**DETERMINANTS OF THE FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT CO-OPERATIVES IN THE BANKING SECTOR IN KENYA**

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**Determinants of the Financial Performance of Savings and Credit  Co-operatives in the Banking Sector in Kenya**

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# DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.


Sign…………………………        Date……………….

**Hannah Waithera Kiaritha**


This thesis has been submitted for examination with our approval as the University supervisors.

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# DEDICATION

I dedicate this thesis to my lovely children, Jewel Nungari, Blessing Kamau and baby Beloved Kiaritha for their great sacrifice they have made especially during the process of my studies at Jomo Kenyatta University of Agriculture and Technology

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# LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| **BOSA** | Back Office Savings Activity |
| **CIC** | Cooperative Insurance Company |
| **ECCOS** | Ethics Commission for Co-operative Societies |
| **FOSA** | Front Office Savings Activity |
| **ICA** | International Cooperative Alliance |
| **ILO** | International Labor Organization |
| **IMF** | International Monetary Fund |
| **KUSCCO** | Kenya Union of Savings and Credit Co-operatives |
| **SACCOs** | Saving and Credit Co-operatives Societies |
| **SASRA** | Sacco Societies Regulatory Authority |
| **WOCCU** | World Council of Credit Unions |

# DEFINITION OF KEY TERMS

**Competition** is the rivalry between two or more businesses striving for the same customer or market (Porter, 1990).

**Financial Performance** is a measure of how well firm use assets from its primary mode of business to generate revenues. It measures the financial health of an organisation. The common indicators of financial performance are; profits, return on investment, return on assets, value added and margins among others. Financial performance guides management on the strategies and policies to adopt to improve sustainability of the organisation (Almazari, 2011).

**Internal politics** consists of activities undertaken to gain advantage or influence organizational decision makers in ways intended to serve a purpose other than the best interests of the overall organization. Internal politics consists of the games people play to promote decisions that are based on criteria other than merit, where personal goal gets magnified and focused and get prioritized than the Organizational goal (Gichira, 2010).

**Investment policies** are statements that provide the general investment goals and objectives of an organisation. They describe the strategies that management should employ to meet these objectives. The policies include goals on asset allocation, risk tolerance, and liquidity requirements (Tarawneh, 2006).

**Operating costs** are expenses associated with administering a business on a day to day basis. They include both fixed costs and variable costs (Woods, 2008).

**SACCOs** are an acronym of Savings and Credit Co-operatives Societies. They are autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned

and democratically-controlled enterprise and are registered with the Department of co-operatives (SASRA, 2011).

**Savings culture** is the practice of setting aside a portion of disposable income not spent on consumption of consumer goods, but accumulated in an account (Loayza and Shankar, 2000).

**ABSTRACT**

This study sought to establish the determinants of financial performance of SACCOs in the banking sector in Kenya. In Kenya, fifty one percent of all registered SACCOs are non-operational; however, all SACCOs in the banking sector in Kenya are operational despite the many employment perks given to staff. The determinants studied were competition from commercial banks, internal politics, operation costs, saving culture and investment policies. This study adopted a descriptive survey design. The target population of this study was SACCOs in the banking sector in Kenya. The sampling frame of this study was derived from the database of the Ministry of industrialization and enterprise Development which regulates and licenses SACCOs in Kenya. Stratified sampling and simple random sampling was used. A Likert scale questionnaire was used to gather primary information while a secondary data collection sheet was used for collecting secondary information regarding SACCO performance. Information was sorted, coded and input into the statistical package for social sciences (SPSS) version 21.0 for production of graphs, tables, descriptive statistics and inferential statistics. The results indicated that there was a positive relationship between financial performance and competition from commercial banks, internal politics, operating costs, saving culture and investment policy. The study concluded that all the variables under study are statistically significant in explaining the financial performance of SACCOs in the banking sector in Kenya. The study recommends that the SACCOs should; be proactive in order to have a competitive advantage, have effective strategic plans to manage operating costs and enhance investment through effective policies.

**CHAPTER ONE**

**INTRODUCTION**

## 1.1     Background

The International Cooperative Alliance (ICA, 2005) defines a cooperative as an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise. The seven internationally recognized cooperative principles are: voluntary and open membership; democratic member control; member economic participation; autonomy and independence; provision of education, training and information; cooperation among co-operatives; and concern for the community (ICA, 2005, ILO, 2002). In concurrence with ICA (2005) definition, ILO (2002) also defines a cooperative as an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.

### 1.1.1 Global perspective of SACCOs

According to Cobia (2008), cooperative efforts have occurred throughout history.  Since the early days, man cooperated with others to help kill large animals for survival and so as to achieve the objectives that they could not reach if they acted individually.  Cooperation has occurred throughout the world.  Ancient records show that the Babylonians practiced cooperative farming and that the Chinese developed savings and loan associations similar to those in use today.  In North America, clearing land in preparation for the planting of crops, threshing beans, and barn raisings all required cooperative efforts.  In the United States, the first formal co-operative business is assumed to have been established in 1752, almost a quarter-century before the Declaration of Independence was signed.

In today's society, cooperative financial institutions hold a considerable market share, with the IMF estimates that across all banking sector assets in developing countries, the market share of co-operative finance was equivalent to 14 percent in 2004 (Hesse and Cihak, 2007). Previous research on co-operative finance during crisis indicates that they tended to fare better than investor-owned savings and loans institutions, as they pursue more conservative investment policies (Chaddad and Cook, 2004). For instance, analysis from the IMF indicates that co-operative banks in developed countries tend to be more stable than commercial banks, especially during financial crisis, as their investment patterns tend to be less speculative and returns are therefore less volatile (Hesse and Cihak, 2007).

Co-operative finance in developed countries tends to have a supply of funding that is more stable and less responsive to monetary policy and market rates. Co-operative finance also tends to offer comparatively lower fees than other types of commercial banks, which not only helps to increase access of the poor to credit, but also reduces the cost of remittance transfers (Schenk, 2007, WOCCU, 2009).

## 1.1.2 Regional perspective of SACCOs

Recent research indicates that approximately seven per cent of the African population is affiliated to co-operatives (Pollet, 2009). The research indicates that while co-operatives are large in number and represent an organized movement, the movement suffers constraints that are related to lack of voice or effective representation in society. Pollet (2009) also found that specific social protection mechanisms associated with co-operatives in Africa are limited.

In 2008 savings in SACCOs across Sub-Sahara Africa grew by an average of 31.9 per cent, which is comparable to average saving growth rates for previous years. Loans grew at an average of 12 per cent, which is lower than growth rates of previous years (WOCCU, 2009). For instance, in 2007 loans issued by SACCOs grew by 35.3 per cent; in 2006 loans grew by 21.2 per cent. Growth

in new membership has been steady. This suggests that SACCOs across Africa may be exercising caution in responding to the loan requests of members. Indeed, it was reported that some SACCOs have been scaling down loans associated with export commodities in order to protect themselves from potential loss (WOCCU, 2009).

### 1.1.3 Kenyan perspective of SACCOs

The SACCO sub-sector is part of the larger cooperative movement in Kenya. There are two broad categories of co-operatives: Financial co-operatives (Savings & Credit Co-operative Societies- SACCOs) and Non-financial co-operatives (includes farm produce and other commodities marketing co-operatives, housing, transport and investment co-operatives). In the recent past Savings and Credit Co-operatives (SACCOs) have witnessed faster growth than other co-operatives. The establishment of SACCO Societies Act 2008 places the licensing, supervision and regulation of deposit taking under the armpit of the SACCO Societies Regulatory Authority (SASRA). Through this new legal framework, prudential regulations have been introduced to guide SACCO's growth and development (Barrales, 2012).

The SACCO sub sector comprises both deposit taking and non-deposit taking SACCOs. Deposits taking SACCOs are licensed and regulated by SASRA while non-deposit taking SACCOs are supervised by the Commissioner for Co-operatives. SASRA licenses SACCOs that have been duly registered under the Cooperative Societies Act CAP 490 (SASRA, 2012).

As at 31st December 2012, the total number of deposit taking SACCOs was 215 of which 124 had been licensed. The remaining 91 SACCOs were at different levels of compliance with the provisions of the law. All deposit taking SACCOs were in operation prior to establishment of SASRA in 2009 and have applied to be considered for licensing as undertaking deposit taking SACCOs business. They are spread across the various counties in the country and are categorized as follows: Government based SACCOs (87); Farmers based

SACCOs (74); Private institutions based SACCOs (24); and, Community based SACCOs (30), (SASRA, 2012).

According to records of the Ministry of Co-operative Development and Marketing (2011), in the banking sector there are seven registered and active SACCOs. The SACCOs are; Kencom SACCO Ltd, Co-operative Bank SACCO, Equity Bank SACCO, Family Bank SACCO, Nyumba SACCO, Kenya Bankers SACCO and Postbank SACCO. The largest of the seven in terms of membership and asset size if the Kenya Bankers SACCO due to its age and the fact that it was registered as a the first SACCO for the employees of the banks that were in existence at it formation and its neutral placement as a SACCO that is not affiliated to any of the existing banks in Kenya. Kenya bankers SACCO draws its members from across all banks while the other six SACCO mainly have members from the banks where their members are employed and domiciled. The Co-operative movement in Kenya is an important player in the social economic development of this country. Co-operatives cut across all sectors of the economy and provide an important framework for mobilization of both human and capital resources (Ministry of Co-operative Development and Marketing, 2008).

The Movement is independent and autonomous. However, the government, through the ministry of Co-operative Development and marketing has continued to play a key facilitative role in the activities of the Movement .The Ministry has been working on enabling the co-operative sector to be vibrant, effective and globally competitive by forging close linkages between the Co-operative Movement and Government line Ministries. As a result, Co-operatives are now playing an important role in the achievement of Kenya vision 2030 and the Millennium Development Goals (Ministry of Co-operative Development and Marketing, 2008). It is worth noting that the United Nation General Assembly, as a clear affirmation that it supports co-operatives, declared the year 2012 as the International Year of Co-operatives (SASRA 2012). An IMF survey in 2007 showed that co-operative banks have become important parts of many financial systems with all financial

stability issues. It is clear that, while Co-operative attendant potencies may not be the solution to the Kenyans problems, they are certainly part of the solution. Kenyans are expected to embrace the culture of savings through SACCOs and to work together on the basis of the co-operative principles and goals (Ministry of Co-operative Development and Marketing, 2008).

Some of the measures the Ministry has undertaken to create an enabling environment for co-operatives to prosper include; the establishment of the SACCO Societies Regulatory Authority (SASRA) to regulate the large financial SACCOs and the establishment of the Ethics Commission for Co-operative Societies (ECCOS) to address governance matters. The SACCO Societies Act, 2008 and SACCO Societies (Deposit-Taking SACCO Business) Regulations, 2010 provide legal, regulatory and supervisory framework commensurate to the risks in deposit taking business conducted by SACCO Societies. SACCO societies serve largely the personal loans market lending on a guarantee system, with credit risk perceived to remain high and hence posing the greatest risk to the SACCO movement. This is largely manifested in high borrowing from commercial banks, which has resulted in low liquidity and solvency margins in many SACCO Societies (SASRA, 2012).

The SACCO Societies Act, 2008 establishes a deposit guarantee fund (DGF) which shall provide protection to members deposits up to Ksh.100,000 per member (the same protection accorded depositors with banking institutions licensed under the Banking Act). The priority of SASRA is on 219 deposit taking SACCO societies (FOSAs), which control more than 67% of deposits and total assets in the SACCO industry. SACCOs further comprise both deposit and non-deposit taking. Deposit Taking SACCO (D.T SACCO) is that SACCO operating a front office savings activity (FOSA). FOSA activity is a quasi-banking activity undertaken by licensed SACCOs (SASRA, 2012).

Kenya's vision 2030 for financial services is to create a successful and globally competitive financial sector capable of promoting high levels of saving and financing for Kenya's investment needs (Adam, Collier and Ndungu, 2011).

The county's vision 2030 recognizes the role of financial services in mediating between borrowing and investment. The move to attain the vision 2030 has led to the government through the act of parliament to establish a regulatory body to oversee the operations of all SACCOs that operate FOSA accounts. However, access to financial services is a stumbling block which has led to low investment culture in Kenya. This is confirmed by the World Council of Credit Unions [WOCCU], 2008) that 38.3% of the Kenyans are still not included in financial services and use. The vision 2030 for financial services in Kenya can be fully achieved if SACCO members can transform their savings into viable investments. Hence, this study seeks to determine the determinants of financial performance of SACCOs in the banking sector where they are presumed to be doing well and understand how such factors and systems of SACCO management can be replicated to SACCOs in other sectors for the purposes of contributing the attainment of the Vision 2030 financial sector goals.

SACCOs in Kenya are gradually responding to the fast changes in the financial environment and adopting new approaches to the SACCO model. A good example is the FOSA concept and the development of products that are not tied to the traditional SACCO model, which relies on the tied shares deposits. However, Co-operative Societies need to keep up with changing demands. For instance, members want quick and easy access to financial services. If their SACCO cannot provide the loan when it is needed, then it is not meeting its members' needs. In this regard, SACCOs need to provide efficient services and remain liquid at all times (WOCCU and FSD, 2007)

With the cut-throat competition witnessed in the last few years, SACCOs are marketing themselves more aggressively than before. A case in point is Stima SACCO which has employed marketing officers, whose responsibility is marketing and business development. The SACCO has not been experiencing serious liquidity problems over the years, but with the current competition, it has to seek ways to mobilise more deposits and re-package its loan products. The SACCO has been unable to introduce a loan whose repayment period goes beyond 48 months, and this is now becoming a challenge due to the

competition that offers a repayment period of 60 months and beyond (WOCCU and FSD, 2007).

## 1.2    Statement of the Problem

SACCOs are found in almost all sectors of the economy. The Ministry of Co-operative and  marketing estimates that about 80% of the Kenyan population derives their income either directly or indirectly through SACCO initiatives.  It is estimated that a significant 24.6million people (63%) participate either directly or  indirectly in  SACCO enterprises. The government has made a significant initiative to support co-operative movements through legislation so as to achieve the millennium development goals and vision 2030 objectives of increasing financial inclusion.

In  Kenya,  6,727  SACCOs  were  registered  and  employed  directly  303,455 people  as  at  December  2010  (GOK  2011).  However,  despite  the  significant government  initiative,  a  significant  3457  (51%)  of  the  SACCOs  were  not operational.  This  high  failure  rate  of  SACCOs  continues  to  frustrate millennium  development  goals  and  vision  2030  objectives  of  increasing financial inclusion. It also implies that the 303,455 people directly employed by the high failure of SACCOs, it is estimated that less than 50% of the target SACCO enterprises are able to participate in SACCO enterprises.

Unique to the high 51% failure rate of SACCOs in Kenya, non of the SACCOs in he banking sector has failed(GOK 2011) . SACCOs in the banking sector in Kenya  are  unique  in  that,  bank  employees  enjoy  many  employment  perks including  highly  concessional  and  discounted  internal  employer  loans.  They also compete for the same savings with the commercial banks who happen to be the employers of the SACCO members. This  posses the question, "why do SACCOs  in  the  banking  sector  continue  to  thrive  and  flourish  in  an environment and economy which at the same time has a 51%  failure rate of SACCOs?".

Scholars Hakelius (2006), Kiaritha (2009), Unal, Guclusoy& Franquesa (2009), Bhuyan (2007), Nyoro and Ngugi (2007), Chombo (2009), Pollet (2009) have conducted studies on financial performance within the SACCO movement and using various variables namely; competition from commercial banks; members' royalty and active participation; financial, organisational,educational factors, membership and legislative support; members satisfaction and members participation; economic factors, management commitee and staff members; voice and effective representation of SACCO's respectively as key issues contributing to the financial performnace and survival of SACCOs.

Many studies in Kenya; Nyoro and Ngugi (2007), Mwangi and Wanjau (2012), Njagi,Kimani and Ngugi (2012), Gicheru, Migwi and M'lmanyara (2011), Kiaritha (2009) Auka and Mwangi (2013) and Mauka, Munene and Muturi (2013) were carried out on SACCOs in sectors such as the agricultural sector, the transport industry, teachers's SACCOs and on SACCOs in Kenya generally. From the reviewed empirical literature, it is evident that factors contributing to success or failure of co-operatives are multifaceted and depends on the operating environment of the specific SACCO. Moreover, the studies evaluated just a handful of factors. In Kenya, there is paucity of empirical studies on the drivers of financial performance of SACCOs in the Banking sector. This study therefore seeks to fill this research gap by invetigating the influence of a competition from commercial banks, internal politics, operating costs, savings culture and investment policies on the financial performance of SACCOs in the banking sector in Kenya.

## 1.3    Objectives

The study was directed by general objective and the specific objectives.

### 1.3.1    General Objective

The general objective of this study was to establish the determinants of financial performance of savings and credit co-operatives in the banking sector

in Kenya. In pursuing this main objective, the following specific objectives were addressed.

### 1.3.2   Specific Objectives

The specific objectivespursued by the study were:

   i.      To establish the extent to which competition from commercial banks influences the financial performance of SACCOs in the banking sector in Kenya.
  ii.      To investigate the extent to which internal politics influences the financial performance of SACCOs in the banking sector in Kenya.
 iii.      To examine how operating costs influences the financial performance of SACCOs in the banking sector in Kenya.
  iv.      To establish how savings culture of SACCO members influences the financial performance of SACCOs in the banking sector in Kenya.
   v.      To establish the extent to which investment policies influence the financial performance of SACCOs in the banking sector in Kenya.

### 1.4    Research Hypotheses

In addressing the objectives of the study the following hypotheses were tested.

$H_{01}$:Competition from commercial banks does not influence the financial    performance of SACCOs in the banking sector in Kenya.

$H_{02}$:Internal politics do not influence the financial performance of SACCOs in the banking sector in Kenya.

$H_{03}$: Operating costs do not influence the financial performance of SACCOs in the banking sector in Kenya.

$H_{04}$:Saving culture does not influence the financial performance of SACCOs in the banking sector in Kenya.

$H_{05}$ Investment policy does not influence the financial performance of SACCOs in the banking sector in Kenya.

## 1.5 Justification of the Study

The findings and conclusions of this study can be of significance to the management of SACCOs in the banking sector. They can be able to appreciate how performance of their SACCOs is influenced by the study variables. Based on the findings the management can be able to understand the strategies to be taken in order to improve the performance of the respective SACCOs. To the SACCO members who also formed part of the sampled respondents, they can be able to understand the factors affecting performance of their SACCOs. This ensured that they become more informed especially in their contributions on the directions they would desire the management to take in improving profitability and other performance indicators. This study shall have policy implications and recommendations which can be used by government policy makers in structuring policies to create an enabling environment to SACCO operations in the country. Scholars and researchers shall find this study quite of interest due to the gaps for further research that shall be produced at the end of this study. Excerpts of this study will be published in renowned journals and will also be available within the University repository systems for access to researchers.

## 1.6 Scope of the Study

This study established the factors determining the financial performance of SACCOs in the banking sector in Kenya. The sample was drawn from SACCOs located in Nairobi county where all banks in Kenya are headquartered. The period for conducting the research was from August 2012 to September 2013. The co-operativesstudied are savings and credit co-operative societies within the banking sector. This study did not cover other forms of co-operatives. The scope was also limited to the stated objectives of the study which spells out the variables to be studied.

**1.7    Limitations of the Study**

The study had the following limitations; it focused on SACCOs in the banking sector in Kenya and also considered five variables as the determinants of the financial performance of SACCOs in the banking sector whereas there could be other factors. Also, the study was not able to carry out a census of SACCO members but instead sampling was used. Due to the limitations of using samples, care was taken to ensure that the sampled respondents are representative of the population in order to arrive at reliable generalizations. The study also considered only the financial performance of SACCO, whereas, there could be non-financial indicators of performance. Those filling the study also feared that the findings of the study could be availed to their competitors; however, I assured them that the data was used for academic purposes only.

## CHAPTER TWO

## LITERATURE REVIEW

### 2.1    Introduction

This chapter discusses theories relevant to the study. The concept of the study was also developed under the conceptual framework section and finally reviews of empirical studies that have previously been conducted on the area of financial performance of SACCOs were done.

### 2.2    Theoretical Review

The theoretical framework is the structure that can hold or support a theory of a research study. It introduces and describes the theory which explains why the research problem under study exists. Torraco, (1997) asserts that theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge, within the limits of the critical bounding assumptions. The theoretical framework mustdemonstrate an understanding of theories and concepts that are relevant to the topic of the research and that will relate to the broader fields of knowledge in the study you are taking. The selection of a theory should depend on its appropriateness, ease of application, and explanatory power. The theoretical framework connects the researcher to existing knowledge (Kennedy, 2007).

### 2.2.1  Institutional Theory

Institutional theory attends to the deeper and more resilient aspects of social structure. It considers the processes by which structures, including schemas; rules, norms, and routines, become established as authoritative guidelines for social behavior. It inquiries into how these elements are created, diffused,

adopted, and adapted over space and time; and how they fall into decline and disuse. Although the ostensible subject is stability and order in social life, students of institutions must perforce attend not just to consensus and conformity but to conflict and change in social structures.

The basic concepts and premises of the institutional theory approach provide useful guidelines for analyzing organization-environment relationships with an emphasis on the social rules, expectations, norms, and values as the sources of pressure on organizations. This theory is built on the concept of legitimacy rather than efficiency or effectiveness as the primary organizational goal (Doug and Scott, 2004).

The environment is conceptualized as the organizational field, represented by institutions that may include regulatory structures, governmental agencies, courts, professionals, professional norms, interest groups, public opinion, laws, rules, and social values. Institutional theory assumes that an organization conforms to its environment. There are, however, some fundamental aspects of organizational environments and activities not fully addressed by institutional theory that make the approach problematic for fully understanding credit reference bureaus and their environment: the organization being dependent on external resources and the organization's ability to adapt to or even change its environment (Doug & Scott, 2004).

Researcher such as Meyer and Rowan (1991), DiMaggio and Powell (1983) are some of the institutional theorists who assert that the institutional environment can strongly influence the development of formal structures in an organization, often more profoundly than market pressures. Innovative structures that improve technical efficiency in early-adopting organizations are legitimized in the environment. Ultimately, these innovations reach a level of legitimization where failure to adopt them is seen as "irrational and negligent" (or they become legal mandates). At this point new and existing organizations will adopt the structural form even if the form doesn't improve efficiency. This theory is relevant to the study as it explains how institutional environment; that

is the desire to explore organization cultures defines the financial management practices of an organization and how such practices affects financial performance of a company. This theory addresses two independent variables of competition and internal politics.

