$\beta_0$ - intersection point of the equation,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$ , -variables coefficient,  $\epsilon_{it}$ - disturbance term X1-management of loan repayment;

X2-Credit costs management X3-Default management and X4- Loan security management.

### **3.5 Operationalization and measurement of study variables.**

Table 3.1 lists variable of research, operationalization and measures used to determine them. Other studies have used and validated measurements used.

**Table 3.1: Operationalization and measurement of study variables**

Category	Variable Name	Operationalization	Size
Dependent	Finance Performance	- Organization performance is determined through use of profit generate for each shilling invested in assets and earned.	Ratio: Net profits being earning after tax to overall net assets.
Independent	Loan repayment Management	- Is the measure of the level of SACCO's credit risk and quality of outstanding loans.	Ratio: Non-performing loan/total loan
	Credit Cost Management	- Is the amount they expect to lose because of the standard credit	Ratio: interest paid/total debt
	Default Management	- Management of all loans outstanding, a lender has written off after a prolonged period of missed payments.	The constant Default rate: $CDR = 1 - \left(1 - \frac{D}{NDP}\right)^n$ Where D =Amount of new defaults during the period And NDP=Non defaulted pool balance at beginning of the period; n= Number of period per year.
	Loan security Management	- Securing loan fully in case of borrower default	Ratio: Collateral value/loan value

**Source: Survey Data (2023)**

### 3.6 Target Population

The targeted population was viewed as a subsection of a large population having the similarity in characteristics and factors that are classified as subject or individual Buchanan and Bryman (2009). The study target population was 10 Institutional based SACCOs in Nairobi city County, Kenya as per SASRA (2022).

The researcher received research permit (Appendix 2) from the country wide fee for technological know-how, technology and Innovation (NACOSTI) to permit using statistics from the published financial statements of institutional SACCOs in Nairobi City County. The study used panel records with time collection and go-sectional dimensions, with 'N' entities spread over 'T' periods.

### **3.7 Collection Procedure of Data**

The researcher was issued with research permit from National Commission for Science, Technology and Innovation (NACOSTI), for the use of statistics from the published statements of institutional based SACCOs in Nairobi City County. The research observed panel records with time collection and cross sectional dimensions, with N or entities spread over T or period N.

Panel data was adequate since it included information from many businesses and throughout time (2013-2022). Appendix 4 shows how the researcher employed a document review guide. The retrieved data were gathered and put into excel spreadsheet for analysis in accordance with study goals. The researcher chose panel data because it can account for individual variation and discover and quantify effects that are difficult to detect as per Wooldridge, (2012) from time series data or pure cross sectional. Further panel data allow more data points to be collected from each variables, which increase degree of freedom required to provide a robust economic forecast ( Ogundipe et al.,2012; Baltagi 2005;Gujarati, 2003).

According to Lee (2006), panel data can be adjusted for unobserved explanatory factors that warrant consistent dissatisfaction estimates. The researcher used data analysis techniques to collect and organize secondary data. The records include income statement, statement of financial position and statement of accounts.

### **3.8 Analysis and presentation of data**

The study used panel data for research by carrying out both descriptive and inferential analysis of statistic. The descriptive used mean, standard, deviation, maximum with minimum values and trend analysis. Inferential statistics was analyzed by correlation and regression analysis. Correlation analysis was performed to establish directional relationship between the two variables under study. The study used regression analysis to determine the effect of financial performance of institutional based SACCOs in Nairobi City County. Information retrieved from every SACCO's financial statement was displayed in an Excel worksheet prior to being imported into the STATA application version 15 that facilitated the study. Tables have been used to present data.

### **3.9 Diagnostic Tests**

Following were diagnostic tests which were performed: test of multicollinearity, test of normality, test of autocorrelation, test of heteroscedasticity, test of stationary and Hausman test.

The Durbin-Watson test changed into developed to observe the serial correlation of variables. A mistakes term is serially correlated whilst mistakes phrases from exceptional durations or move-sectional dates are associated.

#### **3.9.1 Autocorrelation Tests**

The Durbin Watson Test was developed to test variable serial correlation. A term of error is serially linked when error terms from exceptional durations or cross-sectional dates are associated. Serial correlation has an effect on the efficiency of the ordinary least squares estimator (OLS), but not on its consistency and biasness. As a result, the

variable that is dependent needs to be independent to utilize a linear model. This shows that the observations should have no serial correlation.

$H_0: y=0$  Residual are independent

$H_a: y>$  Residual are independent

AP value  $> 0.05$  reject null hypothesis

Wooldridge (2002) assert that there's serial correlation and p-cost which is less than 5% significance level.

### **3.9.2 Heteroscedasticity**

Heteroscedasticity applied Breusch-pagan test, which is designed to detect any type of linear heteroscedasticity. Breusch-Pagan compares the null hypothesis that error variances are a multiplicative function of one or more factors as suggested by Allison (2001). Big Chi-square suggests the presence of heteroscedasticity. The error variance is assumed to vary with a collection of regressors in this test. In the view of Gujarati (2003), heteroscedasticity is an absence of consistent error variance that, although severe, is not considered a problem because it does not result in skewed parameter estimations. The issue, as stated by Wooldridge (2002), biases the standard errors, resulting in skewed or inaccurate test statistics and intervals of confidence.

### **3.9.4 Breusch-Pagan Lagrange Multiplier(LM)**

The research used panel data being a combination of time collections and cross-sectional data, and shows that the panel data is derived from a cross section of individual information recorded for a given period of time.

The Breusch Pagan multiplier test was used to test the probability consequences on structured variables or pooled estimate should be used. The BP null hypothesis test became variance of random impact 0, which means that every object has the same capture. As end result, carry out a joint regression.

**Hypotheses:**

H0: No panel impact (which means that common ols(pooling) have to be used.

H1: Panel effects are present (assuming the use of random effect)

The null hypothesis of the BP test is that variance of random effect is zero, which means that each firm has the equal intercept and have to use a joint regression.

**3.9.5 Model Specification test**

In analysis of data panel, there's establishment of two assumptions about individual explicit effects namely long-term asset and random effect. As Greene (2008) points out, in a random effect model, an arbitrary affect assumption is that the individual direct effects are uncorrelated with the regressors. To establish if a fixed or random effect is appropriate, the study used Hausman (1978) specification test. Null hypothesis of test was that individual heterogeneity and regressors are purely exogenous. The random effect is competent estimator if Hausmna test reject null hypothesis. In the event null hypothesis is rejected, fixed effects model will provide better estimate of coefficient.

**3.9.6 Testing for multicollinearity between independent variables**

The variance factor (VIF) was developed to observe multicollinearity between two or more independent variables. The limit is set at 5. If VIF exceeds 5, the predictor should be removed from the model. All of the variables in Table 4.7 had a

VIF of less than five. All independent variables had p- values less than five percent and were significant.

### **3.10 Ethical Consideration**

This study relied on secondary data from firms registered on the Nairobi Securities Exchange. Prior to data collection, Kenyatta University granted data collection permission and the National Science, Technology and Innovation Commission granted research permission. Only information from published financial statements of the assessed SACCOs have been used for this evaluation.

## **CHAPTER FOUR**

### **RESEARCH FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

The research primary goal is to assess effects of credit administration on financial performance of institutional based SACCOs in Nairobi City County, Kenya. This chapter incorporates study outcome and comments in line with research objectives. This chapter begins with an outline of descriptive facts, diagnostic tests used to justify the methods, hypotheses test, inferential records and their interpretations.

#### **4.2 Descriptive Statistics**

The descriptive characteristics of variable on research in this segments, indicating their means, standard deviations, minimum and maximum values for each one of them, and also how they were distributed among the SACCOs under investigation over the research period of 2013–2022. The mean represents the average of variables across the research period, whereas the standard deviation represents the level of variance over time. The period's maximum and minimum values are also provided.

The descriptive traits of variables beneath take a look at are mentioned on this segment

**Table 4.1: Summary of different variables statistics**

<b>Variables</b>	<b>OBS</b>	<b>Mean</b>	<b>STD. Dev</b>	<b>Min</b>	<b>Max</b>
Loan repayment management	130	0.293	0.028	.282	.535
Credit Cost Management	130	0.297	0.038	.229	.369
Default Management	130	0.509	0.089	.332	.669
Loan Security Management	130	0.442	0.079	.293	.541
Financial performance	130	5.370	0.041	.282	.535

Table 4.1 indicates the mean of financial performance was determined by net profit ratio (profit after tax) which was 5.37% having a minimum value of 2.82, 0.535 as a maximum value and 0.041 as standard deviation. SACCOs earned Ksh 5.37 per Kenyan Shilling in assets.

Loan repayment management in all the 10 SACCOs that have been studied for the length 2017-2021, the total mean of loan repayment management for duration of 2017-2022 become 0.293. This indicates that on common proportion of that an average proportion of non-performing loan to total loan ratio was low over that period as variation was relatively low as evidenced by standard deviation of 0.028 indicating small variability in loan repayment over time. The loan repayment management minimum and maximum values over same duration were 0.259 and 0.335 respectively. There was substantive variation in loan repayment management, evidenced with the fact that minimum observed loan repayment management was 0.259 while maximum was 0.335.