### 2.2.2    Theory of Internal Controls

A system of effective internal control is a critical component of an organization's management and a foundation for its safe and sound operation. A system of strong internal control can help to ensure that the goals and objectives of an organization will be met, that it will achieve long-term targets and maintain reliable financial and managerial reporting. Such a system can also help to ensure that the organization will comply with laws and regulations as well as policies, plans, internal rules and procedures, and reduce the risk of unexpected losses and damage to the organization's reputation (Barnabas, 2011).

In USA, the Committee of Sponsoring Organizations of the Tread way Commission (COSO) issued Internal Control – Integrated Frame working 1992, which defined internal control as a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: Effectiveness and efficiency of operations; Reliability of financial reporting; Compliance with applicable laws and regulations. The Rutteman Report (1994) in UK defined internal control as the whole system of controls, financial and otherwise, established in order to provide reasonable assurance of Effective and efficient operations; Internal financial control and Compliance with laws and regulations.

A comparative analysis of the introduced concepts of internal control shows that the usage of the concept of internal control is quite broad as it is supposed to involve the performance not only of the state, but also of the private sector. Although the conception of internal control is defined in different ways emphasizing its different aspects, the essential term still remains the same in all

authors' definitions: internal control is the inspection, observation, maintenance and regulation of the enterprise's work (Barnabas, 2011).

It should also be mentioned that the system of internal control may be defined in different ways every time. For example, Yeh and Yeh (2007) pay attention to the fact that usually such values as honesty, trust, respect, openness, skills, courage, economy, initiative, etc. are not pointed out, although they definitely can influence not only the understanding of the concept of internal control, but also its definition, because in different periods of time and in different situations it can obtain slightly different shades of meaning. Control and people, and values produced by people or their performance are tightly connected; consequently, internal control must be also oriented to the enterprise's values, mission and vision; it does not matter how differently authors define the conception assessment limits: significant attention must be paid not to internal control itself, but to the identification of its functions and evaluation (Buck and Breuker, 2008).

Mostly internal control is concerned with authority management tools that help to control processes and achieve enterprise goals (COSO, 1992; INTOSAI, 2004; CobiT, 2007). Buck and Breuker (2008) declare internal control as a mistake detecting and correcting system; although Mackevičius (2001) state that internal control is defined as a summation of certain rules, norms and means, actually such definitions are identical, but internal control must be related to safety, the rational use of property and the reliability of financial accounting. The theory is relevant to the study because it outlines the internal control policies, procedures and rules to be followed in the SACCOs. This theory address the third independent variable on operating costs which indicates that there should be transparency and guiding policies and controls to avoid misuse of the cash which may lead to poor financial status of the SACCO.

### 2.2.3 Life-Cycle Theory of Savings

According to the life-cycle model of savings, people save when young to finance consumption during retirement. In theory, in the absence of a bequest motive, the dissaving of the old should offset the saving of the young, so that in a stationary population (with a stable age distribution and no population growth) there is no aggregate saving. However, if the age structure of the population is unbalanced, as occurs under population growth, or if the economy is undergoing rapid economic growth and the wage incomes of the young are high relative to the retirement incomes of the old, the savings of different cohorts may not cancel out, and aggregate savings, or dissavings, may occur (Ando & Modigliani, 1963).

In addition, Fry and Mason (1982) and Mason (1988) point out that the presence of children increases the consumption requirements of young families, so that high rates of youth dependency can depress saving and lower the impact of economic growth on savings rates. Investigators have studied this age-structure and growth effects extensively and have found that, in general, national savings rates are higher when dependency rates are low and economic growth is rapid (Higgins, 1998; Higgins & Williamson, 1997; Kelley & Schmidt, 1996).

Robinson (2001) contends that savings are more crucial to microfinance members than credit. The theory focuses on voluntary savings mobilized from the public. People choose to save excess liquidity for future use and this excess liquidity can be mobilized by financial institutions serving low income people. Proponents of this theory argue that SACCOs are an important part of the solution to poor people's problems with dead capital. Savings accounts in regulated financial institutions are legally recognized assets and often the first that poor families acquire. Their bank accounts are fungible assets (live capital), and since banks are legally accountable for their savers deposits the deposits can be used as collateral for loans and mortgages. Regulated SACCOS provide voluntary savings accounts that are appropriate for low income savers

and are legally recognized as loan capital. These deposits rarely earn notable interest and are cheap capital for investment by these institutions.

### 2.2.4    Modern Portfolio Theory

In investment, modern portfolio theory management is a critical theory. It tries to look for the most efficient combinations of assets to maximize portfolio expected returns for given level of risk. Alternatively, minimize risk for a given level of expected return. Portfolio theory is presented in a mathematical formulation and clearly gives the idea of diversifying the assets investment combination with a purpose of selecting those assets that will collectively lower the risk than any single asset. In the theory, it clearly identifies this combination is made possible when the individual assets return and movement is opposite direction. An investor therefore needs to study the value movement of the intended asset investment and find out which assets have an opposite movement. However, risk diversification lowers the level of risk even if the assets' returns are not negatively or positively correlated (Omisore et al., 2012).

Risk is defined as the standard deviation of return, i.e., to what extend is the actual return deviating from the expected return. Therefore, portfolio being a combination of assets, the model becomes a weighted combination of these assets' returns. When different assets are combined and whose returns are not perfectly positively correlated, then portfolio theory leads to reduction of the total variance of such asset combination returns over a given period of investment. The return is calculated by getting the change in value of the assets plus any distribution received during a given period over which the assets are held and expressed as a fraction of the initial outlay. From this theory, it is evident that the level of risk in a portfolio depends on risk of each asset, proportion of resources allocated on each asset and the interrelationship between the assets making up the portfolio. The major assumptions in portfolio theory in managing risk are that the investors are rational and the market is efficient and perfect (Chijoriga, 2007).

This theory addresses the investments policies variable. The modern portfolio theory demonstrates that organizations manage their businesses on a portfolio basis. With assumptions that investors are homogenous and risk averse, they have to be motivated to invest, they need a rate of return that will compensate them for taking on the risk at the end of period of holding given asset(s). It is therefore important for SACCOs to deploy prudent financial management practices in order to instill control within the various portfolios with a target of maximizing returns on each portfolio.

## 2.3    Conceptual Framework

According to Kombo and Tromp (2009), a concept is an abstract or general idea inferred or derived from specific instances.  A conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation.  Mugenda and Mugenda (2003), Smyth (2002) and Rrichel and Ramel (1987), define a conceptual framework a hypothesized model identifying the model under study and the relationship between the dependent and independent variables. Kothari (2004) defines an independent variable also known as the explanatory variable is the presumed cause of the changes of the dependent variable, while a dependent variable refers to the variable which the researcher wishes to explain.  The goal of a conceptual framework is to categorize and describe concepts relevant to the study and map relationships among them. Such a framework would help researchers define the concept, map the research terrain or conceptual scope, systematize relations among concepts, and identify gaps in literature (Creswell, 2003).

The study hypothesized a causal relationship between financial performance of SACCOs in the banking with each of the independent variable namely; competition from commercial banks, internal politics, operating costs, saving culture and investment policy as indicated in figure 2.1 below

**Competition from Commercial Banks**
1. Products
2. Customer service
3. Advertisement for loans
4. Quality of management

**Internal Politics**
1. AGM interruption
2. manipulation for loan approval
3. members exiting
4. informal grouping

**Operating Cost**
1. Salaries
2. Committee allowances
3. AGM expenses
4. Total expenses

**SACCO members' Saving Culture**
1. Savings targets
2. Savings awards
3. Minimum saving requirement
4. Level of profits

**Investment Policy**
1. Policy document
2. Approval of investments at AGM
3. Investment in securities
4. Re-investment of profits

**Financial performance of SACCOS in the banking sector in Kenya**
1. Profit before tax
2. Net assets
3. Members' savings
4. Loans disbursed
5. Dividends paid

**Independent Variables**                              **Dependent Variables**

**Figure 2.1: Conceptual Framework**

## 2.4     Empirical Literature Review

This section reviews studies previously done on determinants of organizational performance.  According to Zikmund et al (2010), empirical literature review is a directed search of published work which includes books and periodicals. It is a comprehensive survey of previous inquiries related to the research questions. Miller and Yang (2008) states that through the use of a systematic approach to previous scholarly work, literature review allows a researcher to place his research work into an intellectual and historical context, that is, it enables the researcher declare why his research matters.

### 2.4.1     Competition and Financial Performance

In today's society, cooperative financial institutions hold a considerable market share, with the IMF estimates that across all banking sector assets in developing countries, the market share of cooperative finance was equivalent to 14 percent in 2004 (Hesse & Cihak, 2007). Previous research on co-operative finance during crisis indicates that they tended to fare better than investor-owned savings and loan institutions, as they pursue more conservative investment policies (Hansmann, 1996; Chaddad and Cook, 2004). For instance, analysis from the IMF indicates that co-operative banks in developed countries tend to be more stable than commercial banks, especially during the financial crisis, as their investment patterns tend to be less speculative and returns are therefore less volatile (Hesse & Cihak, 2007).

Co-operative finance in developing countries tends to have a supply of funding that is more stable and less responsive to monetary policy and market rates. Co-operative finance also tends to offer comparatively lower fees than other types of commercial banks, which not only helps to increase access of the poor to credit, but also reduces the cost of remittance transfers (Schenk, 2007)

Mumanyi (2014) found that commercial banks in Kenya had relaxed their lending policy, thus attracting SACCO members to taking loans with them. This had resulted to SACCOs losing members' savings.The study further

indicated that some commercial banks were partnering with some SACCOs to act as security for SACCO members' loans threatening their survival. Auka and Mwangi (2013) reported that SACCOs were facing stiff competition as their members were seeking financial services from commercial banks and other financial service providers in Kenya. Further investigations revealed that, although SACCO membership and the demand for loans from SACCOs was reported to have increased, SACCO were facing the problem of low capital base thus causing SACCO members to seek financial services from other financial service providers ( Njagi, Kimani &Ngugi, 2012),

Research from the IMF (Hesse & Cihak, 2007) found that co-operative financial institutions tend to be more stable in times of crisis, as their investment patterns use the capital of members in ways that best serve their long term needs and interests. They have a lesser tendency to invest in high risk financial markets when compared to other forms of commercial banks. It is therefore thought that their comparative stability, under both average and extraordinary conditions, can help to mitigate crisis impact for members and clientele, especially in the short-term.

Financial institutions have been hesitant to provide credit to co-operatives due to the high risks associated with lending to them (Ortmann & King, 2007). High risks are due to insufficient equity capital; the influence problem (caused by egalitarian voting rights), which prevents the majority investors from influencing investment decisions; poor financial record-keeping; and high transaction costs involved in granting small loans (Ortmann & King, 2007). When equity and debt capital are constrained, the co-operative is unable to finance investments in growth assets such as poultry pens or vegetable tunnels, or in fencing to secure a co-operative's property from potential losses such as theft. In order to ensure its long-term sustainability, a co-operative needs adequate capital for both its initial development and its ongoing operation (Ling, 2005; Crow, 2006). Difficulty in raising capital implies that smallholder co-operatives in developing regions are usually dependent on government donations and/or soft loans for initial capital (Magingxa and Kamara, 2003).

Dutta and Basak (2008) suggested that Co-operative banks should improve their recovery performance, adopt new system of computerized monitoring of loans, implement proper prudential norms and organize regular workshops to sustain in the competitive banking environment.

### 2.4.2 Internal Politics and Financial Performance

Epetimehin (2006) viewed co-operative enterprise as a business owned and controlled by the people who use its services. They finance and operate the business or service for their mutual benefit. By working together, they can reach an objective that would be unattainable if acting alone. Akinwunmi (2006) averred that co-operatives depend on the unified efforts of large numbers of small individuals.From the foregoing co-operative can be described as an economic and socio-political institution that allow for freedom of membership devoid of cohesion and pursue economic activities to promote the interest of its members who also use its services. Cooperation embodies the spirit of working together to achieve a common goal. Much as desirable as co-operative societies are in the development of a nation, there are problems and constraints that have militated against its effective performance of its roles in nation building. This has made for poor performance, decline and death of some co-operatives.

The other critical element according to Akinwunmi (2006) was leadership. If there is purposeful leadership, if leaders are transparent, dedicated and truly serving, the co-operative society will succeed. A true leader does not cut corners, does not inflate contracts so as to receive kickbacks, does not have favourites among members and does not mismanage the resources. Mudibo (2005) raised concerns on the caliber of leaders who run SACCOs noting that since these are voluntary organizations, members can elect anybody they like, who may not necessarily have the skills to run a SACCO. He suggested that before a member is elected, he should have a certain number of shares so that he has something to lose if he mismanages the SACCO.

According to Mwaura (2005), the actions of top management affect performance. He recommended that members, when electing office bearers, including delegates, should ensure that they elect trustworthy persons as the success and hence the performance of SACCOs depends on the calibre of the officials that they elect.

Van der Walt's (2005) study of co-operative failures in Limpopo province indicated that poor management, lack of training, conflict among members (due mainly to poor service delivery), and lack of funds were important contributory factors. Weak institutions (such as, ill-defined property rights), inadequate capital, deficient support systems such as external monitoring and evaluation, and lack of a supportive policy environment have also contributed to co-operative failures (Lyne & Collins, 2008; Zulu, 2007). Ill-defined property rights, according to agency theory, give rise to a set of problems that undermine the efficiency of traditional co-operatives (TCs) in risky and differentiated markets (Kyriakopoulos, 2000). There is all the importance of resolving institutional and governance problems in co-operatives and legislation could be amended to mitigate these problems (Lyne and Collins, 2008).

Dunn, et al. (2002) study, which included co-operative managers and directors, voiced concern that an owner-directors too often make decisions based on internal politics rather than on sound economics. These participants believed that, on occasion, co-operative directors may be motivated to make decisions that benefit the individual at the expense of the co-operative. This insight may help explain why governance issues are exaggerated at co-operatives relative to corporations.

A main challenge facing many co-operatives are over-control and regulation by government (DFID, 2010). Autonomy and freedom from government control is positively associated with success. While government support can be helpful, governments should avoid over-regulation. In Ethiopia, US technical assistance has helped overcome this legacy (Assefa, 2007). Sometimes co-operatives can

flourish with a minimum of institutional support. This could depend on many internal and external factors such as when there is a good economic opportunity or a limited economic purpose. However, the absence of institutional support can make a co-operative vulnerable and isolated from the broader co-operative movement and networks. Such institutional isolation can hinder the development of a co-operative's full potential (Theron, 2005).

Despite the colonial focus of co-operatives on particular activities, the strong state control of post-colonial co-operatives and the market appropriation of co-operatives by neoliberal restructuring, co-operatives in Africa have survived. The co-operative sector with primary, secondary, sectorial, apex, and support organisations and social movement links has continued to thrive, albeit unevenly. Co-operatives have often survived the extremes of state control and market adjustment on their own. Such survival often stems from the passion and determination of the people to thrive and survive (Satgar & Williams, 2008). Harnecker (2007) found in some co-operatives, the most important decisions, for example involving distribution of surpluses or compensation, were taken by the coordinators or even just by the president or general coordinator who behaved like the main owner of a co-operative.

According to Mumanyi (2014), the Co-operative Societies Act No. 12 of 1997 sought to reduce the strict state supervision of co-operatives so as to support the liberalization of co-operatives. However, this led to abuse of office by those entrusted which led to cases of corruption and mismanagement of co-operatives and the splitting of viable co-operatives into smaller inefficient units.  Studies by Makori, Munene and Muturi (2013) and Kilonzo (2010) cited political interference as a challenge facing SACCOs in Kenya.

### 2.4.3   Operating Costs and Financial Performance

Neeraj Rao *et al* (2004), studied the economics of milk production in Kanpur (India) district of Uttar Pradesh Two blocks from the selected district and five villages from each selected blocks was selected randomly in proposition to the

number of farmers categorized under three size groups of 0-1,1-2 and above two hectares. The study revealed that the total maintenance cost of a milk animal per lactation increased as farm size increased. On an average the maintenance cost of milk animal during a lactation period came to Rs 10278. Amongst all labour charges accounted for the highest share, followed by fodder and concentrates. The gross income from milk production was higher on large farmers because of excess utilization of concentrates by large farmers. Input output ratio was the highest on small farmers and it was 1:1.31.Elasticity of production for fodder was the highest, followed by human labour and concentrates for all farms.

Asogwa et al. (2011) observed that high level of cost inefficiency is highly attributable to the low profitability that results from inadequate organization of farmers into collective farmers' institutions that can provide opportunities for risk sharing and improved bargaining power. Revamping the productivity of small scale farmers, therefore, requires collective farmers' institutions that provide opportunities for risk sharing and improved bargaining power that are not available to individual farmers.

A study by Mumanyi (2014) in Kenya on the challenges facing SACCOs in Mombasa County indicated that the high cost of administration, the management of small loans and the high interest rate of borrowing so as to lend to members were hindering the growth of SACCOs in Kenya.It was further noted that due to the environment in which SACCOs operate, there are inefficient and non- functional infrastructure facilities which led to increase in the cost of operation. In another study by Makori, Munene and Muturi (2013) cited the high dependency on short term borrowing was causing the operating to be high.

Njagi, Kimani and Ngugi (2012) in a study done in Kenya found out that SACCOs were experiencing a low capital base, and in an attempt to deter their members from borrowing from commercial banks, they borrow from commercial banks at high interest rates so as to lend to their members. This in

essence pushes up the operating costs of the SACCOs. The literature on the impact of a common bond of co-operative's performance provides additional perspective on the size of credit co-operatives in India. Performance of a credit union depends on the strength of common bond among members (Ward and McKillop, 2005). Studies find a favourable impact of occupation-based commonality on the performance of credit unions, as commonality of occupation suggests tighter bonds and reduces operating costs (Ward and McKillop, 2005).

### 2.4.4   Savings Culture and Financial Performance

According to Food and Agricultural Organization (FAO) Economic and Social Development Department (2002) in their document, "savings mobilization to microfinance: A historical perspective on Zimbabwe", it is stated that the first savings club in Eastern Africa was started by a Catholic missionary, Brother F. Waddelove, in 1963. This is certainly true of what came to be known as the savings movement in Zimbabwe. However the idea of developing means of saving amongst the poor in Zimbabwe, pre-dates the savings movement, and can be traced to the emergence of burial societies from the early years of colonial occupation after 1890. Burial societies were developed by migrant workers, often from outside of what was known as Rhodesia, namely Portuguese East Africa and Nyasaland, to both assist newly arriving migrants and assist with funeral arrangements of such workers. The average size of these societies was between 10 and 100. Most had a formal leadership structure of Chairman, Secretary and treasurer, with some producing formal constitutions even at this early stage. In terms of fees, family, members paid a joining fee and monthly subscriptions. In the event of a death in the immediate family, members were paid a lump-sum payment.

Savings and credit schemes are becoming a beacon of hope to the developing countries. These institutions grant loans to members at reasonable rates of interest in times of need. The lent money helps entrepreneurs in impoverished societies to start essential businesses in their communities (Guilford, 2007).

Socially conscious investors can go to Savings and credit schemes and invest whatever amount they want, and even choose the area where the money will go and what annual return they would like to earn on the money. Credit Schemes then distributes the investment to the micro lenders that service the chosen area or project. The money is lent to the impoverished entrepreneurs who use the money to start or finance businesses that enables them to rise up out of poverty. The entrepreneurs repay the loan with interest, and the original investor has helped raise someone out of poverty and earns a return on his investment at the same time (Guilford, 2007).

The divergent interests of members could also manifest in a 'portfolio problem' because members of a co-operative cannot transact equity shares at their market value. This problem leads to sub-optimal investment by members because they are unable to diversify their own portfolios to reflect personal risk preferences. The performance of co-operatives also depends on educating and training co-operative members, and enhancing their knowledge of co-operative principles and members' rights (Ortmann and King, 2007a). Birchall (2004) argues that co-operatives that lack capital and business management capacity have had a rather disappointing history in developing countries.

According to Guilford (2007) credit facilities enable impoverished persons to start businesses, rebuild after natural disasters like floods and hurricanes, and to receive both short- and long-term loans to meet their financial needs and improve their overall quality of life. The impact of micro lending is changing the economic landscape of the areas where it is most prevalent. In Africa, Nigeria is the only African Country south of the Sahara of which it is documented that microfinance existed at least as early as 500 years before, namely in the form of rotating savings and credit associations. They are called Esusu among the Yoruba in Nigeria, now a lingua franca term in many West African countries. As a form of social capital, the Esusu was transported during the slave trade to the Caribbean islands, where both the institution and the term still exist today; they are now being carried to major American cities by a new

wave of migrants who are banked on their new environment (Hans Dieter Seibel, 2005).

According to Gicheru, Migwi and M"Imanyara (2011) in a study which was done in Kenya in the transport industry, majority of SACCOs were weak in terms of loans granted and capital base. It was further indicated that some SACCOs had not granted any loans to members as the monthly share contribution was low due to low patronage. This was attributed to the fact that some SACCOs had business plans which were not backed by financial ability and hence could only attract few financiers, thus posing a threat to the survival of SACCOs in the transport industry in Kenya. This in turn resulted in the loss of employment for drivers, conductors and SACCO staff and also loss of income to investors. The concern for low capital base was also noted by Njagi, Kimani and Ngugi (2012) despite the high demand for loans by SACCO members.

Aura and Mwangi (2013) asserts that SACCOs are seen as vehicles for resource mobilization and gateway to economic prosperity for families. According to Mwangi and Wanjau (2012), SACCOs play a critical role in entrepreneurship development as they mobilise significant volumes of personal savings and channel them into small loans for productive purposes at the community level. Olando and Mbewa (2013) indicated that savings mobilization should be backed by adequate institutional capital which ensures permanency and provide cushion to absorb losses and impairment of members' savings.

### 2.4.5 Investment Policies and Financial Performance

A study by Makori, Munene and Muturi (2013) on the challenges facing SACCOs in Gusii region in Kenya revealed that the high investment in non, earning investments and inadequate managerial competence contributed to the failure of SACCOs in Kenya. The study had used structured questionnaires, interview and focused discussion with selected persons to collect data. In

another study byOlando, Jagongo and Mbewa (2013) on the contribution of financial stewardship to the growth of SACCOs in Kenya indicated that SACCOs did not adequately cover their costs on investments undertaken.

According to Mwaura (2005), the annual delegates meetings and the ministry of co-operatives are to blame for investment activities undertaken by SACCOS because they are the ones who are supposed to approve the same investment. Muchemi (2005) notes that non profitable investments should be discouraged because, despite the enormous amount of resources input in such projects, returns are almost nil, hence reducing the capital base where interest is drawn from. Co-operative Management Committees are notorious for diverting members' funds into investments of dubious value. The law hence needs to be amended to strengthen the Ministry's regulatory hand. It should clearly prohibit investments that are not related to the core objective of the society. (KUSCCO, 2003)

According to Pandey (2005) an efficient allocation of capital is the most important finance function in the modern times. It involves decisions to commit the firm's funds to the long term assets. Investment decisions are of considerable importance to the firm since they tend to determine its value by influencing its growth, profitability and risks. Investment decisions require special attention because of the following reasons: they influence the firm's growth in the long run, they affect the risks of the firm, they involve commitment of large amount of funds, they are irreversible or reversible at substantial loss and they are among the most difficult decisions to make.

Co-operatives have failed without a market-driven approach that allows them to compete. They need a competitive advantage through professional management, operational and financial efficiency, high quality products, and competitive pricing (OCDC, 2007). Donors can respond to the challenge of lack of liquidity among co-operatives by increasing co-operatives' access to finance in a range of ways, including: providing revolving loans funds, bank guarantees, or equity capital to increase the capitalization of financial co-

operatives; engaging with commercial banks to increase their willingness to lend to co-operatives on good terms; and in some cases providing low interest loans directly to co-operatives to support expansion of their business (DFID, 2010). Support to co-operative development should avoid creating dependency, which undermines the mutual self-reliance that is central to cooperation. Donors should be careful not to compromise co-operatives' true (business) nature through direct financial aid (Birchall, 2008).

Many under--estimate the extent of co-operatives in terms of; their membership, the jobs that they have created and the support that the co-operative approach has throughout the world. Ranging from micro-scale to multi-million dollar global enterprises, co-operatives are estimated to employ more than 100 million people and have more than 800 million individual members globally (ICA, 2009). In 2006, the world's top 300 co-operatives were estimated to have an annual turnover of US$963 billion, which is equivalent to the GDP of Canada. In Kenya 303,455 people are directly employed by co-operatives and up to 16.5 per cent of the population indirectly derive their livelihood from the increased demand and associated opportunities to provide goods and services to co-operatives (Pollet, 2009).

Co-operatives are complex social organisations with many interests coalescing in one place and with a focus on inclusive decision-making. Members want more than just a financial return from co-operatives and they thus require more involvement than just attending an annual general meeting as shareholders of private companies would do. Clarity of purpose, on-going participation by members and competent leadership clearly focused on the agreed upon objectives appear to be key factors in ensuring that these complex organisations remain successful (Mayson, 2002).

Research from the IMF (Hesse & Cihak, 2007) found that co-operative financial institutions tend to be more stable in times of crisis, as their investment patterns use the capital of members in ways that best serve their long term needs and interests. They have a lesser tendency to invest in high risk

financial markets when compared to other forms of commercial banks. It is therefore thought that their comparative stability, under both average and extraordinary conditions, can help to mitigate crisis impact for members and clientele, especially in the short-term.

Recent research indicates that approximately seven per cent of the African population is affiliated to co-operatives (Pollet, 2009). The research indicates that while co-operatives are large in number and represent an organized movement, the movement suffers constraints that are related to lack of voice or effective representation in society. Pollet (2009) also found that specific social protection mechanisms associated with co-operatives in Africa are limited. For instance, there are some isolated initiatives of co-operatives that operate social programmes for orphaned and vulnerable children.

One of the main issues of SACCOs in Africa is associated with liquidity. Managing liquidity and capital levels, while meeting the needs of members for finance, has been one of the major ongoing challenges for co-operative financial institutions in Africa. This is connected with the model of co-operative finance in Africa, which essentially follows the three to one principle, based on member savings and shares. This means that loans are available to one in three members at any given time and that availability of loans rotates between members on this basis. Under normal circumstances if this model is managed effectively, it can continue to operate – as it has in Africa for some time (ILO, 2009).

## 2.4.6 Financial Performance of SACCOs

Operating and financial ratios have long been used as tools for determining the condition and the performance of a firm (Ogilo, 2012). A savings and credit society also known as a credit union is a cooperative financial institution that is owned and controlled by its members and operated for the purposes of promoting thrift, providing credit at low interest rates and providing other financial services to its members. World over, systems in these organizations

vary from slightly to significantly in terms of total system assets, average institutions' asset price and regulatory control. This ranges from volunteer operations with a few members' organizations to the institutions with several billion asset value. For instance, according to report by the World Council of Credit Unions, 2008, the average credit unions in the United States of America had USD 93million worth of assets in 2007 as against an average commercial bank average of USD 1.5 billion (Makori, Munene & Muturi, 2013).

Parast and Fini (2010) indicate that in the pursuit of better operational performance and profitability, organizations are looking for strategies to improve their operational performance and boost their profitability. As competition intensifies due to changes in the industry structure and the emergence of new technologies, organizations are determined to reduce their operational costs while enhance their profitability. Similarly, financial performance of SACCOs can also be viewed in light of their overall profitability and return on investment. According to Herrmann (2008) when analyzing a firm's profitability, we are concerned with evaluating a firm's earnings with respect to a given level of sales / assets / owners' investment or share value. In doing so, the common profitability measures include: Common-size income statements; Return on total assets (ROA); Return on equity (ROE); Earnings per share (EPS); Price/Earning (P/E) ratio. Under the common-size income statement, we express every item on the income statement as a % of sales, which is gross margin; operating margin; and profit margin, whereby: Gross margin - % of each sales dollar remaining after the firm has paid the direct cost of goods sold (COGS); Operating margin - % of each sales dollar remaining after the firm has paid all expenses (excluding financing expenses and taxes); Profit margin - % of each sales dollar remaining after the firm has paid all expenses (including interest and taxes).

Return of total assets (ROA) takes into consideration the return on investment (ROI) and indicates the effectiveness in generating profits with its available assets, thus the higher the better. Return on equity (ROE) indicates the return on owners' equity, hence the higher the better. Earnings per share (EPS)

indicate the dollar amount earned on behalf of each common share, thus the higher the better. Price/earnings (P/E) ratio is the amount investors are willing to pay for each dollar of earnings, that is indicates investors' confidence (Herrmann, 2008). In this study, financial performance of deposit taking SACCOs will be measured using Return on equity (ROE).

## 2.5    Summary

Literature reviewed indicates that factors influencing the performance of SACCOs are multifaceted and the factors are purely dependent on the operating environment of the SACCO. It is therefore worthy noting that SACCOs in the banking sector in Kenya operate in a unique environment compared to other forms of SACCOs and hence the need to understand the forces and factors determining their performance. Satgar and Williams (2008) assert that the co-operative movement is one of the most organised social forces on the African continent. They cite the ILO which suggests that at least 7 percent of citizens in African countries belong to co-operatives, rising in countries like Mauritius, Egypt, Ghana, Kenya and Senegal to 10 percent or more. The co-operative movement in Africa plays a crucial role in economic and social transformation and in many parts of Africa it constitutes a parallel co-operative sector and economy.

## 2.6    Research Gap

From the reviewed empirical literature, it is evident that factors influencing the performance of SACCOs are multifaceted and are purely dependent on the operating environment of the SACCO. Scholars identified various factors which contribute to the failure of co-operatives;  Bhuyan ( 2007) cited lack of members' participation, Nyoro and Ngugi cited economic factors, education of management committee and the staff, Chando et al (2009) cited debt burden, wrangles, hostility, lack of institutional transparency and weak management while the ILO(2009) cited liquidity problems.  Makori, Munene and Muturi (2013) cited high dependency on short term borrowing, lack of liquidity monitoring system, political interference, investment in non-earning assets and

inadequate managerial competences. Auka and Mwangi (2013) cited lack of competitive   advantage of SACCO products and services as compared to other financial service providers.  Kilonzo (2010) shocks impinging on the economic system and the lack of proper policy to mitigate the effects of these shocks.

 SACCOs in the banking sector operate in a unique environment, for instance, bank employees enjoy many employment perks including highly concessional internal loans compared to other forms of SACCOs. This implies that the SACCO loans compete with the loans offered by banks to their employees who happen to be members of SACCOs in the banking sector. No other study has been done to establish the financial performance of SACCOs in the banking sector based on a combination of the variables considered in this study. It is in the face of such that this study aims at filling the gap by establishing the factors considered influence the financial performance of SACCOs in the banking sector.  This study will add value to existing literature and may be used as a guide to SACCO policy development for the general good of the country and their members.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter covers the methods employed to structure the research process in gathering and analyzing information to address the research objectives. It covers; research design, population, sampling design, instruments and data analysis. According to Dawson (2009), research methodology is the philosophy or general principles which guides the research. Kombo and Tromp (2009) as well as Zikmund et al (2010) advance that research methodology deals with the description of the methods applied in carrying out the research studies.

## 3.2 Research Design

According to Upagade and Shende (2012), research design is the arrangement of condition from collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is the logical manner in which individuals or other units are compared and analyzed and acts as the basis of making interpretations from the data. Lavkaras, p. (2008) describes a research design as a general plan or strategy for conducting a research study to examine specific testable research questions of interest. Research design is the blue print for the collection, measurement and analysis of data. It is a plan and structure of investment conceived so as to obtain answers to research questions (Coopers and Schindler, 2008).

This study adopted a descriptive survey design to answer the research questions. According to Orodho (2003), descriptive survey is a method of collecting data by interviewing or administering a questionnaire to a sample of individuals which can be used when collecting information about peoples' attitudes, opinions, habits or any other social issues. Descriptive research is a description of the state of affairs as it exists (Orodho and Kombo, 2002). Sekaran and Bougie (2011) concurs with Orodho and Kombo (2002) by

asserting that descriptive study is undertaken in order to ascertain and be able to describe the characteristics of the variables of interest in a situation.

Sekaran and Bougie (2011) aver that descriptive study has several advantages like; it helps in understanding the characteristics of a group in a given situation, assists in systematic thinking about aspects in a given situation. It also offers idea for further probe and research and helps in making certain simple decisions. Zikmund, Babin,Carr andGriffin (2010) say that descriptive researchis to describe characteristics of objects, people, groups, organizations, or environments. In other words, descriptive research tries to "paint a picture" of a given situation by addressing who, what, when, where, and howquestions.

Descriptive research design was appropriate for this study as it helped in understanding the determinants of the financial performance of SACCOs in the banking sector in Kenya and therefore answer the "what" question of the study.

## 3.3    Population

According to Mugenda and Mugenda (2003), a population refers to an entire group of individuals, events or objects having a common observable characteristic. In other words, population is the aggregate of all that conforms to a given specification (Mugenda and Mugenda, 2003). Sekaran and  Bougie (2011) refers to a population as the entire group of people, events or things of interest that the researcher wishes to investigate.

The target population of this study was employees and members of SACCOs in the banking sector in Kenya. The accessible population was SACCOs in the banking sector located within the city of Nairobi in Kenya. The rationale of choosing accessible population of Nairobi was because all commercial banks headquarters and senior management are based in the city of Nairobi, CBK (2011) and therefore their employees' SACCOs are also operated from Nairobi. SASRA (2011) in their SACCO supervision report for the year 2010 indicate that out of the 3280 active SACCOs in the country, 1371 (42%) are located in Nairobi. In terms of assets the SACCOs located in Nairobi control 59% of the

assets base of all SACCOs in Kenya and therefore a study based on Nairobi population and sample covering a substantial portion of the SACCOs in Kenya.

**Table 3.1 Target Population**

| No. | Name of SACCO | Employees | Members | Total Population | % Population |
|-----|---------------|-----------|---------|------------------|--------------|
| 1 | Kencom Sacco | 2 | 1803 | 1805 | 6% |
| 2 | Co-operative Bank SACCO | 5 | 2650 | 2655 | 9% |
| 3 | Equity Bank Sacco | 5 | 3126 | 3131 | 11% |
| 4 | Family Bank SACCO | 2 | 990 | 992 | 4% |
| 5 | Nyumba SACCO | 2 | 742 | 744 | 3% |
| 6 | Kenya Bankers SACCO | 8 | 16801 | 16809 | 59% |
| 7 | Postbank Sacco | 5 | 2112 | 2117 | 7% |
| | **Total** | **29** | **28224** | **28253** | **100%** |

## 3.4    Sampling Frame

Sampling frame is a (physical) representation of all the elements in the population from which the sample is drawn (Sekaran and Bougie, 2011). Turner (2003) defines a sampling frame as the set of source materials from which the sample is selected. The definition also encompasses the purpose of sampling frames, which is to provide a means for choosing the particular members of the target population that are to be interviewed in the survey. More than one set of materials may be necessary and this is generally the case in a multiple survey with a multi-stage nature. Upagade and Shende (2012) also refers to a sampling frame as a source list containing all names of the universe. Specifying the sample frame is crucial as it itemizes all items in the population from which a sample is obtained for analysis so as to test the research hypotheses.

The sampling frame of this study was derived from the database of the Ministry of Co-operative Development and Marketing which regulates and licences SACCOs in Kenya. The list contained banking sector SACCOs licensed by the Ministry as at 1st January 2012 as shown in Appendix III.

### 3.5    Sample and Sampling Technique

A sample is a subset of the population; it comprises some members selected from it. Bryman (1997), Muganda (2010) and Spiegal (2008) define a sample as part of the total population. Orodho and Kombo (2002) view a sample as a finite and representative number of individuals or objects in a population to be studied. Kothari (2008) describes a sample as a collection of units chosen from the universe to represent it. Kombo and Tromp (2009) also define a sample as a finite part of a statistical population whose properties are studied to gain information about the whole or universe. By studying the sample one is able to draw conclusions that are generalizable to the population of interest (Sekaran and Bougie, 2011, Mugenda and Mugenda, 2003, Kothari 2004).

Stratified sampling technique was used to obtain a sample for the study. Stratified sampling is a probability sampling design that first divides the population into meaningful non overlapping subsets, and then randomly chooses the subjects from each subset Sekaran  and Bougie (2011) while Mugenda and Mugenda (2003) and Kothari (2001) agree to this definition. Kombo and Tromp (2009) refers to stratified sampling as the dividing of the population into homogenous subgroups then taking a simple random sample from each subgroup. The essence of stratification is to ensure inclusion, in the sample, of subgroup, which otherwise would be omitted entirely by other sampling methods because of their small numbers in the population. Simple random sampling is a probability sampling design in which every element in the population has a known and equal chance of being selected as a subject Sekaran and Bougie (2011). Upagade and Shende (2012) confirms that a simple random sampling is probabilistic and is also known as chance sampling.

Simple random sampling is easy to implements and every unit has an equal chance of being selected and hence eliminating selection biasness.

The sample for the study was drawn from the sampling frame which included all SACCOs in the commercial banking sector in Kenya. Stratified sampling and simple random sampling was used. Within each study unit (SACCO), two strata were created, one being that of employees of the SACCO and the other for SACCO members. Within the SACCO members' stratum, simple random sampling was used to identify individual respondents.  However, since the SACCO employees were too few, they were all included in the sample.

This population targets to reach out to employees and members of the sampled SACCOs and they constitute a population which is greater than ten thousand sampling elements. This size of a population is defined by Mugenda and Mugenda (2003) as a large population because it has more than ten thousand members. The sample of the study was therefore determined using a formula recommended by Mugenda and Mugenda (2003) for getting the minimum sample size from a large population. The target and accessible population for this study is large and greater than ten thousand and hence the study used a sample of 384 respondents as recommended by Mugenda and Mugenda (2003) that the minimum sample from large population should be at least 384. This minimum sample of a large population is recommended when there is an assumption of a normally distributed population and a degree of confidence of 95% and a significance level of 5%. The formula for determining a minimum sample of a large population is as follows.

n=$Z^2$*p*(1-p)/$d^2$

Where:

 n = Sample size for large population,

 Z = Normal distribution Z value score, (1.96)

p = Proportion of units in the sample size possessing the variables under study, where for this study it is set at 50% (0.5),

 d = Precision level desired or the significance level which is 0.05 for the study.

The substituted values in determining the sample size for a large population are as follows.

n= $\underline{(1.96)^2*(0.5)(0.5)}$= 384

$\quad$ $(0.05)^2$

The sample was distributed among the SACCOs proportionally based on the distribution of the total population, however, all employees formed part of the sample as they were few.

The sample size is as laid on the sample matrix below on table 3.2

**Table 3.2: Sample matrix**

| No | Name of SACCO | Number of Employees | Number of Members | Total |
|----|---------------|---------------------|-------------------|-------|
| 1 | Kencom Sacco | 2 | 23 | 25 |
| 2 | Co-operative Bank Sacco | 5 | 33 | 38 |
| 3 | Equity Bank Sacco | 5 | 39 | 44 |
| 4 | Family Bank Sacco | 2 | 12 | 14 |
| 5 | Nyumba Sacco | 2 | 9 | 11 |
| 6 | Kenya Bankers Sacco | 8 | 211 | 219 |
| 7 | Postbank Sacco | 5 | 27 | 32 |
| | **Total** | **29** | **355** | **384** |

### 3.6 Data Collection Instruments

A questionnaire is a pre-formulated written set of questions to which the respondents record the answers usually within rather closely delineated alternatives. Likert scale is an interval scale that specifically uses five anchors of strongly disagree, disagree, neutral, agree and strongly agree. The Likert measures the level of agreement or disagreement. Likert scale is good in measuring perception, attitude, values and behaviour. The Likert scale has scales that assist in converting the qualitative responses into quantitative values (Mugenda and Mugenda, 2003, Upagade and Shende, 2012, Zikmund, Babin,Carr and Griffin, 2010).

Primary information was gathered by use of a questionnaire coupled with informal interviews that were guided by the questionnaire. Secondary data was gathered from the annual reports of the SACCOs and reports from the Ministry of co-operative development and marketing. A Likert scale questionnaire was used while a secondary data collection sheet was used for collecting secondary information regarding SACCO performance.

### 3.7 Data Collection Procedures

Secondary data was collected from the annual reports of the SACCOs which are available from the Ministry of co-operative development and marketing through the use of research assistants. The questionnaires were issued to the respondents through self-introductions and where need be internal informants were used to give a lead on how to get to the respondents.

### 3.8 Pilot Test

A pilot test is an evaluation of the specific questions, format, question sequence and instructions prior to the main survey. Questions answered by the pilot test include: Is each of the questions measuring what it is intended to measure? Are questions interpreted in a similar way by all respondents? Do close-ended

questions have a response which applies to all respondents? Are the questions clear and understandable? Is the questionnaire too long? How long does the questionnaire take to complete? Are the questions obtaining responses for all the different response categories or does everyone respond the same? (Polit and Beck, 2003). Pilot testing is a crucial step in conducting a research. Even modest pretesting can avoid costly errors. To check the validity and reliability of the questionnaire in gathering the required data for purposes of the study, a pilot test was conducted. According to Bryman (2012), Zikmund, Babin, Carr and Griffin (2010), Saunders, Lewis and Thornhill (2007), the purpose of pilot testing is to establish the accuracy and appropriateness of the research design and instruments. Newing (2011) says that the importance of the pilot test cannot be overemphasized as one will always find unambiguous questions and questions which turn out not to be relevant for eliciting the sort information among other errors. Cooper and Scindler (2011) concurs that the purpose of a pilot test is to detect weaknesses in design and implementation. Sekam (2008) reinforces that pilot testing is necessary for testing the reliability of instruments and the validity of the study.

According to Mugenda and Mugenda (2003), once the questionnaire has been finalized, it should be tried out on the field. This is called pre-testing the questionnaire. The questionnaire should be pretested to a selected sample which is similar to the actual sample which the researcher plans to use in the study. Procedures used in pre-testing the questionnaire should be identical to those which are used during the actual data collection. The practice of pre-testing the questionnaire is very important because of the following reasons: Comments and suggestions made by respondents during the pre-testing should be seriously considered and incorporated. Such comments help to improve the questionnaire. Questions which are vague are revealed in the sense that the respondents interpret them differently. When this happens, the researcher should rephrase the questions until they convey the same meaning to all subjects (Mugenda and Mugenda 2003).

According to Cooper and Schilder (2011), Creswell (2003), Gall and Borg (2007), as the rule of the thumb, one percent of the sample should constitute the pilot test taking into consideration the time, costs and practicability of the exercise. In this study, one percent of the sample questionnaire designed as the main data collection instrument was used to pre-test effectiveness and relevance of the instrument. In this case, thirty eight questionnaires were used in the pilot test.

The questionnaire pre-testing was done using randomly selected SACCO members and employees who were not included in the final data collection.

### 3.8.1 Reliability test

The reliability of the questionnaire was tested using the Cronbach's Alpha correlation coefficient with the aid of SPSS software. According to George and Mallery (2003) Cronbach Alpha value greater than 0.7 is regarded as satisfactory for reliability assessment.

As shown in Table 3.3 Cronbach alpha values for all the variables; competition, internal politics, operating costs, saving culture and investment policy were greater than 0.7. From these findings it can be concluded that the constructs measured had the adequate reliability for the subsequent stages of analysis since all the Cronbach Alpha values were greater than 0.7.

**Table 3.3: Cronbach Alpha for Reliability Assessments**

| Variables | Number of items | Cronbach Alpha Values |
|---|---|---|
| Competition | 12 | 0.710 |
| Internal politics | 12 | 0.833 |
| Operating costs | 12 | 0. 783 |
| Saving culture | 10 | 0.701 |
| Investment policy | 11 | 0. 854 |

### 3.8.2 Validity Test

The validity of the questionnaire was tested and enhanced by giving the questionnaire to two senior officials from the Ministry of co-operative development and marketing and three SACCO managers who were able to assess the validity of the statements on the questionnaire. Their views and responses about the questionnaire were reviewed and were used to improve the study instruments where appropriate.

## 3.9    Data Processing and Analysis

According to Zikmund et al (2010), data analysis refers to the application of reasoning to understand the data that has been gathered with the aim of determining consistent patterns and summarizing the relevant details revealed in the investigation.  To determine the patterns revealed in the data collected regarding the selected variables, data analysis was guided by the aims and objectives of the research and the measurement of the data collected.

A mix of tools was used since the data collected was both qualitative and quantitative.  For the qualitative data which was measured using the Likert Scale, Content Analysis was carried out to understand the relationship of each of the independent variable with the dependent variable. Also, Principal Component Analysis was conducted to determine the significant factors in the financial performance of SACCOs in the banking sector.  High values ranging between 0.4 and 1.0 indicated that the factor is appropriate while a value below 0.4 would mean that the factor would not be appropriate (Muganda, 2008). This provided the basis of removal of redundant variables in the proposed model. In respect of the qualitative data, inferential statistics was conducted.

In order to determine the accuracy level of the independent variable in predicting the dependent variable, the Cox and Snell's R- square was used (O'Connell, 2005; Fox, 2000) while Nagelkerke's R-Squared was used to test the strength of the overall relationship of the independent variables in predicting the dependent variable (Gujarat, 2009).   The t-test was used to test the direction of the relationship between the independent variables and the dependent variable, that is, whether the relationship is positive or negative. A

negative value means that as one variable increases, the other variable decreases.  A positive value on the other hand indicates that as one variable increases, the other variable also increases.