Credit cost management as part of SACCO credit administration was decided via ratio of interest paid to total debt. In table 4.1, the credit cost management mean for the

10years is 0.297 and the standard deviation of 0.038 shows small variability in credit score fee management over the years. The minimum and maximum values of credit cost management over same length of time 0.229 and 0.369 respectively.

Loan default management as a component of the credit administration of a SACCO was determined using the constant default rate. From table 4.1, the loan default management mean for the ten years is 0.509 and standard deviation of 0.089 indicating small variability in loan default management over time. The minimum and maximum values of loan default management over the same period were 0.332 and 0.669 respectively.

Loan security management as part of SACCO credit administration was measured via ratio of collateral value to loan value. In table 4.1, the loan security management mean for 10 years is 0.509 and standard deviation of 0.079 indicating small variability in loan safety management over time. The minimum and maximum values of Loan security management over same period were 0.293 and 0.541 respectively.

### **4.3 Correlation analysis**

The correlation coefficients range from negative one to positive one. When there's Positive correlation coefficient, it means there an increase in one which will lead to increase on the other and vice versa. The greater the coefficient, the more stable association. Negative connection coefficients indicate that they will generally go in opposite direction. Table 4.8 presents the correlation results of credit administration on institutional based SACCOs in Nairobi city county, Kenya financial performance.

**Table 4.2: Correlation Matrix Results**

		<b>X<sub>1</sub></b>	<b>X<sub>2</sub></b>	<b>X<sub>3</sub></b>	<b>X<sub>4</sub></b>	<b>Y</b>
<b>X<sub>1</sub></b>	R	1				
	Sig value					
<b>X<sub>2</sub></b>	R	.691**	1			
	Sig value	.000				
<b>X<sub>3</sub></b>	R	.671**	.441**	1		
	Sig value	.000	.000			
<b>X<sub>4</sub></b>	R	.691**	.586**	.575**	1	
	Sig value	.000	.000	.000		
<b>Y</b>	R	.548**	.646**	.435**	.615**	1
	Sig value	.000	.000	.000	.000	

Correlation is significant at 0.01 level (2 tailed)

**Keyword:** **X<sub>1</sub>** = loan repayment management; **X<sub>2</sub>** = Credit Cost Management; **X<sub>3</sub>** = Default Management; **X<sub>4</sub>** = Loan Security Management and **Y** = Financial Performance

Correlation analysis was carried out on the ROA and the results portrayed in Table 4.2 that indicate loan repayment management which has substantial positive relationship with financial performance. Findings indicate a 5% significance level,  $r = 0.548$  with a p-value of 0.000. Credit cost management has significant relationship with financial performance. Findings indicate 5% significance level,  $r = 0.646$  with p-value of 0.000. Further, default management has significant positive relationship with financial performance. The findings show that at 5% significance level,  $r = 0.435$  with a p-value of 0.000. Finally, loan security management has a significant positive relationship with financial performance. The findings show that at 5% significant level,  $r = 0.615$  with p-value of 0.000. Observation indicates financial performance measured by ROA, increases as loan repayment management, credit cost management, default management, and loan security management increase.

#### **4.4 Diagnostic Tests**

Diagnostic examinations are completed at statistics variables to affirm that they meet each of criteria of various regression technique used. Multicollinearity check, heteroscedacity test, stationary test, Durbin-Wats on statistical test for autocorrelation, Jarque Bera test, Breusch-pagat Langrange Multiplier (LM) test and Hausman test must be performed and reported.

##### **4.4.1 Multicollinearity test**

Multicollinearity tests have been accomplished considering, it would suggest that unique least squares imply regression analysis can be produced even instances of ideal associations between predicors can (Hossain& Bhatti, 2018). The situation expands confidence durations and standard mistakes, leading in unreliable estimates of impartial predictor values. Within the present research, variance inflation component (VIF) and tolerance have been utilized to assess mult-collinearity. The outcomes of the multicollinearity tests are summarized in Table 4.3.

The (VIF) became under five, and the tolerance were larger than 0.2, showing that the variables had been no longer fairly correlated, and so there has been no longer fairly correlated, and so there has been no Multi-collinearity. These points out that variable are suitable for in addition research (regression evaluation).

**Table 4.3: Multi-collinearity Test Results**

<b>Variables</b>	<b>Tolerance</b>	<b>VIF</b>
Loan repayment	0.913	1.095
Credit Cost	0.993	1.007
Default Management	0.886	1.129
Loan Security Management	0.839	1.191
Financial performance	0.615	1.005

**Source: Survey Data, 2023**

#### 4.4.2 Normality test

Because of a couple of regression was used as primary approach to data analysis, the assumption of data normality was required. Kolmogorov-Smimo tests, Kurtosis and Skewness, Shapiro Wilk tests, Quantile-Quantile plots (q-q) plots, Jarque Bera tests and histograms can be used to assess the normality of data as suggested by Saunders et al (20019). The measure of normality used Jarque Bera given that the data set contained more than one hundred findings or observations as suggested by Field (2005).