Information was sorted, coded and input into the statistical package for social sciences (SPSS) version 21.0 for production of graphs, tables, descriptive statistics and inferential statistics. A multiple regression model was used to test the significance of the influence of the independent variables on the dependent variable. The multiple regression model is as laid below.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where:

   $Y$ = Financial performance

   $B_0 =$ the Y intercept

   $X_1$ = competition from commercial banks

   $X_2$ = internal politics

   $X_3$ = operating costs

   $X_4$ = savings culture

   $X_5$ = investment policies

   $e$ = the error term

 Analysis of data using regression model has been used previously by Aduda (2011) in a study which investigated the relationship between executive compensation and firm performance in the Kenyan banking sector. Also Ngugi (2001) used a regression analysis in a study on the empirical analysis of interest rates spread in Kenya while Khawaja and Mulesh (2007) used regression analysis to identify the determinants of interest rates spread in Pakistan.

Using SPSS version 21.0, the regression model was tested on how well it fits the data. The significance of each independent variable was also tested. Fischer distribution test called F-test was applied. It refers to the ratio between the model mean square divided by the error mean square. F-test was used to test the significance of the overall model at a 5 percent confidence level. The p-

value for the F-statistic was applied in determining the robustness of the model. The conclusions were based on the basis of p value where if the null hypothesis of the beta is rejected then the overall model was significant and if null hypothesisis accepted the overall model was insignificant. In other words if the p-value is less than 0.05 then it was concluded that the model is significant and has good predictors of the dependent variable and that the results are not based on chance. If the p-value is greater than 0.05 then the model was not significant and cannot be used to explain the variations in the dependent variable.

Similarly the t-test statistic was used to test the significance of each individual predictor or independent variable and hypothesis. The p-value for each t-test was used to make conclusions on whether to fail to accept or fail to reject the null hypotheses. The benchmark for this study for failure to reject or failure to accept the null hypothesis is a level of significance of 5 percent. If the p-value is less than five percent the null hypothesis failed to be accepted and the alternate hypothesis failed to be rejected. Also if the p-value is greater than 5 percent the null hypothesis failed to be rejected and the alternate hypothesis failed to be accepted.

# CHAPTER FOUR

# RESULTS AND DISCUSSION

## 4.1    Introduction

This study investigated the determinants of the financial performance of SACCOs in the banking sector in Kenya.  Specifically, the study investigated the influence of competition from commercial banks, internal politics, operating costs, saving culture and investment policy on the financial performance of SACCOs in the banking sector in Kenya. This chapter deals with the analysis of data. The data analysis is in line with the specific objectives where patterns were investigated, interpreted and inferences drawn on them.

## 4.2    Preliminary data

This section presents the preliminary findings of the study in terms of the response rate and sample demographics.

## 4.2.1    Response Rate

The number of questionnaires that were administered to all the respondents was 384 questionnaires. A total of 269 questionnaires were properly filled and returned from the SACCO employees and SACCO members. This represented an overall successful response rate of 70%. According to Mugenda and Mugenda (2003), a response rate of 50% or more is adequate. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good.

**Table 4.1: Response Rate**

| Response Rate | Frequency | Percent |
|---|---|---|
| Returned | 269 | 70% |
| Unreturned | 115 | 30% |

| | | |
|---|---|---|
| **Total** | **384** | **100%** |

### 4.2.2 Demographics

The preliminary information gathered regarding the characteristics of the respondents was about; SACCO name, SACCO affiliation and duration in SACCO.

### 4.2.2.1 SACCO Name

The respondents were asked to indicate their SACCO they worked for. Table 4.2 shows that 42.8% of the respondents worked for Kenya bankers SACCO, 24.9% worked for Equity and 11.5% worked for KENCOM SACCO. The other ratios are distributed in the table below. The findings imply that the respondents were well spread across all the seven SACCOs in the banking sector hence representative of the population thus enhancing accuracy of responses.

**Table 4.2: SACCO Name**

| SACCO Name | Frequency | Percent |
|---|---|---|
| Kenya Bankers SACCO | 115 | 42.8 |
| Equity SACCO | 67 | 24.9 |
| Coop bank SACCO | 26 | 9.7 |
| Kencom SACCO | 31 | 11.5 |
| Family SACCO | 18 | 6.7 |
| Nyumba SACCO | 5 | 1.9 |
| Postbank SACCO | 7 | 2.6 |
| **Total** | **269** | **100** |

### 4.2.2.2 SACCO Affiliation

The study sought to find out the SACCO affiliation of the respondents. Figure 4.1 indicates that 53.2% of the respondents were members, 19.3% were employees and 27.5% were both employees and members of the SACCOs.

This meant that there was a fair representation of members from both the SACCO members and employees and hence the information obtained was reliable.



**Figure 4.1: SACCO Affiliation**

**4.2.2.3 Duration in SACCO**

The study sought to establish the period the respondents have been in their current SACCOs. Figure 4.2 shows that 38.3% of the respondents have been in their current SACCOs for a period of between 4-6 years, 23.4% indicated between 1-3 years and 21.2% indicated more than 9 years. The findings imply that the respondents have been in their respective SACCOs for duration periods of more than one year hence have knowledge about the issues the researcher was interested in. This was also important information in guaranteeing the reliability of data obtained as the respondents were representative of the population.
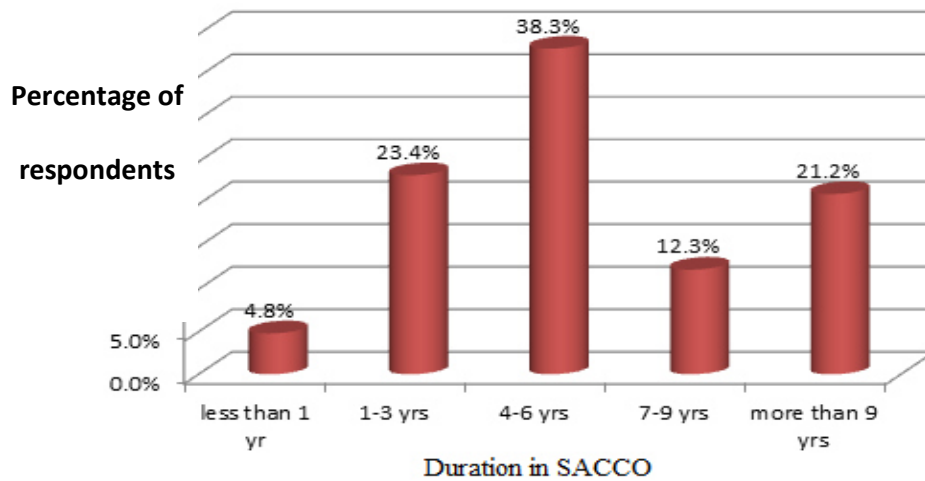
**Figure 4.2: Duration in SACCO**

## 4.3    Normality Test

The researcher sought to assess the normality of data of the sample taken in respect of the various variables in the study. The purpose of normality test was to assess whether the sample was obtained from a normally distributed population. To measure this, the Shapiro-Wilk (S-W) normality test was conducted. According to Shapiro-Wilk( S-W) test, if the p-value is greater than 0.05, the data are described as normally distributed (Yap and Sim, 2010). Table 4.3 shows the Shapiro-Wilk (S-W) normality test results. The p-values for all the variables; competition, internal politics, operating costs, saving culture and investment policy were less than 0.05 in respect of the S-W test. From these findings it can be concluded that the sample was not obtained from a normally distributed population. .Condition for normality is required for one to fit a linear regression model (Sekaran, 2003). Consequently such data does not qualify    for    linear    regression    analysis    (Sekaran,    2003).

**Table 4.3: Tests of Normality**

| Variable | Shapiro-Wilk (S-W) Test | | |
|---|---|---|---|
| | Statistic | Df | Sig. |
| Performance | 0.799 | 269 | 0.000 |
| Competition | 0.912 | 269 | 0.000 |
| Internal politics | 0.919 | 269 | 0.000 |
| Operating costs | 0.887 | 269 | 0.000 |
| Saving culture | 0.944 | 269 | 0.000 |
| Investment policy | 0.968 | 269 | 0.000 |

## 4.4    Financial Performance of SACCOs in the Banking Sector

The financial performance of SACCOs in the banking sector was evaluated using various indicators namely; profit before tax, total assets, loans disbursed, SACCO members' savings, dividends paid and SACCO membership. The findings were as discussed below.

### 4.4.1   Profit Before Tax

The study sought to establish the profitability of SACCOs in the banking sector in Kenya over a period of six years. Results in Figure 4.3 shows that the average mean of profit before tax increased gradually from 4.5 million shillings in 2007 to 7.68 in 2011 and a slight decrease to 6.72 million shillings in 2012. The findings imply that the profitability of SACCOs increased across the years, most probably due to good governance practices.
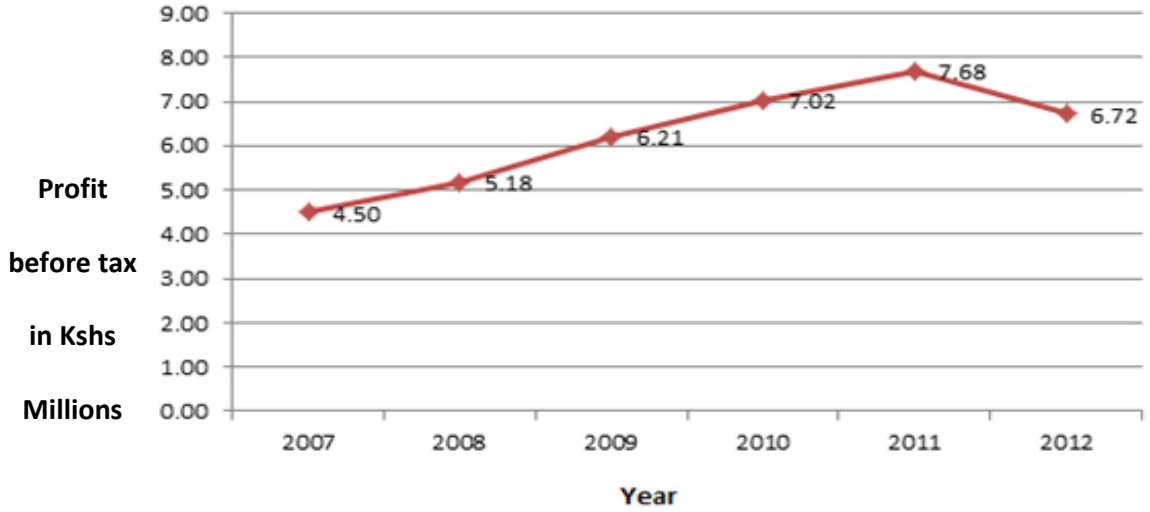
**Figure 4.3: Profit before Tax Trends Analysis**

### 4.4.2 Total Assets

The study sought to establish the total assets owned by the SACCOs across the years. Results indicate that there was gradual increase in the total assets owned by the SACCOs. The findings imply that there was growth in the banking SACCOs and more people were joining and saving with the SACCOs. This is contrary to the findings of Gicheru, Migwi and M"Imanyara (2011) who stated that had low capital base.
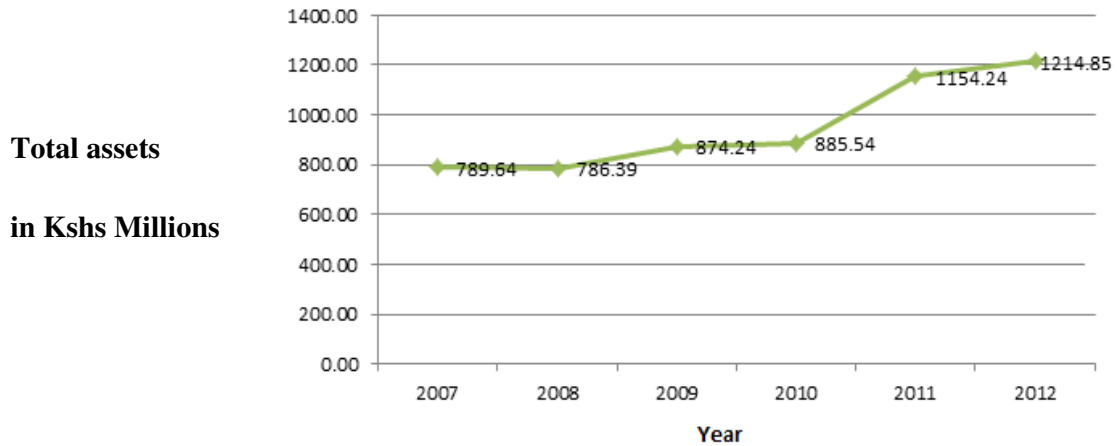


**Figure 4.4: Number of Total Assets Trends Analysis**

### 4.4.3   Loans Disbursed

The study sought to establish the amounts of loans disbursed to the members across the six years. Figure 4.5 indicates that there was a slight decrease in the year 2009 which might have been caused by post-election violence that erupted in 2007 and 2008. However there was a gradual increase from 2010 to 2012 to attract a high of 893.28 million shillings. The study findings further revealed that as the average loan disbursed to member increased the average loan disbursed per member also increased. This implies that there is a positive correlation between the amount of loans disbursed to all members and the average amount disbursed to each member. The findings are contrary to the findings of a study by Gicheru,  Migwi and M''Imanyara (2011) who advanced that majority of SACCOs were weak in terms of loans granted and the capital base.
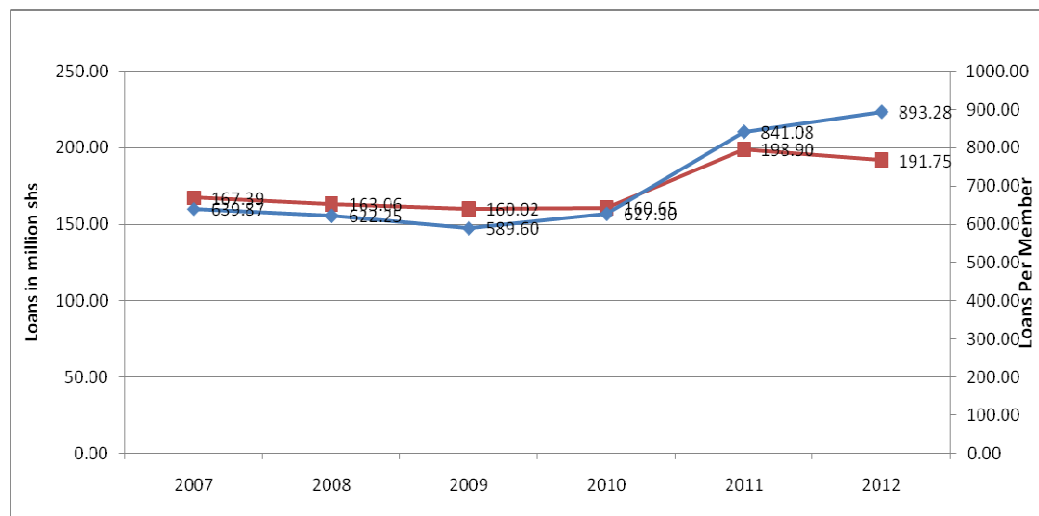


**Figure 4.5: Loans Disbursed to Members Trends Analysis**

### 4.4.4   SACCO Members' Savings

The study sought to determine the saving culture of the members in the banking SACCOs. Results revealed that there was gradual increase in the saving culture across the years. The study findings also illustrated that as the savings per member increased the total savings increased consistently too. This

means that the more each member saved the more the total savings. The findings imply that people are investing so much in SACCOs as they can easily get loans as per the amount of savings they have in their accounts. this concurs with the findings by Njagi , Kimani and Ngugi (2011) who averts that SACCOs are better placed to bring Kenyans under financial inclusion than other financial service providers as they are widely distributed in the country. This is contrary to the findings of Gicheru, Migwi and M''Imanyara (2011) whose findings indicated that members' contributions were low due to low patronage.
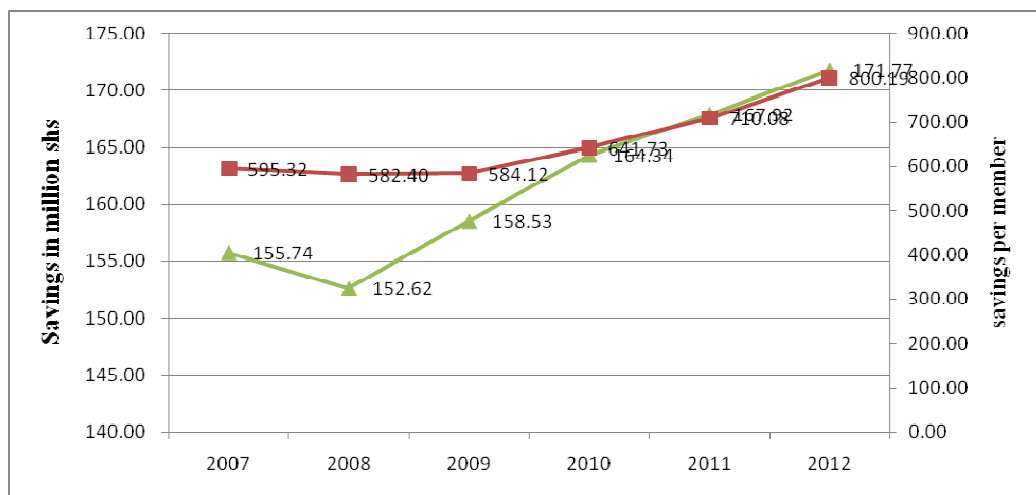


**Figure 4.6: Total Savings Trends Analysis**

**4.4.5    Dividends Paid**

Figure 4.7 indicates that there was an incline in the amount disbursed to the members as dividends. Results indicate that there was a positive correlation between total dividends disbursed to members and the amount each member received. The findings imply that the SACCOs had increasing trend and hence increased financial performance.
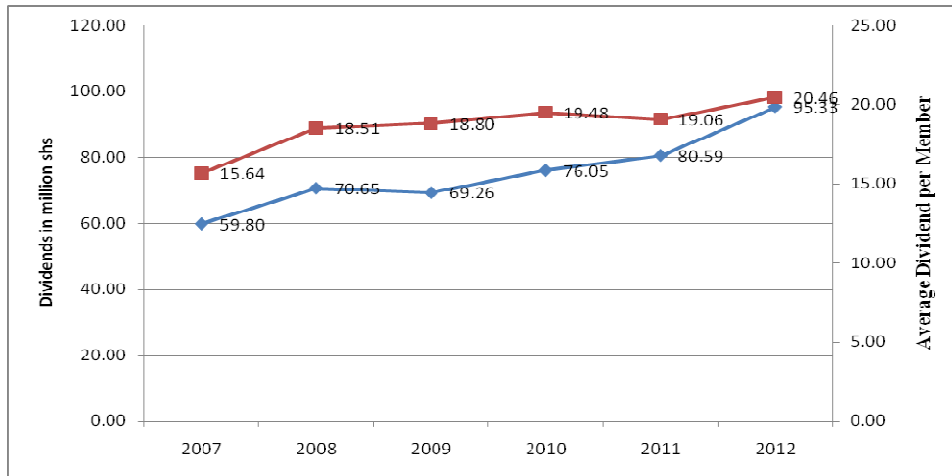
**Figure 4.7: Total Dividends Trends Analysis**

### 4.4.6  SACCO Membership

The study sought to find out the growth of SACCOs by the number of members the SACCOs had. Results indicate that a slight decline in the year 2007 from 3823 members to 3685 in the year 2009 and then an incline to 4658 in the year 2012. The findings imply that the SACCOs were doing well as an increase in the members can be further translated to increases financial performance of SACCOs. This is contrary to the findings of Gicheru, Migwi and M''Imanyara (2011) whose findings indicated that members' contributions were low due to low patronage.
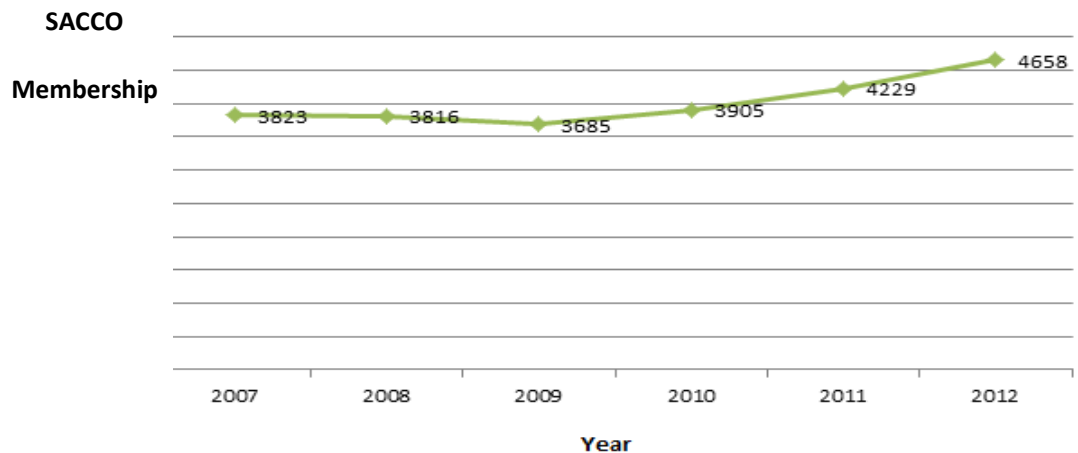
**Figure 4.8: Number of Members Trends Analysis**

## 4.5    Determinants of Financial Performance

This section attempts to analyse the findings of the various determinants of financial performance of SACCOs in the banking sector in Kenya as were hypothesized by the researcher. They include; competition from commercial banks, internal politics, operating costs, saving culture and investment policy.

### 4.5.1    Competition from Commercial Banks

The first objective of the study was to establish if competition from commercial banks affects the financial performance of SACCOs in the banking sector in Kenya. A reliability test, factor analysis, descriptive analysis, correlation analysis, regression analysis ANOVA and a scatter diagram were done in respect of this variable.

#### 4.5.1.1 Reliability Test for Competition

The reliability results for competition attracted a coefficient of 0.71 hence the statements were good for analysis as shown in table 4.5.

**Table 4.4: Reliability Test for Competition**

| Variable | No. of Items | Cronbach's Alpha |
|----------|--------------|------------------|
| Competition | 12 | 0.71 |

#### 4.5.1.2  Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity.

For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.5 showed that the KMO statistic was 0.695 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 545.631 with 45 degree of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.5. These results provide an excellent justification for further statistical analysis to be conducted.

**Table 4.5: Competition KMO Sampling Adequacy and Bartlett's Sphericity Tests**

| | |
|---|---|
| Kaiser-Meyer-Olkin Measure | 0.695 |
| Bartlett's Chi- Square | 545.631 |
| Bartlett's df | 45 |
| Bartlett's Sig. | 0.000 |

**4.5.1.3 Factor Analysis for Competition**

Factor analysis in respect of competition was conducted and the results were as shown in Table 4.6 The results of the analysis for statements regarding competition and financial performance and all the twelve statements attracted a coefficient of more than 0.3, which is the minimum required,( Zikmund, Babin, Carr and Griffin (2010) ) hence were retained for further analysis.

**Table 4.6: Competition factor analysis Component Matrix**

| Statement | Component |
|---|---|
| Threat from Commercial banks | 0.778 |
| Savings products of commercial banks as competitors | 0.599 |
| Loans from commercial banks are more favorable | 0.538 |
| Land purchase using a bank loan is better than using a SACCO loan | 0.555 |
| Interest rate on loans of banks are better than those of our SACCO | 0.536 |
| Commercial banks have better customer service than our SACCO | 0.667 |
| Commercial banks loan advertisements affect grow of SACCOs | 0.525 |
| Commercial banks poach SACCO employees | 0.797 |
| SACCO compete for few skills in financial services | 0.626 |
| SACCO reliance on commercial banks for many banking services | 0.554 |
| SACCOs are more competitive than commercial banks in services | 0.797 |
| Banks managed by well educated & trained staff than SACCOS | 0.602 |

### 4.5.1.4 Descriptive Analysis for Competition

The first objective of the study was to establish if competition from commercial banks affect financial performance of SACCOs in the banking sector in Kenya. Table 4.7 shows that 81% of the respondents disagreed that commercial banks are a great threat to survival of their SACCO, 65% disagreed that savings products of commercial banks are a great competitor to their SACCO products and 85% disagreed that loans from commercial banks are more favorable than loans from their SACCO. Furthermore results indicated that 73% of the respondents disagreed that land purchase using a bank loan was better than using a SACCO loan, 83% disagreed that interest rate on loans of banks are better than those of the SACCO and 76% disagreed that commercial banks have better customer service than their SACCO.

In addition, 66% of the respondents disagreed that commercial banks loan advertisements affect grow of SACCOs, 81% disagreed that commercial banks

normally poach SACCO employees and hence hampering their operations and 72% disagreed that SACCO normally compete for very few skills in financial services who were only affordable to banks. finally, 55% of the respondents disagreed that SACCO have to rely on commercial banks for many banking services and hence a lot of dependency on banks, 81% disagreed that SACCOs are more competitive than commercial banks in service delivery and 64% disagreed that banks are managed by well-educated and trained banks than those of SACCOs and hence edging up competition in terms of skills and knowledge. The mean score of the responses for this section was 2.16 indicating that more employees disagreed that SACCOs were faced with a lot of competition from the commercial banks. The findings imply that the SACCOs were faced with low competition from commercial banks. The findings imply that there was low competition from commercial banks hence the SACCOs had improved financial performance.

The findings disagreed with those in Chaddad and Cook (2004) who did a research on co-operative finance during crisis indicated that co-operative finance tended to fare better than investor-owned savings and loans institutions, as they pursue more conservative investment policies. The findings also concur with those of Hesse and Cihak (2007) who argued that co-operative banks in developed countries tend to be more stable than commercial banks, especially during financial crisis, as their investment patterns tend to be less speculative and returns are therefore less volatile.

**Table 4.7: Competition and Financial Performance**

| Statement | strongly disagree (%) | Disagree (%) | Neutral (%) | Agree (%) | strongly agree (%) |
|---|---|---|---|---|---|
| Commercial Bank threat | 67 | 14 | 9 | 8 | 2 |
| Bank Products Preferred | 20 | 45 | 8 | 22 | 5 |
| Bank Loans more Attractive | 19 | 66 | 5 | 8 | 2 |
| Land purchase better with bank loan | 22 | 51 | 5 | 16 | 6 |
| Interest rates | 20 | 63 | 6 | 10 | 3 |
| Customer service | 31 | 45 | 7 | 12 | 5 |
| Bank Loan Advertisements | 19 | 47 | 7 | 20 | 6 |
| Banks poach SACCO employees | 64 | 17 | 3 | 13 | 3 |
| Competition for available skills | 28 | 44 | 10 | 16 | 2 |
| SACCO dependence on banks | 31 | 24 | 10 | 31 | 4 |
| SACCOs service delivery | 64 | 17 | 3 | 13 | 3 |
| Banks managed by professionals | 22 | 42 | 7 | 23 | 6 |
| **Mean** | **34** | **40** | **7** | **16** | **4** |

## 4.5.1.5 Correlation Analysis – Competition and Financial Performance

Table 4.8 displays the results of correlation test analysis between the dependent variable (financial performance) and competition. The results show that financial performance was positively correlated with competition with a weak correlation coefficient of 0.151. This reveals that any positive change in competition led to improved financial performance.

**Table 4.8: Pearson Correlation - Competition and Financial Performance**

| Variable | | Performance | Competition |
|---|---|---|---|
| Performance | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | | |
| Competition | Pearson Correlation | 0.151 | 1 |
| | Sig. (2-tailed) | 0.013 | |

**4.5.1.6 Regression Analysis - Competition and financial performance**

After testing the normality of data, results indicated that the data had linear and non-linear components hence the option to carry out quadratic regression. Regression analysis was conducted to empirically determine whether competition was a significant determinant of financial performance. Regression results in table 4.9 indicate the goodness of fit for the regression between competition and financial performance was satisfactory in the linear regression. An R squared of 0.023 indicates that 2.3% of the variances in financial performance of SACCOs in the banking sector are explained by the variances in competition in the linear model. The correlation coefficient of 15.1% indicates that the combined effect of the predictor variables have a positive correlation with financial performance. However with the combination of linear and non-linear components the R square improved to 41.9% which implies that the variances in financial performance of SACCOs in the banking sector are explained by the variances in competition. The non-linear addition model is statistically significant with an F statistics of 181.41 and P value (0.000)

The model being estimated takes the form of

$$Y = \beta_0 + \beta_1 X_1 + \beta_{11} X_{11}^2 + \mu$$

Where Y= Financial performance, $X_1$= Linear composition of competition and $X_{11}^2$ = non linear composition of competition.

The above quadratic model is supported by the scatter plot and line of best fit fitted in figure 4.9 below and the value of R-square of 0.419 meant that the quadratic model had a stronger explanatory power to the extent of 41.9% compared to the linear model which gave R-square of 0.023, thus justifying the model used as shown in Table 4.9

**Table 4.9: Model Summary - Competition and Financial Performance**

| Model | R | R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change |
|---|---|---|---|---|---|---|---|---|
| 1 | .151a | 0.023 | 0.52018 | 0.023 | 6.208 | 1 | 267 | 0.013 |
| 2 | .647b | 0.419 | 0.40184 | 0.396 | 181.41 | 1 | 266 | 0.000 |

a Predictors: (Constant), competition

b Predictors: (Constant), competition, competition squared

**4.5.1.7 ANOVA - Competition and Financial Performance**

Table 4.10 displays the regression coefficients of the independent variable (competition). The results reveal that competition is statistically significant in explaining financial performance of SACCOs in the banking sector in Kenya. An F statistic of 95.906 indicated that the combined model was significant. This was supported by a probability value of (0.000). The reported probability of (0.000) is less than the conventional probability of (0.05) hence significant.

**Table 4.10: ANOVA – Competition and Financial Performance**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 1.68 | 1 | 1.68 | 6.208 | .013b |
| | Residual | 72.246 | 267 | 0.271 | | |
| | Total | 73.925 | 268 | | | |
| 2 | Regression | 30.973 | 2 | 15.486 | 95.906 | .000c |
| | Residual | 42.952 | 266 | 0.161 | | |
| | Total | 73.925 | 268 | | | |

a Dependent Variable: Performance

b Predictors: (Constant), competition

c Predictors: (Constant), competition, competition squared

Table 4.11 displays the regression coefficients of the independent variable (competition). The results reveal that competition is statistically significant in explaining financial performance of SACCOs in banking sector in Kenya. This is supported by (b= -0.573, p value = 0.000). The negative beta explains that the SACCOs performance reaches a point where it stagnates and tends to go down whether competition is managed or not. This is summarized in the regression model below;

$$Y = 4.097 + 2.976X_1 - 0.573X_1^2$$

This implied that the null hypothesis failed to be accepted and the alternative hypothesis failed to be rejected.

**Table 4.11: Regression Coefficient - Competition and Financial Performance**

| Model | | B | Std. Error | T | Sig. |
|---|---|---|---|---|---|
| 1 | (Constant) | 7.327 | 0.103 | 71.298 | 0.000 |
| | Competition | 0.113 | 0.045 | 2.492 | 0.013 |
| 2 | (Constant) | 4.097 | 0.253 | 16.22 | 0.000 |
| | Competition | 2.976 | 0.215 | 13.813 | 0.000 |
| | Competition squared | -0.573 | 0.043 | -13.469 | 0.000 |

### 4.5.1.8 Scatter Plot

Figure 4.9 shows the scatter plot of competition and financial performance. The figure reveals that there was a positive relationship between the two variables. Therefore, an increase in competition management affects financial performance positively. However, as competition intensifies beyond a certain level which the SACCOs cannot handle, their financial performance tends to decrease.
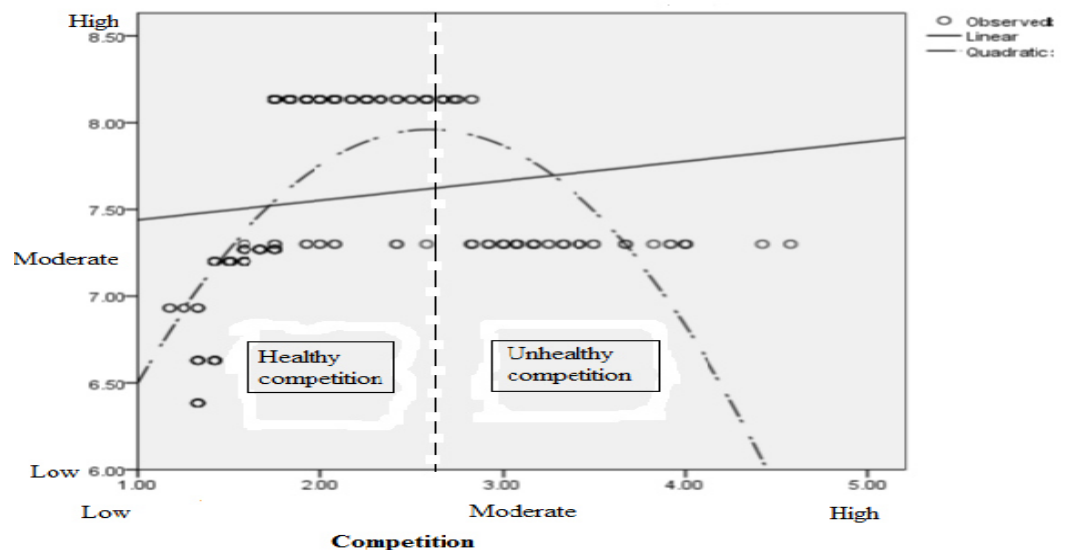


**Figure 4.9: Scatter Plot-Competition and Financial Performance**

## 4.5.2 Internal Politics

The second objective of the study was to investigate whether internal politics influences the financial performance. A reliability test, factor analysis, descriptive analysis, correlation analysis, regression analysis ANOVA and a scatter diagram were done in respect of this variable.

### 4.5.2.1 Reliability Test for Internal Politics

Table 4.12 shows the reliability results for internal politics which attracted a coefficient of 0.71 hence the statements were good for analysis.

**Table 4.12: Reliability Test for Internal Politics**

| Variable | No. of Items | Cronbach's Alpha |
|---|---|---|
| Internal Politics | 12 | 0.833 |

### 4.5.2.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.13 showed that the KMO statistic was 0.827 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 4274.615 with 66 degree of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.13. These results provide an excellent justification for further statistical analysis to be conducted.

**Table 4.13: Internal Politics KMO Sampling Adequacy and Bartlett's Sphericity Tests**

| | |
|---|---|
| Kaiser-Meyer-Olkin Measure | 0.827 |
| Bartlett's Chi- Square | 4274.615 |
| Bartlett's df | 66 |
| Bartlett's Sig. | 0.000 |

### 4.5.2.3 Factor Analysis for Internal Politics

Table 4.14 shows the factor analysis results for statements regarding internal politics and financial performance. All the twelve statements attracted a coefficient of more than 0.5 hence were retained for further analysis.

**Table 4.14: Internal Politics Factor Analysis Component Matrix**

| Statement | Component |
|---|---|
| Our SACCO has members who are politicians | 0.668 |
| Internal politics influence the approval of loans in our SACCO | 0.883 |
| Our annual general meetings are normally chaotic | 0.794 |
| Election of SACCO officials is rarely transparent in our SACCO | 0.525 |
| Political interference has affected the profitability of our SACCO | 0.812 |
| Internal Politics cause of staff departure to other SACCOs | 0.776 |
| Management decisions rarely objective due to internal conflicts | 0.922 |
| Informal groupings in SACCO influenced by personal interests | 0.855 |
| Informal groupings in SACCO led to negative energy in operations | 0.893 |
| Management committee hardly independent in their decisions | 0.863 |
| Selfish interests influence voting during meetings | 0.89 |
| Politics of other SACCOs spill over to our SACCO | 0.87 |

### 4.5.2.4 Descriptive Analysis for Internal Politics

The second objective of the study was to investigate whether internal politics influences the financial performance. Results on Table 4.15 indicates that 48% of the respondents agreed that their SACCO have members who are politicians, 44% disagreed that internal politics influence the approval of loans in their SACCO and 57% disagreed that their annual general meetings are normally chaotic due to internal politics. Fifty percent of the respondents disagreed that election of SACCO officials is rarely transparent in their SACCO, 47% disagreed that interference of political persons has affected the profitability of their SACCO and 46% disagreed that members of their SACCO are leaving for other SACCOs due to internal politics. In addition, 40% disagreed that management decisions are rarely objective due to interference by internal conflict, 41% agreed that there are several internal informal groupings in their SACCO which are influenced by their personal group interests and 36% disagreed that informal groupings in their SACCO have led to a lot of negative energy in operations. Finally, 37% disagreed that the management committee is hardly independent in their decisions, 36% disagreed that voting during SACCO meetings in controlled through severe campaigns by particular members for their own selfish interests and 46% disagreed that politics of other SACCOs spill over to their SACCO. The mean score for the responses was 2.76 which indicate that many employees disagreed with the statements regarding internal politics. The results revealed that internal politics influenced financial performance of SACCOs. The findings imply that the SACCOs had policies in place that ensured that there was good management of internal politics.

The findings are consistent with those in Akinwunmi (2006) who averred that co-operatives depend on the unified efforts of large numbers of small individuals. He further argued that cooperation embodies the spirit of working together to achieve a common goal. The findings are in contrast with those of Mwaura (2005) who asserted that the annual delegates meetings and the ministry of co-operatives are to blame for investment activities undertaken by

SACCOS because they are the ones who are supposed to approve the same investment.

The findings corroborate with those of Muchemi (2005) who noted that non profitable investments should be discouraged because, despite the enormous amount of resources input in such projects, returns are almost nil, hence reducing the capital base where interest is drawn from. The findings further disagreed with those in KUSCCO (2003) who asserted that co-operative management committees are notorious for diverting members' funds into investments of dubious value thus the law needs to be amended to strengthen the minister's regulatory hand. It should clearly prohibit investments that are not related to the core objective of the society.

**Table 4.15: Internal Politics and Financial Performance**

| Statement | Strongly disagree (%) | Dis agree (%) | Neutral (%) | Agree (%) | Strongly agree (%) |
|---|---|---|---|---|---|
| SACCO members are politicians | 15 | 16 | 22 | 48 | 0 |
| Loan approval influenced by politics | 23 | 21 | 18 | 39 | 0 |
| General meetings disrupted by politics | 30 | 27 | 21 | 22 | 1 |
| Election of officials not transparent | 19 | 31 | 9 | 29 | 12 |
| Effect of politics on profitability | 23 | 24 | 20 | 26 | 7 |
| Members exit in-mass due to politics | 18 | 28 | 31 | 23 | 0 |
| Effects of conflicts on decision making | 18 | 22 | 30 | 31 | 0 |
| Informal groupings due to personal interest | 12 | 23 | 24 | 41 | 0 |
| Inforal groupings cause negative energy | 12 | 24 | 32 | 33 | 0 |
| Decisions making by Management biased | 16 | 21 | 26 | 36 | 0 |

| | | | | | |
|---|---|---|---|---|---|
| Selfish interests influence voting | 12 | 24 | 32 | 33 | 0 |
| Effect of other SACCO | 17 | 29 | 31 | 23 | 0 |
| **Mean** | **18** | **24** | **25** | **32** | **2** |

### 4.5.2.5 Correlation Analysis - Internal Politics and Financial Performance

Correlation Analysis between the dependent variable (financial performance) and Internal Politics was carried out and the results are as shown in Table 4.16. The results indicated that financial performance was positively correlated with internal politics. This reveals that any positive change in management of internal politics led to improved financial performance.

**Table 4.16: Pearson Correlation - Internal Politics and Financial Performance**

| Variable | | Performance | Internal politics |
|---|---|---|---|
| Performance | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | | |
| Internal politics | Pearson Correlation | 0.518 | 1 |
| | Sig. (2-tailed) | 0.000 | |

### 4.5.2.6 Regression Analysis - Internal Politics and Financial Performance

After testing the normality of data, results indicated that the data had linear and non- linear components hence the option to carry out quadratic regression. Regression analysis was conducted to empirically determine whether internal politics was a significant determinant of financial performance. Regression results in Table 4.17 indicate the goodness of fit for the regression between internal politics and financial performance was satisfactory in the linear regression model. An R squared of 0.269 indicates that 26.9% of the variances in financial performance in banking SACCOs are explained by the variances in internal politics management. The correlation coefficient of 51.8% indicates that the combined effect of the predictor variables have a strong and positive correlation with financial performance. However with the combination of linear and non- linear components the R square improved to 54.3% which implies that the variances in financial performance of SACCOs in the banking sector are explained by the variances in internal politics management. The non-linear addition model is statistically significant with an F statistics of 160.025 and P value (0.000)

The model being estimated takes the form of

$$Y= \beta_0+ \beta_2 X_2+ \beta_{21} X_{21}^2 +\mu$$

Where Y= Financial performance, $X_2$= Linear composition of internal politics and $X_{21}^2$ = non- linear composition of internal politics.

The above model is supported by the scatter plot and line of best fit fitted in figure 4.10 below and by the value of R-square of 0.543 giving the model a stronger explanatory power of 54.3% compared with the linear model which gave R-square of 0.269, which translates to 26.9% thus validating the model used as shown in Table 4.17

**Table 4.17: Model Summary - Internal Politics and Financial Performance**

| Model | R | R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change |
|---|---|---|---|---|---|---|---|---|
| 1 | .51a | 0.269 | 0.44994 | 0.269 | 98.166 | 1 | 267 | 0.000 |
| 2 | .737b | 0.543 | 0.3562 | 0.275 | 160.02 | 1 | 266 | 0.000 |

a Predictors: (Constant), internal politics

b Predictors: (Constant), internal politics, internal politics squared

The overall model significance was presented in table 4.18. An F statistic of 98.166 indicated that the overall model was significant. This was supported by a probability value of (0.000). The reported probability of (0.000) is less than the conventional probability of (0.05). The probability of (0.000) indicated that there was a very low probability that the statement "overall model was insignificant" was true and it was therefore possible to conclude that the statement was untrue.

**4.5.2.7 ANOVA for Internal Politics**

ANOVA was conducted to establish the homogeneity of data as indicated in table 4.18. If the observations were drawn from the same population their variances would not differ much. An F statistic of 158.329 indicated that the combined model was significant. This was supported by a probability value of (0.000). The reported probability of (0.000) is less than the conventional probability of (0.05).

**Table 4.18: ANOVA - Internal Politics and Financial Performance**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 19.873 | 1 | 19.873 | 98.166 | .000b |
| | Residual | 54.052 | 267 | 0.202 | | |
| | Total | 73.925 | 268 | | | |
| 2 | Regression | 40.176 | 2 | 20.088 | 158.329 | .000c |
| | Residual | 33.749 | 266 | 0.127 | | |
| | Total | 73.925 | 268 | | | |

a Dependent Variable: Performance

b Predictors: (Constant), internal politics

c Predictors: (Constant), internal politics, internal politics squared

Table 4.19 displays the regression coefficients of the independent variable (internal politics). The results reveal that internal politics is statistically significant in explaining financial performance of SACCOs in banking sector in Kenya. This is supported by (b= -0.339, p value = 0.000). The negative beta explains that the SACCOs performance reaches a point where it stagnates and tends to go down whether internal politics are managed or not as summarized in the regression model below;

$$Y = 4.799 + 2.038 X_2 - 0.339X_{21}^2$$

This implied that the null hypothesis failed to be accepted and the alternative hypothesis failed to be rejected.

**Table 4.19: Regression Coefficient - Internal Politics and Financial Performance**

| Model | | B | Std. Error | T | Sig. |
|---|---|---|---|---|---|
| 1 | (Constant) | 6.737 | 0.089 | 76.086 | 0.000 |
| | Internal politics | 0.302 | 0.031 | 9.908 | 0.000 |
| 2 | (Constant) | 4.799 | 0.168 | 28.489 | 0.000 |
| | Internal politics | 2.038 | 0.139 | 14.629 | 0.000 |
| | Internal politics Squared | -0.339 | 0.027 | -12.65 | 0.000 |

### 4.5.2.8 Scatter Plot - Internal Politics and Financial Performance

Figure 4.11 shows the scatter plot of internal politics and financial performance. The figure reveals that there was a positive relationship between the two variables. Therefore, an increase in management of internal politics affects financial performance positively. However, it is evident that when internal politics reach a certain level, it becomes unhealthy and therefore affects the financial performance of SACCOs negatively.
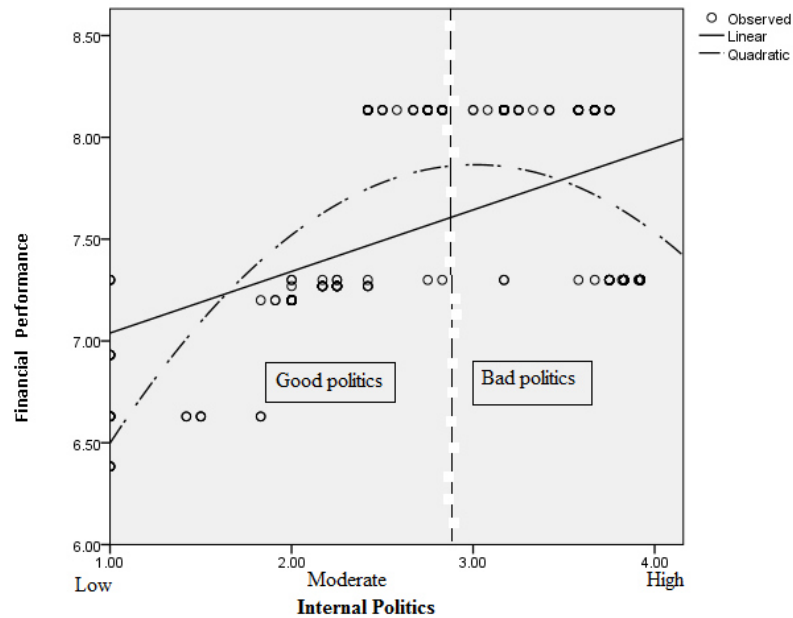


**Figure 4.10: Scatter Plot- Internal Politics and Financial Performance**

### 4.5.3   Operating Costs

The third objective of the study was to examine whether operating costs influences the financial performance of SACCOs in the banking sector in Kenya. A reliability test, factor analysis, descriptive analysis, correlation analysis, regression analysis ANOVA and a scatter diagram were done in respect of this variable.