**Table 4.4: The results of Normality test (Jarque-Bera test)**

<b>Variables</b>	<b>Jarque-Bera test</b>	<b>P-value</b>
Loan Repayment Management	3.70389	0.156931
Credit Cost Management	1.49713	0.473046
Default Management	1.19678	0.549696
Loan Security Management	1.4900	0.432895
Financial performance	1.55628	0.16782

**Source: Survey Data, 2023**

The variable residuals were distributed in accordance to the Table 4.4 results. The Jarque-Bera test null hypothesis was that the residuals are not statistically different from a distribution that is normal as per Gujarati & Porter (2004). When P-value is less than 0.05, it means that the data contradicts the prediction of null hypothesis being true as asserted by Brooks, (2008). Study test was performed at the 95 percent level of significance and all variables had values greater than 0.05, therefore it was confirmed data was normally distributed.

#### **4.4.3 Heteroscedasticity test**

Breusch-Pagan (BP) test was used to assess panel-level heteroscedasticity. Ho, was that the data were homoscedastic, while H1 was that the data were heteroscedastic. Rejection is done for null hypothesis if p-value is less than 0.05, and the data are determined to be heteroscedastic. Alternatively, if the p-value exceeds the 5% significance level, Ho is not rejected and the data are considered homoscedastic that is data remain same across firms and time. The test results are projected in Table 4.5.

**Table 4.5: Breusch Pagan heteroscedasticity test**

<b>Model</b>	<b>Statistic of BP</b>	<b>Freedom Degree</b>	<b>P-value</b>
<b>1</b>	6.3121	<b>9</b>	<b>0.6243</b>

**Source: Survey Data, 2023**

From Table 4.5, the BP test statistics listed were tests with nine degrees of freedom. The investment return has T statistic value 6.3121 and p-value 0.1021. The p-value in the model is above ten percent. Thus, Ho is not rejected and it is determined that the data are not heteroscedastic.

#### 4.4.4 Autocorrelation test

Durbin-Watson statistical assessments were used to assess autocorrelation in residuals from statistical regression evaluations. Serial correlation among variables was examined by Durbin-Watson test. If error terms of different periods are combined, it means they are serially correlated. The performance of ordinary least square estimators is affected by serial link; however, bias and consistency are not affected. Dependent variables must be independent if linear model is to be used and this explains the fact there should be no serial correlation in findings. Durbin-Watson test was used to test dependent variables in research and results shown in Table 4.6.

**Table 4.6: Durbin Watson Auto-correlation**

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Durbin Watson statistics	1.954
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**Source: Survey Data, 2023**

Test statistic starting from zero to four is provided by Durbin-Watson test. Information set has no autocorrelation if there's a score of 2. Values along 0 TO 2 indicate positive autocorrelation while those along 2 to 4 indicate negative correlation. The value of test statistic is 1.954 indicating that positive autocorrelation is minimal.

Auto Correlation Test:

$H_0: y = \dots$  Is remainders are independent

$H_a: y > 0$ . The rest is dependent to each other.

P-value > accept null hypothesis. AP-cos greater than 0.05 significance level fails to reject null hypothesis, showing residual as being independent that OLS(estimation) can be used. As a result test statistics were non-significant at 5% level, which means

that residual are independent, with robustness and consistency of estimates for legitimate significance test.

#### 4.4.5 Test of stationary

To keep away from misguided regression findings, panel root test was applied for all variables in research. Fisher type test was used in the study as it offers more advantages to other panel unit root check as it uses Dickey fuller specification. A test was performed to look for stochastic trends. Assess whether or not the data had root units. If no roots of units are detected, the data is paper; otherwise it is non-stationary.

Hypothesis:

H0: The financial performance series non-stationary unit root

H1: Financial performance series does not have a unit root, which means it is stationary.

**Table 4.7: Dickey Fuller Unit Root Check**

<b>Dickey Fuller statistics</b>	<b>Order of Delay</b>	<b>P-value</b>
-12.9422	0	0.01

**Source: Survey Data, 2023**

Table 4.7 indicates that p-value was less than 0.05 at 5% level of significance; in this case we reject H0 and conclude that data does not have unit roots and is stationary. In order to perform multiple linear regressions, the data must be stationary. Consequently, panel linear multiple regressions can be used.