### 4.5.3.1 Reliability Test for Operating Costs

Table 4.20 shows the reliability results for operating costs which attracted a coefficient of 0.783 hence the statements were good for analysis.

**Table 4.20: Reliability Test for Operating Costs**

| Variable | No. of Items | Cronbach's Alpha |
|---|---|---|
| Operating Costs | 12 | 0.783 |

### 4.5.3.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.21 showed that the KMO statistic was 0.798 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 690.875 with 45 degree of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.21. These results provide an excellent justification for further statistical analysis to be conducted.

**Table 4.21: Operating Costs KMO Sampling Adequacy and Bartlett's Sphericity Tests**

| | |
|---|---|
| Kaiser-Meyer-Olkin Measure | 0.798 |
| Bartlett's Chi- Square | 690.875 |
| Bartlett's df | 45 |
| Bartlett's Sig. | 0.000 |

### 4.5.3.3 Factor Analysis for Operating Costs

Table 4.22 shows the factor analysis results for statements regarding operation costs and financial performance and all twelve statements attracted a coefficient of more than 0.5 hence were retained for further analysis.

**Table 4.22: Operation Costs factor analysis Component Matrix**

| Statement | Component |
|---|---|
| Salaries is a major cost | 0.780 |
| Rent and council rates are major costs | 0.814 |
| Interest on deposits is a major cost | 0.654 |
| Committee allowance is a major cost | 0.804 |
| Annual general meeting is a major cost | 0.617 |
| Training is a major cost | 0.660 |
| SASRA regulation requirements are a major cost | 0.670 |
| Control of SACCO expenses would mean more profits | 0.925 |
| Control of costs by supervisory committee | 0.838 |
| Advertising is a major expense | 0.504 |
| Expenses are well controlled and are at optimal levels | 0.918 |
| Operations costs are a major determinant of profitability | 0.832 |

### 4.5.3.4 Descriptive Analysis for Operating Costs

The third objective of the study was to examine whether operating costs influences the financial performance of SACCOs in the banking sector in Kenya. The results as indicated in Table 4.23 showed that 48% of the respondents disagreed that salaries was a major cost to their SACCO, 47% disagreed that rent and council rates are major costs to their SACCO and 43% agreed that interest on member deposits was a major cost to their SACCO. Furthermore 45% disagreed that committee allowance was a major cost to their SACCO, 35% disagreed that annual general meeting was a major cost to their SACCO and 46% disagreed that training was a major cost to their SACCO.

Fifty three percent of the respondents disagreed that SASRA regulation requirements were a major cost to their SACCO, 53% agreed that if the Committee members control expenses of the SACCO there would be more profits for the SACCO and 59% agreed that the supervisory committee can assist in checking areas where SACCO expenses can be reduced. Finally 68% disagreed that advertising was a major expense for their SACCO, 55% agreed that expenses of their SACCO were well controlled and were at optimal levels and 60% agreed that cost of the SACCO operations were a major determinant of profitability. The mean score for this section was 2.85 which indicates that majority of the respondents disagreed that there were high operating costs for the SACCOs. The findings imply that the SACCOs had put in place strategic measures that govern use of funds hence a budget that takes care of the operation costs.

The findings agree with those in Asogwa et al. (2011) who observed that high level of cost inefficiency is highly attributable to the low profitability that results from inadequate organization of farmers into collective farmers' institutions that can provide opportunities for risk sharing and improved bargaining power. Revamping the productivity of small scale farmers, therefore, requires collective farmers' institutions that provide opportunities for risk sharing and improved bargaining power that are not available to individual farmers.

The findings also concur with those of Ward and McKillop (2005) who asserted that the impact of a common bond on co-operative's performance provides additional perspective on the size of credit co-operatives in India. Performance of a credit union depends on the strength of common bond among members. The authors also found a favourable impact of occupation-based commonality on the performance of credit unions, as commonality of occupation suggests tighter bonds and reduces operating costs.

**Table 4.23: Operating costs and Financial Performance**

| Statement | Strongly disagree (%) | Disagree (%) | Neutral (%) | Agree (%) | Strongly agree (%) |
|---|---|---|---|---|---|
| Salaries is a major cost | 19 | 29 | 26 | 26 | 0 |
| Rent and council rates are major costs | 21 | 26 | 36 | 18 | 0 |
| Interest on deposits is a major cost | 11 | 21 | 25 | 33 | 10 |
| Committee allowance is a major cost | 20 | 25 | 16 | 39 | 1 |
| General meeting is a major cost | 10 | 25 | 35 | 29 | 1 |
| Training is a major cost | 10 | 36 | 49 | 5 | 0 |
| SASRA is a major cost | 11 | 42 | 32 | 16 | 0 |
| Control of expenses means more profits | 13 | 17 | 16 | 41 | 12 |
| Cost control by supervisory committee | 11 | 15 | 15 | 45 | 14 |
| Advertising is a major expense | 20 | 48 | 23 | 9 | 0 |
| Expenses are well controlled and are at optimal levels | 13 | 17 | 15 | 43 | 12 |
| Operations costs are a major determinant of profitability | 10 | 15 | 15 | 46 | 14 |
| **Mean** | **14** | **26** | **25** | **29** | **5** |

### 4.5.3.5 Pearson's Correlation - Operating Costs and Financial Performance

Table 4.24 displays the results of correlation test analysis between the dependent variable (financial performance) and operating costs. The results show that the financial performance was positively correlated with operating costs with a high correlation coefficient of 0.608. This reveals that any positive change in management of operating costs led to improved financial performance.

**Table 4.24: Pearson's Correlation -Operating Costs and Financial Performance**

| Variable | | Performance | Operating costs |
|---|---|---|---|
| Performance | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | | |
| Operating costs | Pearson Correlation | 0.608 | 1 |
| | Sig. (2-tailed) | 0.000 | |

### 4.5.3.6 Regression Analysis - Operating Costs and Financial Performance

Regression analysis was conducted to empirically determine whether operating cost was a significant determinant of financial performance. Regression results in Table 4.25 indicate the goodness of fit for the regression between operating cost and financial performance was satisfactory in the linear model regression. An R squared of 0.369 indicates that 36.9% of the variances in financial performance in banking SACCOs are explained by the variances in operating costs management. The correlation coefficient of 60.8% indicates that the combined effect of the predictor variables have a strong and positive correlation with financial performance. However with the combination of linear and non- linear components the R square improved to 53.5% which implies that the variances in financial performance of SACCOs in the banking sector are explained by the variances in operating costs management. The non-

linear addition model is statistically significant with an F statistics of 95.023 and P value (0.000)

The model being estimated takes the form of

$$Y = \beta_0 + \beta_3 X_3 + \beta_{31} X_{31}^2 + \mu$$

Where Y= Financial performance, $X_3$= Linear composition of operation costs and $X_{31}^2$ = non- linear composition of operation costs

The above model is supported by the scatter plot and line of best fit fitted in figure 4.11 below and also by the value of R- square of 0.535 which was a higher explanatory power compared to that given by the linear model of R-square of 0.369 thus validating the model used as shown in Table 4.25.

**Table 4.25: Model Summary - Operating Costs and Financial Performance**

| Model | R | R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change |
|---|---|---|---|---|---|---|---|---|
| 1 | .608a | 0.369 | 0.4179 | 0.369 | 156.292 | 1 | 267 | 0.000 |
| 2 | .732b | 0.535 | 0.35939 | 0.166 | 95.023 | 1 | 266 | 0.000 |

a Predictors: (Constant), operating costs

b Predictors: (Constant), operating costs, operating cost squared

### 4.5.3.7 ANOVA - Operating Costs and Financial Performance

The overall model significance was presented in Table 4.26. An F statistic of 153.176 indicated that the combined model was significant. This was supported by a probability value of (0.000). The reported probability of (0.000) is less than the conventional probability of (0.05). The probability of (0.000) indicated that there was a very low probability that the statement "combined model was insignificant" was true and it was therefore possible to conclude that the statement was untrue.

**Table 4.26: ANOVA – Operating Costs and Financial Performance**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 27.296 | 1 | 27.296 | 156.292 | .000b |
| | Residual | 46.63 | 267 | 0.175 | | |
| | Total | 73.925 | 268 | | | |
| 2 | Regression | 39.569 | 2 | 19.784 | 153.176 | .000c |
| | Residual | 34.357 | 266 | 0.129 | | |
| | Total | 73.925 | 268 | | | |

a Dependent Variable: Performance

b Predictors: (Constant), operating costs

c Predictors: (Constant), operating costs, operating costs squared

Table 4.27 displays the regression coefficients of the independent variable (operating costs). The results reveal that operating cost is statistically significant in explaining financial performance of SACCOs in banking sector in Kenya. This is supported by (b= -0.358, p value = 0.000). The negative beta explains that the SACCOs performance reaches a point where it stagnates and tends to go down whether operating costs are managed or not. The regression model is as summarized below;

$$Y= 4.429 + 2.207 X_3 - 0.358X_{31}^2$$

This implied that the null hypothesis failed to be accepted and the alternative hypothesis failed to be rejected.

**Table 4.27: Regression Coefficient - Operating Costs and Financial Performance**

| Model | | B | Std. Error | T | Sig. |
|---|---|---|---|---|---|
| 1 | (Constant) | 6.459 | 0.092 | 69.851 | 0.000 |
| | Operating costs | 0.39 | 0.031 | 12.502 | 0.000 |
| 2 | (Constant) | 4.429 | 0.223 | 19.87 | 0.000 |
| | Operating costs | 2.207 | 0.188 | 11.718 | 0.000 |
| | Operating Costs Squared | -0.358 | 0.037 | -9.748 | 0.000 |

a Dependent Variable: Performance

**4.5.3.8 Scatter Plot - Operating Costs and Financial Performance**

Figure 4.13 shows the scatter plot of operating costs and financial performance. The figure reveals that there was a positive relationship between the two variables. Therefore, an increase in management of operating costs affects financial performance positively. However, it is evident that if the operating costs go unchecked, they affect the financial performance of SACCOs negatively eventually.
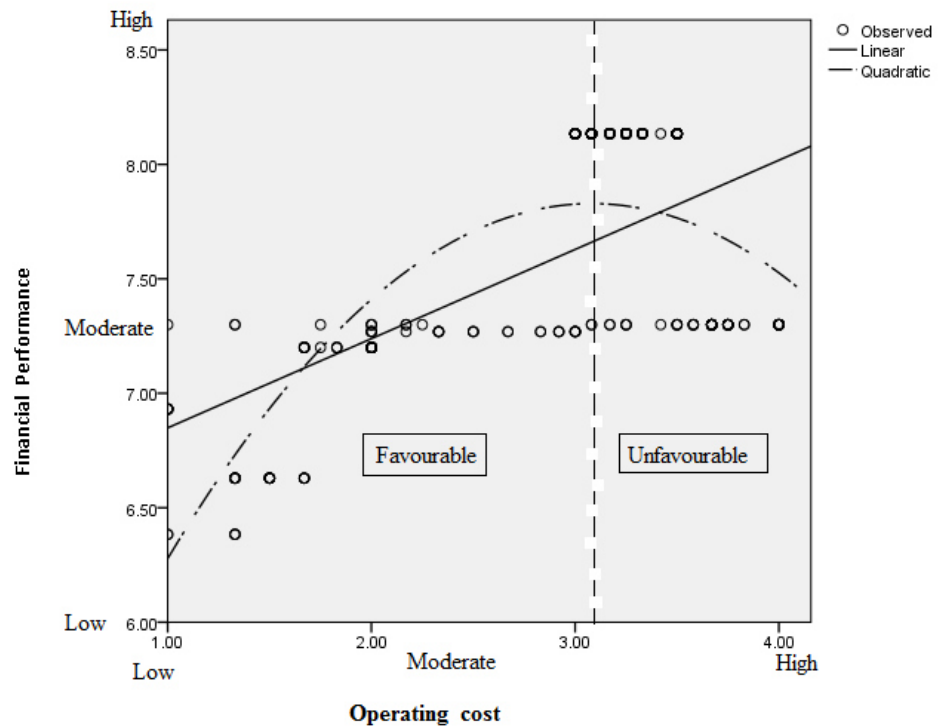


**Figure 4.11: Scatter Plot - Operating Costs and Financial Performance**

**4.5.4  Saving Culture**

The fourth objective of the study was to establish if savings culture influences the financial performance of SACCOs in the banking sector in Kenya. A reliability test, factor analysis, descriptive analysis, correlation analysis, regression analysis ANOVA and a scatter diagram were done in respect of this variable.

### 4.5.4.1 Reliability test for Saving Culture

Table 4.28 shows the reliability results for saving culture which attracted a coefficient of 0.701 hence the statements were good for analysis.

**Table 4.28: Reliability Test for Operating Costs**

| Variable | No. of Items | Cronbach's Alpha |
|---|---|---|
| Saving Culture | 10 | 0.701 |

### 4.5.4.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.29 showed that the KMO statistic was 0.889 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 4484.484 with 66 degree of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.29. These results provide an excellent justification for further statistical analysis to be conducted.

**Table 4.29: Savings Culture KMO Sampling Adequacy and Bartlett's Sphericity Tests**

| Kaiser-Meyer-Olkin Measure | 0.889 |
|---|---|
| Bartlett's Chi- Square | 4484.484 |
| Bartlett's df | 66 |
| Bartlett's Sig. | 0.000 |

### 4.5.4.3 Factor Analysis for Saving Culture

Table 4.30 shows the factor analysis results for statements regarding saving culture and financial performance and all twelve statements attracted a coefficient of more than 0.4 hence were retained for further analysis.

**Table 4.30: Saving Culture Factor Analysis Component Matrix**

| Statement | Component |
| --- | --- |
| Annual savings target for the members | 0.852 |
| Doubling savings improves performance | 0.808 |
| Performance is high with huge savings | 0.444 |
| Annual awards for super savers | 0.852 |
| I personally like saving with the SACCO | 0.855 |
| Personal annual saving targets | 0.849 |
| Minimum savings rule  for SACCO | 0.859 |
| Higher savings mean higher profits | 0.913 |
| Low borrowing due low saving levels | 0.401 |
| High SACCO savings make more profits | 0.761 |
| Law on minimum savings will promote growth | 0.715 |
| Aggressive savings leads to high performance | 0.724 |

### 4.5.4.4 Descriptive Analysis for the Saving Culture

The fourth objective of the study was to establish if savings culture influences the financial performance of SACCOs in the banking sector in Kenya. Table 4.31 shows that 77% of the respondents agreed that their SACCO has annual savings target for the members, 73% agreed that if members doubled their savings the performance of their SACCO would improve and 48% agreed that their SACCO performs well because members have huge savings. Seventy seven percent of the respondents agreed that their SACCO had annual awards for super savers, 74% agreed that they personally like saving with the SACCO and 80% agreed that they personally have their own annual savings target. In

addition 80% agreed that their SACCO has a minimum savings rule which is stauncher than the minimum required by the Ministry, 75% agreed that if their SACCO had more savings than what it had today, they would make more profits and 55% agreed that members fail to borrow enough due to low saving levels. Finally, 60% agreed that SACCOs that have more savings make more profit than SACCOs with fewer saving, 62% agreed that the government should set a mandatory minimum for savings by all Sacco members in order to promote SACCO growth and 63% agreed that for SACCOs to perform better, they need to be aggressive in encouraging member savings. The mean score for the responses was 3.71 which indicate that many respondents agreed that saving culture was a key driver of financial performance of SACCOs. The findings imply that there was a constant saving culture for the SACCOs.

The findings concur with those in Ortmann and King (2007a) and Birchall (2004) who asserted that the performance of co-operatives depends on educating and training co-operative members, and enhancing their knowledge of co-operative principles and members' rights argues that co-operatives that lack capital and business management capacity have had a rather disappointing history in developing countries.

The findings also concur with those of Guilford (2007) who argued that credit facilities enable impoverished persons to start businesses, rebuild after natural disasters like floods and hurricanes, and to receive both short- and long-term loans to meet their financial needs and improve their overall quality of life. The impact of micro lending is changing the economic landscape of the areas where it is most prevalent.

**Table 4.31: Saving Culture and Financial Performance**

| Statement | Strongly disagree (%) | Disagree (%) | Neutral (%) | Agree (%) | Strongly agree (%) |
|---|---|---|---|---|---|
| Annual savings target | 2 | 7 | 16 | 57 | 20 |
| Doubling savings | 0 | 7 | 21 | 54 | 19 |
| Performance is high with huge savings | 1 | 27 | 24 | 31 | 17 |
| Annual awards for super savers | 2 | 7 | 16 | 57 | 20 |
| I personally like saving | 2 | 7 | 18 | 54 | 20 |
| Personal annual saving targets | 0 | 6 | 15 | 52 | 28 |
| Minimum savings rule | 0 | 6 | 14 | 55 | 25 |
| Higher savings, higher profits | 0 | 6 | 20 | 53 | 22 |
| Low borrowing due low savings | 4 | 26 | 15 | 41 | 14 |
| High savings make more profits | 11 | 12 | 18 | 40 | 20 |
| Law on minimum savings | 10 | 11 | 17 | 43 | 19 |
| Aggressive savings | 10 | 11 | 16 | 38 | 25 |
| **Mean** | **3** | **11** | **17** | **48** | **21** |

### 4.5.4.5 Pearson's Correlation - Saving Culture and Financial Performance

Correlation analysis was conducted to establish whether a relationship existed between the saving culture and the financial performance of SACCOs in the banking sector in Kenya. Table 4.32 shows that financial performance was positively correlated with saving culture with a correlation coefficient of 0.333.

This reveals that any positive change in saving culture led to improved financial performance.

**Table 4.32: Pearson Correlation -Saving Culture and Financial Performance**

| Variable | | Performance | Saving culture |
|---|---|---|---|
| Performance | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | | |
| Saving culture | Pearson Correlation | 0.333 | 1 |
| | Sig. (2-tailed) | 0.000 | |

### 4.5.4.6 Regression Analysis - Saving Culture and Financial Performance

Regression analysis was conducted to empirically determine whether saving culture was a significant determinant of financial performance. Regression results in Table 4.33 indicate the goodness of fit for the regression between saving culture and financial performance was satisfactory in the linear regression model. An R squared of 0.111 indicates that 11.1% of the variances in financial performance in banking SACCOs are explained by the variances in saving culture. The correlation coefficient of 33.3% indicates that the combined effect of the predictor variables have a strong and positive correlation with financial performance. However with the combination of linear and non linear components the R square improved to 40.5% which implies that the variances in financial performance of SACCOs in the banking sector are explained by the variances in saving culture management. The non-linear addition model is statistically significant with an F statistics of 131.429 and P value (0.000)

The model being estimated takes the form of

$Y = \beta_0 + \beta_4 X_4 + \beta_{41} X_{41}^2 + \mu$

Where Y= Financial performance, $X_4$= Linear composition of saving culture and $X_{41}{}^2$ = non- linear composition of saving culture

The regression model took a quadratic form as suggested by the scatter plot in Fig 4.12 and by R-square which gave a higher value of 0.405, thus a higher explanatory power as compared to the linear regression model which gave an R- square of 0.111, thus validating the model used as shown in Table 4.33.

**Table 4.33: Model Summary - Saving Culture and Financial Performance**

| Model | R | R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change |
|---|---|---|---|---|---|---|---|---|
| 1 | .333a | 0.111 | 0.49609 | 0.111 | 33.382 | 1 | 267 | 0.000 |
| 2 | .636b | 0.405 | 0.40662 | 0.294 | 131.429 | 1 | 266 | 0.000 |

a Predictors: (Constant), saving culture

b Predictors: (Constant), saving culture, saving culture squared

## 4.6.4.7 ANOVA - Saving Culture and Financial Performance

The overall model significance was presented in Table 4.34. An F statistic of 90.559 indicated that the combined model was significant. This was supported by a probability value of (0.000). The reported probability of (0.000) is less than the conventional probability of (0.05). The probability of (0.000) indicated that there was a very low probability that the statement "overall model was insignificant" was true and it was therefore possible to conclude that the statement was untrue.

**Table 4.34: ANOVA - Saving Culture and Financial Performance**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 8.216 | 1 | 8.216 | 33.382 | .000b |
| | Residual | 65.71 | 267 | 0.246 | | |
| | Total | 73.925 | 268 | | | |
| 2 | Regression | 29.946 | 2 | 14.973 | 90.559 | .000c |
| | Residual | 43.98 | 266 | 0.165 | | |
| | Total | 73.925 | 268 | | | |

a Dependent Variable: Performance

b Predictors: (Constant), save culture

c Predictors: (Constant), save culture, save culture squared

Table 4.35 displays the regression coefficients of the independent variable (saving culture). The results reveal that saving culture is statistically significant in explaining financial performance of SACCOs in banking sector in Kenya. This is supported by (b= -0.342, p value = 0.000). The negative beta explains that the SACCOs performance reaches a point where it stagnates and tends to go down whether saving culture is managed or not.

The quadratic model is as summarized below;

$$Y= 2.661+2.642 X_4 - 0.342 X_{41}^2$$

This implied that the null hypothesis failed to be accepted and the alternative hypothesis failed to be rejected.