#### 4.4.6 Model Specification Test

Baltagi (2005) stated that the model specification test is critical in deciding when to use an FE or RE model with panel data. Table 4.6 shows a model specification test

that indicates whether the FE or RE model should be used in the investigation. H0 is that the RE model is acceptable according to the results in Table 4.6; an alternative hypothesis is that a finite element model should be used based on the model specification test results. H0 is not rejected when  $p\text{-value} > 0.05$ . P-value in this case was greater than critical value ( $p\text{-value} = 0.254 > 0.05$ ). The RE model as proposed by Green (2008) was suitable for this model.

**Table 4.8: Hausman test for estimating model effects**

Model	Dependent variable	Independent Variables	Prob>chi <sup>2</sup>	Model
	Financial performance	Loan repayment management, Credit cost management, Default management Loan security management	0.2541	RE

**Key: RE=Random effect, Source: 2023 data survey**

Table 4.8 portrays the results of Housman specification test of panel regression equations which are examined in above section, and are statically insignificant chi-square statistic at 0.05. An equation with a probability >chi2 value greater than 0.05 led to rejection of HO, which affected the random, estimate was appropriate for the equations at the significance level; and therefore random effects panel models were calculated (Greene, 2012: Henderson & Paramete 2012; Baltagi, Bresson & Pirotte). Conversely, Prob > values less than 0.05 indicates that the FE estimates was appropriate for the equations at the 95% significance level.

#### **4.5 Hypotheses Testing**

This research was based on hypothesis that there was correlation on credit administration and financial performance. To assess direct association strength between credit administration and financial success, a panel regression model with

ROA was utilized. The statistical significance of the various hypotheses was also determined using regression analysis. The Wald chi2 value determines whether or not, the general regression model is good fit for the data, whereas determination coefficient (R-squared) value is proportion of variance in outcome variable(ROA) that is predicted from predictor variables. According to the H0, the regression coefficients are equal to zero. The Wald chi-squared test outcome and coefficient of determination of the outcome variable (the financial performance as assessed by ROA) as shown in table 4.9.

**Table 4.9: The Test of fitness**

ROA	Statistics
Wald chi2(4)	10.37
Prob>F	0.0357
R-Squared	0.4134

According to the study outcome in Table 4.9, Prob>F= 0.0357 using ROA as the outcome variable. Because p-value = 0.0357 which is less than 0.05, the study rejects the Ho that the regression coefficients are equal to zero. As a result, the panel regression model was chosen for study, using ROA as the outcome variable. The R-squared (0.4134) value indicates that credit management defines the 41.3% of the variation in the dependable variable (ROA).

The four objectives of research were to be used to investigate the direct effects of loan repayment management, credit cost management, default management, and loan security management of Institutional based SACCOs in Nairobi County City. Table 4.10 summarized findings.

**Table 4.10: Effects of Credit Administration and financial performance**

<b>The Financial Performance</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>z</b>	<b>P &gt;  z </b>	<b>Model</b>
Loan repayment management	0.402	0.066	6.04	0.000	RE
Loan security management	0.737	0.227	3.24	0.001	
Default management	0.904	0.236	3.83	0.000	
Credit cost management	0.547	0.072	7.58	0.000	
-Cons	0.244	.070	3.51	0.000	

**Source: Survey Data, 2023**

As a result, the credit administration and financial performance model were as the following:

$$Y = 0.244 + 0.547X_1 + 0.904X_2 + 0.737X_3 + 0.402X_4$$

Where; Y = The Financial Performance; X<sub>1</sub> = Loan Repayment; X<sub>2</sub> = Credit Cost; X<sub>3</sub> = Default Management and X<sub>4</sub> = Loan Security Management

Table 4.10 outcome indicates that Wald Ch-Square is highly significant (P = 0.0357( < 0.05 ). This suggests that a joint loan repayment, credit cost, default management, and loan security management predicted financial performance measured by ROA.

**H<sub>0</sub>: Loan repayment has no significant effect on Institutional based SACCOs in Nairobi City County, Kenya**

The first research objective sought to establish loan repayment effects on Institutional based SACCOs in Nairobi City County, Nairobi. Outcome is outlined in Table 4.10. To meet this objective, null hypothesis of loan repayment management having no significant effect on institutional based SACCO financial performance in Nairobi

County, Kenya was developed. In the table 4.10, the coefficient of Non-performing loan/total loan ratio. (Loan repayment) ( $\beta = 4.02$ ,  $p = 0.000 < 0.05$ ) shows that loan repayment possess statistically significant positive effect on financial performance. Thus null the hypothesis is that loan repayment has no significant effect on financial performance of institutional based SACCOs in Nairobi City County, Kenya which was rejected at 5% significance level, which meant that there was 5% chance that the outcome streams from a random distribution and also signifies 95% probability that loan repayment has technically, statistically significant positive effect on financial performance of institutional based SACCOs in Nairobi city county, Kenya.

The 0.402 positive coefficients established in observation, points out, that unit increase in loan repayment management holding other variable constant leads to an increase of 0.402 in financial performance measured by ROA. The positive sign obtained in research agrees with information asymmetry theory earlier stated in the study. Results corroborates with those of Bagachwa (1997), and Akyoo and Karumana (2011). Nevertheless, the findings contradicted those of Frenzyied (2013). The discrepancy might be attributed to variances in context. Kenya is a border market, whereas the later study was conducted in an advanced nation.

**H<sub>02</sub>: Management of credit cost has no significance effect on SACCOs of institutional based in Nairobi city Count financial performance.**

Second specific research objective was to find cost of credit management effects on financial performance of SACCOs that are institutional based in Nairobi City County. Outcome is represented in table 4.10. So as to meet this objective, the null hypotheses of credit cost management with no significant effect on institutional based SACCOs financial performance in Nairobi City County, was developed. In Table 4.10, the the

coefficient of interest paid to total debt ratio of credit cost management ( $\beta = 0.547$ ,  $p = 0.000 < 0.05$ ) points out that credit cost management has statistically, significant positive effect on financial performance. Thus the null hypothesis that credit cost management has no significant effect on financial performance of SACCOs that are institutional based in Nairobi City County, Kenya was rejected at 5% significance level, which means that there's a 5% chance that the outcome streams from random distribution. Thus it signifies that there is 95% probability that credit cost management has a technically statistically significant positive effect on financial performance of institutional based SACCOs in Nairobi city County, Kenya.

The positive coefficient of 0.547 indicates that a unit increase in credit cost management holding other variables constant will lead to a 0.547 increase in financial performance as measured by ROA. The results corroborate with those of Alber (2016) and Halal and Miah (2017) and at same time contradicted by Frenzyied (2013). The discrepancy can be attributed to variances context. Kenya is a border market, whereas the later study was done in advanced Nation.

**H<sub>03</sub>: Default management has no significant effect on SACCOs which are institutional based in Nairobi City County, Kenya.**

The third specific objective sought to find the default management effects on institutional based SACCOs in Nairobi city County, Kenya. Outcomes are presented in Table 4.10. For this objective to be met, a null hypothesis, default management has no significant effect on institutional based SACCOs financial performance in Nairobi city County, Kenya was developed. In Table 4.10, the coefficient of Constant Default Rate (default management) ( $\beta=0.904$ ;  $p=0.000 < 0.05$ ) points out that default management has statistically significant positive effect on financial performance of

institutional based SACCOs in Nairobi, city County, Kenya. Thus the null hypothesis that default management has no significant effect on financial performance of institutional based SACCOs in Nairobi City County, Kenya and was rejected at 5% level of significance. This shows that there's 5% chance that the outcome streams from random distribution. It signifies a 95% probability that default management has a technically statistically significant positive effect on financial performance of institutional based SACCOs in Nairobi City County, Kenya.

The positive coefficient of 0.904 points a unit increases in default management holding other variable constant leading to 0.904 increase, in financial performance as measured in ROA. The result collaborates with those of Alber (2016) and Helal and Miah (2017). Nevertheless, findings contradicted those of Frenzyied (2013). The discrepancy might be attributed to variances in context. Kenya is a border market, whereas the later study was conducted in an advanced nation.

**H<sub>04</sub>: Loan security management composed of no significant effect on SACCOs which are institutional based in Nairobi City Count financial performance**

This is the final fourth study research objective which sought to establish loan security management loan effect on financial performance of institutional based SACCOs in Nairobi city county, Kenya. Outcomes are presented in Table 4.10. In order to meet this objective, a null hypothesis of loan security management, having no significance on financial performance of institutional based SACCOs in Nairobi City, County Kenya. In Table 4.10 the coefficient of non-performing loan to total loan ratio of Loan security management ( $\beta = 0.737$ ,  $P = 0.000 < 0.05$ ) points out that loan repayment possess statistically significant positive effect on financial performance. In this research scenario, the null hypothesis that management of loan security has no

significant effect on financial performance of institutional based SACCOs in Nairobi County, Kenya and was rejected at 5% level of significance. This shows that there's a 5% chance that the outcome streams from random distribution, which signifies that there is a 95% probability that the management of loan security has technically, statistically significant positive effect on financial performance of institutional based SACCOs in Nairobi City County, Kenya.