**Table 4.35: Regression Coefficient - Saving Culture and Financial Performance**

| Model | | B | Std. Error | t | Sig. |
|---|---|---|---|---|---|
| 1 | (Constant) | 6.676 | 0.158 | 42.334 | 0.000 |
| | Save culture | 0.241 | 0.042 | 5.778 | 0.000 |
| 2 | (Constant) | 2.661 | 0.373 | 7.128 | 0.000 |
| | Save culture | 2.642 | 0.212 | 12.45 | 0.000 |
| | Save culture squared | -0.342 | 0.03 | -11.464 | 0.000 |
| a Dependent Variable: Performance | | | | | |

## 4.5.4.8 Scatter Plot - Saving Culture and Financial Performance

Figure 4.15 shows the scatter plot of saving culture and financial performance. The figure reveals that there was a positive relationship between the two variables. Therefore, an increase in saving culture affects financial performance positively. However, it is evident that members' savings can only influence the financial performance of SACCOs positively up to a certain level, beyond which the financial performance tends to decrease.
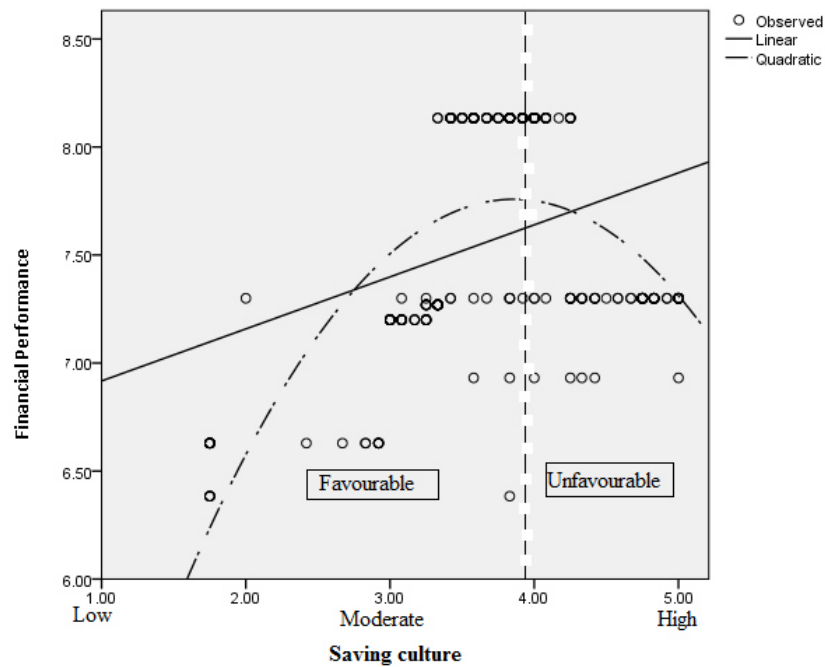
**Figure 4.12: Scatter Plot- Saving Culture and Financial Performance**

### 4.5.5 Investment Policy and Financial Performance

The fifth objective of the study was to establish if investment policy influences the financial performance of SACCOs in the banking sector in Kenya. A reliability test, factor analysis, descriptive analysis, correlation analysis, regression analysis ANOVA and a scatter diagram were done in respect of this variable.

### 4.5.5.1 Reliability Tests for Investment Policy

The reliability results for investment policy attracted a coefficient of 0.854 as shown in Table 4.36 and hence the statements were good for analysis.

**Table 4.36: Reliability Test for Investment Policy**

| Variable | No. of Items | Cronbach's Alpha |
|---|---|---|
| Investment policy | 11 | 0.854 |

**4.5.5.2 Sampling Adequacy**

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.37 showed that the KMO statistic was 0.838 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 2194.801 with 66 degree of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.37. These results provide an excellent justification for further statistical analysis to be conducted.

**Table 4.37: Investment Policy KMO Sampling Adequacy and Bartlett's Sphericity Tests**

| | |
|---|---|
| Kaiser-Meyer-Olkin Measure | 0.838 |
| Bartlett's Chi- Square | 2194.801 |
| Bartlett's df | 66 |
| Bartlett's Sig. | 0.000 |

**4.5.5.3 Factor Analysis for Investment Policy**

Table 4.38 shows the factor analysis results for statements regarding investment policy and financial performance and all twelve statements attracted a coefficient of more than 0.5 hence were retained for further analysis.

**Table 4.38: Investment Policy factor analysis Component Matrix**

| Statement | Component |
|---|---|
| Surplus funds invested in income generating avenues | 0.554 |
| Surplus income invested in land and buildings | 0.609 |
| Surplus earning are reinvested in loans to members | 0.521 |
| Limited avenues for investment | 0.705 |
| Capital investments approved during general meeting | 0.724 |
| Margin is a key decision parameter in investment decisions | 0.761 |
| Long terms investments preferred | 0.763 |
| Short term investments preferred | 0.592 |
| Plough back of dividends as capital encouraged | 0.764 |
| Government bonds investments is highly preferred | 0.637 |
| Corporate bonds investment is highly preferred | 0.665 |
| Stocks investments highly preferred | 0.643 |

### 4.5.5.4 Descriptive Analysis for Investment Policy

The fifth and last objective of the study was to establish whether investment policies influence the financial performance of SACCOs in the banking sector in Kenya. The results were as shown in Table 4.39. Sixty seven percent of the respondents agreed that their SACCO invests surplus funds in income generating avenues, 64% agreed that their SACCO invests its surplus income in land and buildings and 84% agreed that majority of the SACCO surplus earning are reinvested in loans to members. Fifty three percent of the respondents agreed that their SACCO has prohibited avenues of investment, 61% agreed that all capital investments of their SACCO must be approved by members during the annual general meeting by way of voting and 55% agreed that margin was a key decision parameter in SACCO investment decisions.

In addition, 52% of the respondents agreed that long terms investments are more preferred in SACCO because they normally have long term view in their decisions, 60% agreed that short term investments are preferred in their

SACCO because members need their returns in a short period and 60% agreed that members are encouraged to plough back their dividends as capital. Finally 54% of the respondents agreed that investment in Government bonds was highly preferred due to their good returns and reliability, 52% agreed that investment in corporate bonds was highly preferred due to their good returns and reliability and 48% agreed that investment in stocks was highly preferred due to their good returns and reliability. The mean score for the responses was 3.55 which indicate that many respondents agreed that investment policies were a key determinant of financial performance of SACCOs. The results revealed that investment policies influenced financial performance of SACCOS in Kenya. The findings imply that there are strategic plans for investment policy in SACCOs which guide the investment plans.

The findings agree with those in Mayson (2002) who asserted that co-operatives are complex social organizations with many interests coalescing in one place and with a focus on inclusive decision-making. Mayson further argued that members want more than just a financial return from co-operatives and they thus require more involvement than just attending an annual general meeting as shareholders of private companies would do and clarity of purpose, on-going participation by members and competent leadership clearly focused on the agreed upon objectives appear to be key factors in ensuring that these complex organizations remain successful.

The findings corroborate with those in Hesse and Cihak (2007) who on an IMF research found that co-operative financial institutions tend to be more stable in times of crisis, as their investment patterns use the capital of members in ways that best serve their long term needs and interests. They have a lesser tendency to invest in high risk financial markets when compared to other forms of commercial banks. It is therefore thought that their comparative stability, under both average and extraordinary conditions, can help to mitigate crisis impact for members and clientele, especially in the short-term.

**Table 4.39: Investment Policy and Financial Performance**

| Statement | Strongly Disagree (%) | Disagree (%) | Neutral (%) | Agree (%) | Strongly Agree (%) |
|---|---|---|---|---|---|
| Surplus funds re-invested in income generating avenues | 7 | 4 | 22 | 46 | 21 |
| Surplus income invested in land/buildings | 7 | 9 | 20 | 44 | 20 |
| Surplus earning are reinvested in loans | 3 | 4 | 10 | 64 | 20 |
| Limited avenues for investment | 4 | 31 | 12 | 34 | 19 |
| Investments approved in general meeting | 4 | 15 | 21 | 41 | 20 |
| Margin a parameter in investment decisions | 3 | 13 | 29 | 35 | 20 |
| Long terms investments preferred | 5 | 13 | 31 | 35 | 17 |
| Short term investments preferred | 2 | 19 | 19 | 38 | 22 |
| Plough back of dividends encouraged | 5 | 22 | 15 | 36 | 24 |
| Government bonds investments preferred | 3 | 17 | 26 | 34 | 20 |
| Corporate bonds investment preferred | 3 | 16 | 30 | 35 | 17 |
| Stocks investments highly preferred | 6 | 16 | 30 | 30 | 18 |
| **Mean** | **4** | **15** | **22** | **39** | **20** |

### 4.5.5.5 Pearson's Correlation - Investment Policy and Financial Performance

Table 4.40 displays the results of correlation test analysis between the dependent variable (financial performance) and investment policy. The results show that the financial performance was positively correlated with investment policy. This reveals that any positive change in investment policy led to improved financial performance.

**Table 4.40: Pearson Correlation - Investment Policy and Financial Performance**

| Variable | | Performance | Investment policy |
|---|---|---|---|
| Performance | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | | |
| Investment policy | Pearson Correlation | 0.342 | 1 |
| | Sig. (2-tailed) | 0.000 | |

### 4.5.6.6 Regression Analysis - Investment Policy and Financial Performance

Regression analysis was conducted to empirically determine whether investment policy was a significant determinant of financial performance. Regression results in Table 4.41 indicate the goodness of fit for the regression between investment policy and financial performance was satisfactory in the linear regression model. An R squared of 0.117 indicates that 11.7% of the variances in financial performance in banking SACCOs are explained by the variances in investment policy. The correlation coefficient of 34.2% indicates that the combined effect of the predictor variables have a strong and positive correlation with financial performance. However with the combination of linear and non- linear components the R square improved to 46.1% which implies that the variances in financial performance of SACCOs in the banking sector are explained by the variances in investment policy. The non- linear

addition model is statistically significant with an F statistics of 170.042 and P value (0.000)

The model being estimated takes the form of

$$Y = \beta_0 + \beta_5 X_5 + \beta_{51} X_{51}^2 + \mu$$

Where Y= Financial performance, $X_5$= Linear composition of investment policy and $X_{51}^2$ = non- linear composition of investment policy

The above quadratic model is supported by the scatter plot and line of best fit fitted in figure 4.13 below and the value of R- square of 0.461 which was a stronger explanatory power than that given by the linear model with R-square of 0.111, thus validating the model used as indicated in Table 4.41.

**Table 4.41: Model Summary – Investment Policy and Financial Performance**

| Model | R | R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change |
|---|---|---|---|---|---|---|---|---|
| 1 | .342a | 0.117 | 0.49439 | 0.117 | 35.454 | 1 | 267 | 0.000 |
| 2 | .679b | 0.461 | 0.38686 | 0.344 | 170.042 | 1 | 266 | 0.000 |

a Predictors: (Constant), Investment policy
b Predictors: (Constant), Investment policy, Investment policy squared

### 4.5.5.7 ANOVA - Investment Policy and Financial Performance

The overall model significance was presented in Table 4.42. An F statistic of 113.972 indicated that the combined model was significant. This was supported

by a probability value of (0.000). The reported probability of (0.000) is less than the conventional probability of (0.05). The probability of (0.000) indicated that there was a very low probability that the statement "overall model was insignificant" was true and it was therefore possible to conclude that the statement was untrue.

**Table 4.42: ANOVA - Investment Policy and Financial Performance**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 8.666 | 1 | 8.666 | 35.454 | .000b |
| | Residual | 65.26 | 267 | 0.244 | | |
| | Total | 73.925 | 268 | | | |
| 2 | Regression | 34.115 | 2 | 17.057 | 113.972 | .000c |
| | Residual | 39.811 | 266 | 0.15 | | |
| | Total | 73.925 | 268 | | | |

a Dependent Variable: Performance

b Predictors: (Constant), Investment policy

c Predictors: (Constant), Investment policy, investment policy squared

Table 4.43 displays the regression coefficients of the independent variable (investment policy). The results reveal that investment policy is statistically significant in explaining financial performance of SACCOs in banking sector in Kenya. This is supported by (b= -0.516, p value = 0.000). The negative beta explains that the SACCOs performance reaches a point where it stagnates and tends to go down whether investment policy is changed or not.

The regression model is as summarized below,

$$Y= 0.312+ 3.95\ X_5 - 0.516\ X_{51}^2$$

This implied that the null hypothesis failed to be accepted and the alternative hypothesis failed to be rejected.

**Table 4.43: Regression Coefficient for Investment Policy**

| Model | | B | Std. Error | t | Sig. |
|---|---|---|---|---|---|
| 1 | (Constant) | 6.682 | 0.152 | 43.91 | 0.000 |
| | Investment policy | 0.25 | 0.042 | 5.954 | 0.000 |
| 2 | (Constant) | 0.312 | 0.503 | 0.621 | 0.535 |
| | Investment policy | 3.95 | 0.286 | 13.829 | 0.000 |
| | Investment Policy Squared | -0.516 | 0.04 | -13.04 | 0.000 |
| a Dependent Variable: Performance | | | | | |

### 4.5.5.8 Scatter Plot - Investment Policy and Financial Performance

Figure 4.17 shows the scatter plot of investment policy and financial performance. The figure reveals that there was a positive relationship between the two variables. Therefore, an increase in improved investment policy affects financial performance positively. However, it is evident that improved investment policy can only influence the financial performance of SACCOs positively up to a certain level, beyond which it tends to have a negative effect.
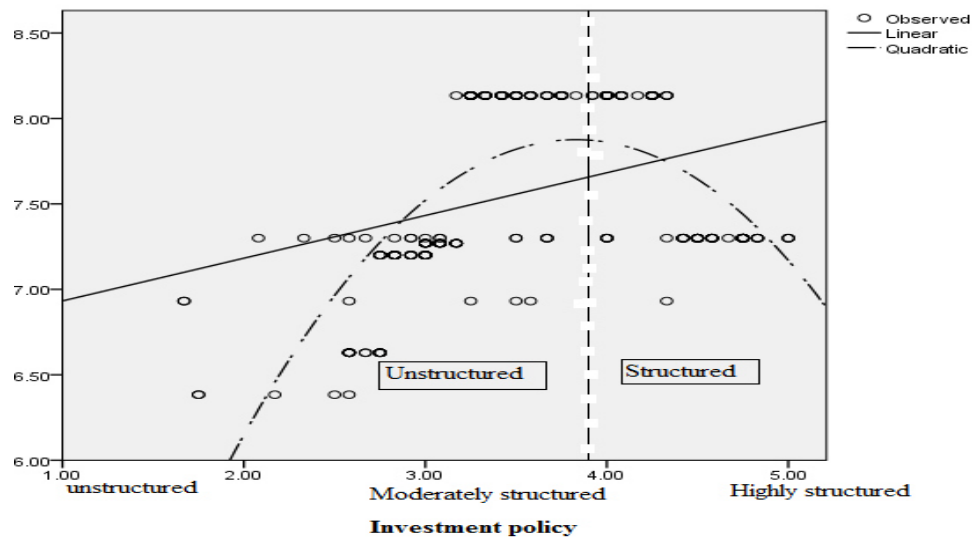


**Figure 4.13: Scatter Plot - Investment Policy and Financial Performance**

## 4.6 Multiple Regression Analysis for the Determinants of the Financial Performance in SACCOs (Overall Model)

A multiple regression analysis was conducted to investigate the joint causal relationship between the independent and dependent variables. Regression results in Table 4.44 indicated that the goodness of fit for the regression of independent variables and financial performance is satisfactory in the linear model. An R squared of (0.538) indicated that (53.8%) of the variances in financial performance are explained by the variances in the determinants of financial performance (competition, internal politics, operating costs, saving culture and investment policy). However with the combination of linear and non- linear components the R square improved to 69.5% which implies that the variances in financial performance of SACCOs in the banking sector are explained by the variances in the determinants of financial performance (competition, internal politics, operating costs, saving culture and investment policy). The non- linear addition model is statistically significant with an F statistics of 26.453 and P value (0.000)

The non- linear regression equation is as follows;

$$Y = \beta_o + \beta_1 X_1 + \beta_{11}X_{11}^2 + \beta_2 X_2 + \beta_{21}X_{21}^2 + \beta_3 X_3 + \beta_{31}X_{31}^2 + \beta_4 X_4 + \beta_{41}X_{41}^2 + \beta_5 X_5 + \beta_{51}X_{51}^2 + \mathcal{E}$$

Where

$Y$ = Financial Performance (dependent variable)

$\beta_o$ = Y Intercept

$\mathcal{E}$ = Error term

$X_1$ = linear composition of competition from commercial banks

$X_2$ = linear composition of internal politics

$X_3$ = linear composition of operating costs

$X_4$ = linear composition of savings culture

$X_5$ = linear composition of investment policies

$X_1^2$ = non-linear composition of competition from commercial banks

$X_2^2$ = non-linear composition of internal politics

$X_3{}^2$ = non-linear composition of operating costs

$X_4{}^2$ = non-linear composition of savings culture

$X_5{}^2$=non- linear composition of investment policies

After regression the model took this form

Financial Performance = $0.97+ 0.687X_1 -0.16X_{11}{}^2 -0.005X_2 + 0.029X_{21}{}^2+ 0.880X_3 -0.136X_{31}{}^2+0.564X_4 -0.049X_{41}{}^2+1.928X_5 -0.293X_{51}{}^2$

## 4.6.1 Correlation Analysis for the Overall Model

The results of the correlation analysis for the overall model are as shown in table 4.44. A correlation coefficient of 0.834 indicated that there was a strong correlation between financial performance and all the predictor variables (competition, internal politics, operating costs, saving culture and investment policy) taken jointly. An R- square value of 0.695 indicated that 69.5% 0f the variations in the financial performance of SACCOs could be explained by variations in the predictor variables. The results also indicated that the predictors were significant with a F- value of 0.000.

**Table 4.44: Model Fit for Financial Performance**

| Model | R | R Square | Std. Error of the Estimate | R Square Change | F Change | df1 | df2 | Sig. F Change |
|---|---|---|---|---|---|---|---|---|
| 1 | .734a | 0.538 | 0.36017 | 0.538 | 61.374 | 5 | 263 | 0.000 |
| 2 | .834 b | 0.695 | 0.29567 | 0.156 | 26.453 | 5 | 258 | 0.000 |

a Predictors: (Constant), Investment policy, operating costs, save culture, competition and internal politics.

b Predictors: (Constant), Investment policy, operating costs, save culture, competition, internal politics, Save culture squared, operating costs squared, competition squared, internal politics squared and investment policy squared.

**4.6.2 ANOVA for the Overall Model**

ANOVA results were presented in Table 4.45. The results indicated that the overall model was significant, that is, the independent variables were good joint explanatory variables/determinants for financial performance (F=58.763, P value =0.000).

**Table 4.45: ANOVA for Financial Performance**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 39.808 | 5 | 7.962 | 61.374 | .000b |
| | Residual | 34.117 | 263 | 0.13 | | |
| | Total | 73.925 | 268 | | | |
| 2 | Regression | 51.371 | 10 | 5.137 | 58.763 | .000c |
| | Residual | 22.555 | 258 | 0.087 | | |
| | Total | 73.925 | 268 | | | |

a Dependent Variable: Performance

b Predictors: (Constant), Investment policy, operating costs, save culture, competition and internal politics.

c Predictors: (Constant), Investment policy, operating costs, save culture, competition, internal politics, save culture squared, operating  costs squared, competition squared, internal politics squared, investment policy squared.

### 4.6.3 Model Summary

Regression results in Table 4.46 indicated that the relationship between financial performance and internal politics was positive and significant (b1= 0.188, p value, 0.019). This implies that an increase in effective management of internal politics by 1 unit leads to improved financial performance of SACCOs by 0.188 units.

The results further indicated that the relationship between financial performance and operating costs was positive and significant (b1= 0.465, p value, 0.000). This implies that an increase in the effectiveness of operating costs by 1 unit leads to an increase or improved financial performance by 0.465 units.

The results further indicated that the relationship between financial performance and saving culture was positive and significant (b1= 0.193, p

value, 0.000). This implies that an increase in saving culture by 1 unit leads to an increase or improved financial performance by 0.193 units. However the results indicated that competition had a negative and significant relationship with financial performance but investment policy had a negative and insignificant relationship with financial performance.

**Table 4.46: Model Summary and Parameter Estimates**

| Model | | B | Std. Error | t | Sig. |
|---|---|---|---|---|---|
| 1 | (Constant) | 6.522 | 0.147 | 44.255 | 0.000 |
| | Competition | -0.499 | 0.056 | -8.904 | 0.000 |
| | Internal politics | 0.188 | 0.08 | 2.359 | 0.019 |
| | Operating costs | 0.465 | 0.066 | 7.046 | 0.000 |
| | Save culture | 0.193 | 0.053 | 3.66 | 0.000 |
| | Investment policy | -0.121 | 0.067 | -1.804 | 0.072 |
| 2 | (Constant) | 0.97 | 0.55 | 1.763 | 0.079 |
| | Competition | 0.687 | 0.392 | 1.752 | 0.081 |
| | Internal politics | -0.005 | 0.307 | -0.015 | 0.988 |
| | Operating costs | 0.88 | 0.368 | 2.39 | 0.018 |
| | Save culture | 0.564 | 0.26 | 2.164 | 0.031 |
| | Investment policy | 1.928 | 0.387 | 4.982 | 0.000 |
| | Competition Squared | -0.16 | 0.063 | -2.552 | 0.011 |
| | Internal politics Squared | 0.029 | 0.064 | 0.448 | 0.655 |
| | Operating Costs Squared | -0.136 | 0.068 | -1.988 | 0.048 |
| | Save Culture Squared | -0.049 | 0.041 | -1.201 | 0.231 |
| | Investment Policy Squared | -0.293 | 0.059 | -4.996 | 0.000 |
| a Dependent Variable: Performance | | | | | |

**4.6.4 Optimal Model**

A multiple regression analysis was conducted to investigate the joint causal relationship between the independent and dependent variables. Regression results in Table 4.47 indicated that the goodness of fit for the regression of independent variables and financial performance is satisfactory. An R squared of (0.678) indicated that (67.8%) of the variances in financial performance are explained by the variances in the determinants of financial performance (linear composition of operating costs, saving culture, investment policy and non-linear composition of competition, operating costs and investment policy).

The non- linear regression equation is as follows;

$$Y = \beta_o + \beta_{11}X_{11}{}^2 + \beta_3 X_3 + \beta_{31}X_{31}{}^2 + \beta_4 X_4 + \beta_5 X_5 + \beta_{51}X_{51}{}^2 + \varepsilon$$

Where

$Y$ = Financial Performance (dependent variable)

$\beta_o$ = Y Intercept

$\varepsilon$ = Error term

$X_3$ = linear composition of operating costs

$X_4$ = linear composition of savings culture

$X_5$ = linear composition of investment policies

$X_{12}$ = non-linear composition of competition from commercial banks

$X_{32}$ = non-linear composition of operating costs

$X_{52}$ = non- linear composition of investment policies

After regression the model took this form

Financial Performance = $1.545 - 0.155X_{11}^2 + 1.138X_3 - 0.155X_{31}^2 + 0.285X_4 + 2.014X_5 - 0.292X_{51}^2$

**Table 4.47: Model Fit for Financial Performance (Optimal Model)**

| Indicator | Coefficients |
|---|---|
| R | 0.824 |
| R Square | 0.678 |
| Std. Error of the Estimate | 0.3013 |

ANOVA results were presented in Table 4.48. The results indicated that the overall model was significant, that is, the independent variables were good joint explanatory variables/determinants for financial performance (F=92.056, P value =0.000).