The 0.737 positive coefficients in the finding indicates that a unit increase in Loan security management holding other variables constant would lead to 0.737 increase in financial performance as measured in ROA. The findings are consistent with those of Nduwayo (2015). However, the findings contradicted those of Fiordelisi et al. (2010). The discrepancy might be attributed to variances in context. Kenya is a border market, whereas the later study was conducted in an industrialized nation.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter summarized the findings of the research and drew conclusions that formed basis for recommendations. It provided for further research suggestions in line with findings and short coming of the research. Conclusion therefrom are discussed in the context of the four study objectives and hypothesis corresponding. Finally, this chapter presents recommendation for further studies.

#### **5.2 Summary**

Currently available evidence shows that SACCOs in Kenya adopt various credit administration practices. These have affected the SACCOSs' financial performance in a different way, and hence a review of the effects of SACCOs credit administration on financial performance was important. The writings or studies done have shown that loan repayment, credit cost, default management and security loan management can improve financial performance of SACCOs. Corporate management has lacked direction on how various credit administration practices affect financial performance of SACCOs. Hence it's in line with this background that study purposed to find to find effects of credit administration on institutional based SACCOs financial performance. Explanatory research design was employed in the study and positivist viewpoint in epistemology, which is concerned with how individuals think about knowledge, was embraced. A census of 10 SACCOs in Nairobi City County. Panel data from published financial statements of the institutional-based SACCOs in Nairobi City County covering the year 2013 to 2022 were used in the analysis.

Multicollinearity tests, normality tests, Auto-correlation tests, heteroscedasticity tests, stationarity tests, and Hausman tests were done prior to panel regression analysis.

The study first objective was to establish the effect of loan repayment on the SACCOs financial performance in Nairobi City County. The study measured loan repayment in by use of Non-performing loan to total loan ratio. By use of Fixed Effect Model, the research found out that there was a positive significant link between loan repayment and institutional based SACCOs financial performance in Nairobi City County. This signified that SACCOs increased their loan repayment administration level and improved performance as well.

The second research objective was to find out cost of credit effects on institutional based SACCOs financial performance in Nairobi City County. The study measured credit cost in terms of the Non-performing loan/total loan ratio. Using the Fixed Effect model, the research established that there was a significant positive relationship between credit cost management and financial performance of institutional based SACCOs in Nairobi city county, Kenya. This shows that the SACCOs increased their credit costs level, hence improved financial performance.

Third study objective established the default management effects on institutional based SACCOs in Nairobi City County financial performance. The study measured repayment of loan by constant default rate. By use of the Fixed Effect Model, the study found out that there was positive and significant relation between default management and SACCOs financial performance. As the SACCOs default management level increased, the financial performance increased too. The fourth study objective determined the effects of loan security management on financial performance of institutional based SACCOs of Nairobi city county, Kenya. The study

measured loan security management in terms of Collateral value to loan value ratio. Using a fixed effect model, the research found that there is a significant positive relationship between default management and financial performance of institutional SACCOs in Nairobi City County, Kenya. This implied that when SACCOs level of security management increased, the financial performance also improved.

### 5.3 Conclusions

The research sought to establish the effects of loan security management on financial performance in institutional based SACCOs, in Nairobi City. Management of loan security was established as having significant and positive effects on SACCOs financial performance and therefore a conclusion that improved management of loan security management of loan security pose a significant and positive effect on SACCOs financial performance. It can be said that Loan security is the most important part of credit administration which plays a vital role in successful SACCO operation as a profitable organization. The sought to ascertain the effects of default management on the financial performance of institutional based SACCOs in Nairobi city county, Kenya. It was concluded that default management positively affected financial performance. The conclusion is that default management affects positively the financial management. As the default management increases the financial performance improves.

Credit administration effects on institutional based SACCOs on financial performance in Nairobi City County was determined and found that credit cost management affected positively the financial performance. Hence the researcher concluded that credit cost management positively contributed to SACCO financial performance. When credit cost management increases it improves financial performance.

Finally, the research sought to determine loan repayment management effects on financial performance on institutional based SACCOs in Nairobi city county, Kenya. It was established that loan repayment positively affected financial performance positively as the loan repayment management increases as financial performance improves.

The study findings will support the theory of information asymmetry that champion for positive link on credit administration and financial performance. Hence this justifies that theory of information asymmetry applies to few selected institutional based SACCOs in Nairobi City County. Default management is mainly the most important practice followed by loan security management based on standardized coefficient (beta), loan repayment, and lastly credit cost management. It can be concluded that all variables have significant and positive contribution to profitability.

#### **5.4 Recommendations**

The study advocates for the management of institutional-based SACCOs and other Deposits taking SACCO to improve their policy of collection by switching from a liberal approach to a more severe one in order to effectively recover debt. The study suggests that institutional-based SACCOs improve their customer evaluation methods in order to boost their financial success. The institutional-based SACCOs will be able to identify creditworthy clients using client evaluation methodologies, which will help them cut down on non-performing loans. Additionally, institutional-based SACCOs must improve on the risk of credit management as it will lower non-performing loan portfolios and default rates. Hence they will perform financially better as a result of this.

Institutional-based SACCOs should examine their credit rules on a regular basis. This would improve loan application examination and guarantee that are fully evaluated and rated on merits. For SACCOs to improve on their financial performance, they must provide prompt loan distribution to promote loan recovery and reduce administrative expenses.

Based on the conclusions that loan default management affects significantly affect SACCOs' financial performance, the research recommends that the SASRA and SACCO management should come up with a policy to monitor customers across all the financial institutions. The government should evaluate the SACCO legislative framework to guarantee that appropriate credit policies are implemented for enhanced SACCO financial performance

### **5.5 Contributions to Knowledge**

Based on research, the findings add to the literature body by showing that when analyzed collectively or applied collectively in credit administration, all of a SACCO's credit administration components positively affect financial performance. The findings showed that the elements of credit administration significantly and favorably impacted financial performance. The research added to knowledge body by demonstrating how employment of various financial structure elements improved the ability of credit administration to account for differences in financial performance. As a result, the financial performance was positively and significantly impacted by all of the factors.

The research adds to the body of knowledge by demonstrating that combining default management with other variables of loan security management, loan repayment, and credit cost administration pose an effect of increasing, of each variable to financial

performance resulting to high explanatory capacity of the variables of credit administration on their impact on financial performance.

Furthermore, the research adds to credit administration writings or literature through demonstrating the influence of default management, loan security management, loan repayment, and credit cost administration on SACCOs financial performance in Kenya for the years 2017-2021. This was a key phase during which organizations attempted re align and reestablish themselves in the market following economic crisis years. Examined variables and their combinations will add to current literature through opening new avenue of analysis and providing significant insight into business research and building solid foundation for analyzing the impact of credit administration on financial performance.

### **5.6 Limitations of the Study**

The size of population for the study was one of the primary limitations. For maximization for quality and quantity of data available for analysis, the study employed panel data because there are relatively few institutional based SACCOS in Nairobi city County, Kenya. Another drawback was research theoretical framework, which was biased in favor of credit management as credit administration theories were less well-known than credit management theories at the time the study was conducted. SACCOS that come within the investment, insurance sector, banking and finance were left out of research because they are sectors or industries governed by separate banking and insurance acts, making it impossible to extrapolate the study's findings to these industries in Kenya.

### **5.7 Suggestions for Further Research**

This study recommended for further research on credit administration effect on financial performance, in categories outside institutional based SACCOs: targeting the same category and comparing results found with those of other SACCOs in different sectors. The researcher recommends for further diversified studies of credit risk analysis and its impact on financial performance in regional countries. A further research can also be undertaken by having similar data from different countries or using other proxies such as ROE as a measure of financial performance.

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## APPENDICES

### Appendix 1: Letter of Introduction

Lydia Saranwa,  
Kenyatta University,  
Mobile phone:  
0722400765

Dear Respondent,

#### **RE: COLLECTION OF DATA FOR RESEARCH**

I am a student at Kenyatta University doing an MBA in Finance option. I would like to introduce you to my academic-based research study to be conducted on Credit Administration and the Financial Performance of SACCOS. I kindly ask for your help in filling out the attached data collection tool to enable me to do the research. Research is purely academic, and I assure you of the confidentiality of any information provided. Please provide the correct information. Don't write your name on the research tool.

Looking forward to your co-operation,

Thank you.

Yours Sincerely,

Lydia Saranwa

Student

Registration:

D53/OL/CTY/24255/2014



### **Appendix 3: Institutional-Based SACCOS in Nairobi City County**

<b>No</b>	<b>SACCO</b>
1.	Ushuru
2.	Shirika
3.	Finnlemm
4.	Mwito
5.	Kilele
6.	Amref
7.	Mhasibu
8.	Africa Nazarene University
9.	Sheria
10.	Bunge
	<b>Total</b>

**Source: SASRA, (2022)**

**Appendix 4: Document Review Guide**

Year	Net income (Profit after tax)	Total Net Assets	Non-performing loan	total loan	interest paid	total debt	Amount of new defa ults during the period	Non- defaulted pool balance at the beginning of th e period	Number of periods per year	Collateral value	loan value
2013											
2014											
2015											
2016											
2017											
2018											
2019											
2020											
2021											
2022											