**Table 4.48: ANOVA for Financial Performance (Optimal Model)**

| Indicator | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 50.141 | 6 | 8.357 | 92.056 | 0.000 |
| Residual | 23.784 | 262 | 0.091 | | |
| Total | 73.925 | 268 | | | |

Regression results in Table 4.49 indicated that the relationship between financial performance and operating costs was positive and significant (b1= 1.138, p value, 0.000). This implies that an increase in the effectiveness of operating costs by 1 unit leads to an increase or improved financial performance by 1.138 units.

Results on Table 4.49 further indicated that the relationship between financial performance and saving culture was positive and significant (b1= 0.285, p value, 0.000). This implies that an increase in saving culture by 1 unit leads to

an increase or improved financial performance by 0.285 units. However the results indicated that non-linear composition of competition, investment policy and operating costs had a negative and significant relationship with financial performance.

**Table 4.49: Optimal Model Summary and Parameter Estimate**

| Variable | Beta | Std. Error | t | Sig. |
|---|---|---|---|---|
| Constant | 1.545 | 0.482 | 3.208 | 0.002 |
| Operating costs | 1.138 | 0.222 | 5.115 | 0.000 |
| Save culture | 0.285 | 0.044 | 6.419 | 0.000 |
| Investment policy | 2.014 | 0.332 | 6.073 | 0.000 |
| Competition Squared | -0.045 | 0.009 | -5.191 | 0.000 |
| Operating Costs Squared | -0.155 | 0.044 | -3.508 | 0.001 |
| Investment Policy Squared | -0.292 | 0.048 | -6.094 | 0.000 |

# CHAPTER FIVE

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.1    Introduction

This chapter presents the summary of major findings of the study, relevant discussions, conclusions and the necessary recommendations. The study sought to establish the effect of competition from commercial banks, internal politics, operating costs, saving culture and investment policy on the financial performance of SACCOs in the banking sector in Kenya.

Each recommendation traces directly to each conclusion in line with practice and policy.

### 5.2    Summary of the Findings

The summary is done in line with the objectives of the study based on the output of the descriptive and inferential statistical analyses guided to test the research hypothesis of the study.

### 5.2.1   Competition and Financial Performance

The first objective of the study was to establish if competition from commercial banks affect financial performance of SACCOs in the banking sector in Kenya. Various methods were used to arrive at the findings. These methods included descriptive statistics, parametric analysis and regression analysis. The findings indicated that there was low competition from the commercial banks.

This observation was arrived at since the employees disagreed that commercial banks are a great threat to survival of their SACCO, savings products of commercial banks are a great competitor to their SACCO products and loans from commercial banks are more favorable than loans from their SACCO. In addition, the employees disagreed that land purchase using a bank loan was

better than using a SACCO loan, interest rate on loans of banks are better than those of the SACCO and commercial banks have better customer service than their SACCO.

The study had hypothesised that competition from commercial banks affects the financial performance of SACCOs in the banking sector in Kenya. The results reveal that competition is statistically significant in explaining financial performance of SACCOs in the banking sector in Kenya. This implied that the null hypothesis, competition from commercial banks does not influence the financial performance of SACCOs in the banking sector in Kenya, failed to be accepted and the alternative hypothesis failed to be rejected.

## 5.2.2   Internal Politics and Financial Performance

In order to determine if internal politics influence financial performance of SACCOS in the banking sector in Kenya, descriptive statistics, regression analysis and analysis of variance (parametric analysis) were conducted. Results indicated that there had in place effective policies to manage internal politics.

Specifically, the study showed that the SACCOs internal politics did not influence the approval of loans in their SACCO and the annual general meetings were not chaotic due to internal politics. Results further indicated that the election of SACCO officials was transparent in their SACCO and there was no interference of political persons.

The study had hypothesised that internal politics influences the financial performance of SACCOs in the banking sector in Kenya. The results reveal that internal politics is statistically significant in explaining financial performance of SACCOs in banking sector in Kenya. This implied that the null hypothesis, internal politics does not influence the financial performance of SACCOs in the banking sector in Kenya, failed to be accepted and the alternative hypothesis failed to be rejected.

### 5.2.3 Operating costs and Financial Performance

The third objective of the study was to examine whether operating costs influences the financial performance of SACCOs in the banking sector in Kenya. To meet this objective, descriptive statistics, regression analysis and ANOVA was conducted. Results indicated that that the SACCOs have effective policies to manage operating costs.

Specifically, results indicated that the employees agreed that salaries, rent and council rates and interest on member deposits were a major cost to their SACCO. In addition the respondents disagreed that committee allowance, annual general meeting and training was a major cost to their SACCO.

. The study had hypothesised that operating costs influence the financial performance of SACCOs in the banking sector in Kenya. The results reveal that operating costs are statistically significant in explaining financial performance of SACCOs in banking sector in Kenya.   This implied that the null hypothesis, operating costs do not influence the financial performance of SACCOs in the banking sector in Kenya,    failed to be accepted and the alternative hypothesis failed to be rejected.

### 5.2.4 Saving Culture and Financial Performance

The study sought to establish the extent which saving culture influence financial performance of of SACCOs in the banking sector in Kenya. The type of analysis used includes descriptive statistics, regression analysis and parametric analysis. Results indicated that there were effective policies that guided the saving culture of the SACCOs. Specifically, the SACCOs have annual savings target for the members, if members doubled their savings the performance of their SACCO would improve and SACCO performs well because members have huge savings.

Results further indicated that the SACCO had annual awards for super savers, members have their own annual savings target, SACCO had a minimum

savings rule which is stauncher than the minimum required by the Ministry and that banks have better customer service than their SACCO.

. The study had hypothesised that the saving culture influences the financial performance of SACCOs in the banking sector in Kenya. The results reveal that saving culture is statistically significant in explaining financial performance of SACCOs in banking sector in Kenya.   This implied that the null hypothesis, saving culture does not influence the financial performance of SACCOs in the banking sector in Kenya, failed to be accepted and the alternative hypothesis failed to be rejected.

### 5.2.5   Investment Policy and Financial Performance

The fifth and last objective of establish if investment policies influence the financial performance of SACCOs in the banking sector in Kenya. To meet this objective, descriptive statistics, regression analysis and ANOVA was conducted. Results indicated that that the SACCOs have effective investment policies.

Specifically, the study findings indicated that SACCOs invested surplus funds in income generating avenues, SACCOs invested its surplus income in land and buildings and majority of the SACCO surplus earning are reinvested in loans to members. In addition, respondents agreed that all capital investments of their SACCO must be approved by members during the annual general meeting by way of voting and margin was a key decision parameter in SACCO investment decisions.

 The study had hypothesised that investment policy adopted influences the financial performance of SACCOs in the banking sector in Kenya. The results reveal that investment policy is statistically significant in explaining financial performance of SACCOs in banking sector in Kenya.   This implied that the null hypothesis, investment policy does not influence the financial performance of SACCOs in the banking sector in Kenya, failed to be accepted and the alternative hypothesis failed to be rejected.

### 5.2.6    Financial Performance

The study sought to establish the financial performance of SACCOs in the banking sector in Kenya. Descriptive statistics, regression analysis and ANOVA were conducted. Results indicated that there was increased financial performance of SACCOs across the years of study. Specifically, the results indicated that there was increased number of members, profit before tax, increased total assets and increased number of dividends disbursed to the members in the SACCOs.

### 5.3    Conclusion

The conclusions were arrived at on the influence of the independent variables (competition from commercial banks, internal politics, operating costs, saving culture and investment policy) on the financial performance of SACCOs in the banking sector based on the findings of the study.

### 5.3.1    Competition and Financial Performance

The study concludes that competition from commercial banks was low. This low competition from commercial banks may have led to improved financial performance of SACCOs due to their flexibility. It can be concluded from this study that when holding other factors constant competition was found to have a positive and significant relationship between competition and financial performance. This implies that managing competition in SACCOs was statistically significant in explaining financial performance of SACCOs in banking sector in Kenya. However, when other determinants were introduced in the analysis, competition was found to have a negative and significant relationship with financial performance due to dilution effect of other factors.

### 5.3.2    Internal Politics and Financial Performance

From the study findings, it can be deduced that SACCOs had effective policies to manage internal politics.  It can be concluded from this study that there

exists a positive significant relationship between internal politics and financial performance of SACCOs. The results reveal that internal politics management is statistically significant in explaining financial performance of the SACCOs.

### 5.3.3   Operating costs and Financial Performance

The study concluded that there were effective policies at the SACCO to govern the operating cost and running of the SACCO. This is because employees agreed that salaries, rent and council rates and interest on member deposits were a major cost to their SACCO. It was possible to infer that the relationship between operating costs and financial management is positive and significant. The study shows that managing operating costs was statistically significant in explaining financial performance of SACCOs.

### 5.3.4   Saving Culture and Financial Performance

The study sought to establish the extent which saving culture influence financial performance of of SACCOs in the banking sector in Kenya. The study concludes that there were effective policies that guided the saving culture of the SACCOs. This is because the SACCOs have annual savings target for the members and SACCO performs well because members have huge savings.

It can be concluded from this study that there exists a positive and significant relationship between saving culture and financial performance. This implies that managing saving culture in SACCOs was statistically significant in explaining financial performance of SACCOs in banking sector in Kenya.

### 5.3.5   Investment Policy and Financial Performance

The study sought to establish the extent which investment policy influences the financial performance of of SACCOs in the banking sector in Kenya. The study concluded that there were good and effective investment policies which led to increased financial performance of SACCOs in the banking sector. It was possible to infer that holding other factors constant investment policy was

found to have a positive and significant relationship with financial performance. The study shows that investment policy was statistically significant in explaining financial performance of SACCOs in the banking sector in Kenya. However, when other factors were introduced in the analysis investment policy was found to have a negative and insignificant relationship due to the dilution effect by other factors.

### 5.3.6   Financial Performance

It was possible to conclude from the study findings that there was improved and increased financial performance of SACCOs across the years. The performance indicators had all increased in number and growth. This implies that the employees and members of the SACCOs had embraced the idea of joining SACCOs and using their products fully.

### 5.4      Recommendations

The recommendations were made regarding the influence of the independent variables; competition from commercial banks, internal politics, operating costs, saving culture and investment policy on the financial performance of SACCOs in the banking sector based on the findings of the study.

### 5.4.1 Financial Performance and Competition

The study sought to establish the influence of competition from commercial banks on the financial performance of of SACCOs in the banking sector in Kenya. The study recommends that the SACCOs should emphasize and enhance that the competition from commercial banks is managed well. They should also ensure that they engage the employees views whenever making changes in the systems so that there will be smooth operations of the activities. The SACCO should also ensure that all employees are well trained about the policies governing the SACCOs to enlighten the employees on their knowledge about SACCO and their profitability.

### 5.4.2 Financial Performance and Internal Politics

The study sought to establish whether internal politics influenced the financial performance of SACCOs in the banking sector in Kenya. Internal politics were found to be determinants of improved financial performance of SACCOs. The study recommends that the SACCOs should put in place measures to safeguard the independence and effectiveness of all members. The management should ensure that all SACCOs have strategic objectives, ensure they come up with common objectives for all members and to make sure all members are treated equally when accessing the products.

### 5.4.3 Financial Performance and Operating Costs

The study sought to establish the influence of operating costs on the financial performance of SACCOs in the banking sector in Kenya. . Operating costs were found to be a determinant of the financial performance of SACCOs in the banking sector in Kenya. The study recommends that the SACCO management should ensure that all SACCOs have effective strategic plans and policies governing the running of the SACCOs which will help in the reduction of operating costs.

### 5.4.4 Financial Performance and Saving Culture

The study sought to establish the extent which saving culture influences the financial performance of SACCOs in the banking sector in Kenya. From the study conclusions, there were good and effective policies on saving culture of SACCOs. The study recommends that the SACCO should emphasize on setting targets on the members on the amounts to save to help improve the financial performance of SACCOs. The government should make it easier for organizations that want to open up micro finance institutions this is because it will bring close service delivery and financial assistance closer to the public.

### 5.4.5   Financial Performance and Investment Policy

The study sought to establish whether investment policy influences the financial performance of SACCOs in the banking sector in Kenya**.** The study recommends the SACCOs to establish and enhance policies for investing so as to attract and encourage large institutional and foreign investors to participate. This would be achieved by increasing investor confidence through establishing relevant policies to enhance the efficiency of the SACCOs. Since Institutional and international investors have a greater capacity to conduct extensive security analyses they will help improve availability of relevant financial information and the overall quality of the information environment of the SACCOs to members and hence improved performance.

### 5.5      Suggested Areas for Further Research

Arising from the findings and the gaps in the study, a replica study is recommended for SACCOs in other sectors in order to test whether the conclusions of this study will hold true. Another study could be carried out using other factors that may influence the financial performance of SACCOs. Future studies could also focus on a comparative study among various sectors. Future studies should apply different research instruments like focus group discussions and primary data only to involve respondents in discussions in order to generate detailed information which would help improve financial performance of SACCOs.

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# APPENDICES

**Appendix I: Letter of Introduction**

Date……………………………

**General Manager**

**……………….SACCO Limited**

**P O BOX …………..Nairobi**

Dear Sir,

## RE: COLLECTION OF RESEARCH DATA

I am a postgraduate student of the Jomo Kenyatta University of Agriculture and Technology pursuing a PhD in Business Administration. I wish to conduct a study entitled "determinants of financial performance of savings and credit co-operatives in the banking sector in Kenya". Your SACCO has been identified as a key player in the SACCO sector in Kenya and hence the decision to have your participation in this important study.

Information will be gathered by use of questionnaires and informal interviews. I therefore request you to kind allow my research assistants to issue questionnaire to randomly selected employees and members of your SACCO.

Responses provided will be handled with utmost confidentiality and ethically and the findings of this study will be used exclusively for academic purposes.

Yours Sincerely

**Hannah Waithera Kiaritha**

**Student Reg. No. HD433/0045/2010**

**Appendix II: Questionnaire**

<u>**Introduction**</u>

This questionnaire is meant to gather information regarding the factors that influence the financial performance of SACCOs in the banking sector in Kenya. Your participation in filling this questionnaire is highly welcome and it will contribute to this research. Your responses to this questionnaire will be handled confidentially and ethically.

<u>**SECTION 1: BASIC INFORMATION**</u>

1) Name of the
   SACCO……………………………………………………………….

2) Kindly indicate your affiliation to the SACCO

   Member        [ ]            employee        [ ]

   Both          [ ]

3) Please indicate the period you have been with your current SACCO

   Less than 1 Year        [ ]        1 -3 Years        [ ]
   4 to 6 years            [ ]        7 to 9 years      [ ]
   More than 9 years       [ ]

## SECTION 2: FACTORS OF SACCO FINANCIAL PERFORMANCE

**This section has five sub-sections. Each sub-section has statements related to a factor influencing financial performance. Please indicate by a tick your opinion on each statement**

## COMPETITION FROM COMMERCIAL BANKS

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|----|-----------|-------------------|----------|---------|-------|----------------|
|    |           | 1                 | 2        | 3       | 4     | 5              |
| 1  | Commercial banks are a great threat to survival of our SACCO |  |  |  |  |  |
| 2  | Savings products of commercial banks are a great competitor to our SACCO products |  |  |  |  |  |
| 3  | Loans from commercial banks are more favorable than loans from our SACCO |  |  |  |  |  |
| 4  | Land purchase using a bank loan is better than using a SACCO loan |  |  |  |  |  |
| 5  | Interest rate on loans of banks are better than those of our SACCO |  |  |  |  |  |

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | Commercial banks have better customer service than our SACCO | | | | | |
| 7 | Commercial banks loan advertisements affect grow of SACCOs | | | | | |
| 8 | Commercial banks normally poach SACCO employees and hence hampering their operations | | | | | |
| 9 | SACCO normally compete for very few skills in financial services who are only affordable to banks | | | | | |
| 10 | SACCO have to rely on commercial banks for many banking services and hence a lot of dependency on banks | | | | | |
| 11 | SACCOs are more competitive than | | | | | |

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|----|-----------|-------------------|----------|---------|-------|----------------|
|    |           | 1 | 2 | 3 | 4 | 5 |
|    | commercial banks in service delivery | | | | | |
| 12 | Banks are managed by well-educated and trained banks than those of SACCOs and hence edging up competition in terms of skills and knowledge | | | | | |

## INTERNAL POLITICS

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|----|-----------|-------------------|----------|---------|-------|----------------|
|    |           | 1 | 2 | 3 | 4 | 5 |
| 1 | Our SACCO has members who are politicians | | | | | |
| 2 | Internal politics influence the approval of loans in our SACCO | | | | | |
| 3 | Our annual general meetings are normally chaotic due to internal | | | | | |

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| | politics | | | | | |
| 4 | Election of SACCO officials is rarely transparent in our SACCO | | | | | |
| 5 | Interference of political persons has affected the profitability of our SACCO | | | | | |
| 6 | Members of our SACCO are leaving for other SACCOs due to internal politics | | | | | |
| 7 | Management decisions are rarely objective due to interference by internal conflict | | | | | |
| 8 | There are several internal informal groupings in our SACCO which are influenced by their personal group interests | | | | | |
| 9 | Informal groupings in our SACCO | | | | | |

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| | have led to a lot of negative energy in operations | | | | | |
| 10 | The management committee is hardly independent in their decisions | | | | | |
| 11 | Voting during SACCO meetings in controlled through severe campaigns by particular members for their own selfish interests | | | | | |
| 12 | Politics of other SACCOs spill over to our SACCO | | | | | |

**OPERATING COSTS**

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 1 | Salaries is a major cost to our SACCO | | | | | |
| 2 | Rent and council rates are major costs to our | | | | | |

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| | SACCO | | | | | |
| 3 | Interest on member deposits is a major cost to our SACCO | | | | | |
| 4 | Committee allowance is a major cost to our SACCO | | | | | |
| 5 | Annual general meeting is a major cost to our SACCO | | | | | |
| 6 | Training is a major cost to our SACCO | | | | | |
| 7 | SASRA regulation requirements are a major cost to our SACCO | | | | | |
| 8 | If the Committee members control expenses of the SACCO there would be more profits for the SACCO | | | | | |
| 9 | The supervisory committee can assist in checking areas where SACCO expenses | | | | | |

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|----|-----------|-------------------|----------|---------|-------|----------------|
|    |           | 1 | 2 | 3 | 4 | 5 |
|    | can be reduced | | | | | |
| 10 | Advertising is a major expense for our SACCO | | | | | |
| 11 | Expenses of our SACCO are well controlled and are at optimal levels | | | | | |
| 12 | Cost of the SACCO operations are a major determinant of profitability | | | | | |

**SAVING CULTURE**

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|----|-----------|-------------------|----------|---------|-------|----------------|
|    |           | 1 | 2 | 3 | 4 | 5 |
| 1 | Our SACCO has annual savings target for the members | | | | | |
| 2 | If members doubled their savings the performance of our SACCO would improve | | | | | |

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 3 | Our SACCO performs well because members have huge savings | | | | | |
| 4 | Our SACCO has annual awards for super savers | | | | | |
| 5 | I personally like saving with the SACCO | | | | | |
| 6 | I personally have my own annual savings target | | | | | |
| 7 | Our SACCO has a minimum savings rule which is more staunch than the minimum required by the Ministry | | | | | |
| 8 | If our SACCO had more savings than what it has today, we would make more profits | | | | | |
| 9 | Members fail to borrow enough due to low saving levels | | | | | |
| 10 | SACCOs that have | | | | | |

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|----|-----------|-------------------|----------|---------|-------|----------------|
|    |           | 1 | 2 | 3 | 4 | 5 |
|    | more savings make more profit than SACCOs with less savings | | | | | |
| 11 | The government should set a mandatory minimum for savings by all Sacco members In order to promote SACCO growth | | | | | |
| 12 | For SACCOs to perform better, they need to be aggressive in encouraging member savings | | | | | |

**INVESTMENT POLICIES**

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|----|-----------|-------------------|----------|---------|-------|----------------|
|    |           | 1 | 2 | 3 | 4 | 5 |
| 1 | Our SACCO invests surplus funds in income generating avenues | | | | | |
| 2 | Our SACCO | | | | | |

| No | Statement | Strongly disagree 1 | Disagree 2 | Neutral 3 | Agree 4 | Strongly Agree 5 |
|----|-----------|-----|-----|-----|-----|-----|
|  | invests its surplus income in land and buildings |  |  |  |  |  |
| 3 | Majority of the SACCO surplus earning are reinvested in loans to members |  |  |  |  |  |
| 4 | Our SACCO has prohibited avenues of investment |  |  |  |  |  |
| 5 | All capital investments of our SACCO must be approved by members during the annual general meeting by way of voting |  |  |  |  |  |
| 6 | Margin is a key decision parameter in SACCO investment decisions |  |  |  |  |  |
| 7 | Long terms investments are more preferred in our SACCO because we |  |  |  |  |  |

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|----|-----------|-------------------|----------|---------|-------|----------------|
|    |           | 1 | 2 | 3 | 4 | 5 |
|    | normally have long term view in our decisions | | | | | |
| 8 | Short term investments are preferred in our SACCO because members need their returns in a short period | | | | | |
| 9 | Members are encouraged to plough back their dividends as capital | | | | | |
| 10 | Investment in Government bonds is highly preferred due to their good returns and reliability | | | | | |
| 11 | Investment in corporate bonds is highly preferred due to their good returns and reliability | | | | | |
| 12 | Investment in stocks is highly preferred due to | | | | | |

| No | Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|----|-----------|-------------------|----------|---------|-------|----------------|
|    |           | 1 | 2 | 3 | 4 | 5 |
|    | their good returns and reliability | | | | | |

**Appendix III: Secondary Data Collection Sheet**

| Name | INDICATOR | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|
| EQUITY SACCO | Profit Before Tax | 1,170,678 | 2,018,238 | 3,781,734 | 4,123,706 | 4,977,810 | 5,243,306 |
| | Total Assets | 263,059,938 | 356,003,602 | 393,079,104 | 440,160,724 | 1,000,638,474 | 946,462,928 |
| | Loans | 246,843,924 | 352,193,295 | 375,574,083 | 426,185,534 | 972,351,340 | 919,220,397 |
| | Savings | 180,401,397 | 237,203,428 | 291,225,366 | 351,944,566 | 465,590,450 | 545,005,777 |
| | Dividends\ interest | 15,153,717 | 30,124,835 | 33,782,142 | 41,177,514 | 58,198,806 | 77,935,826 |
| | Membership | 2554 | 3450 | 3500 | 3450 | 4200 | 6011 |
| | salaries | | 1,311,034 | 1,990,435 | 2,204,859 | 2,474,460 | 3,538,581 |
| | Operating costs | | 1,997,391 | 2,238,675 | 2,435,531 | 3,294,694 | 4,130,952 |
| FAMILY SACCO | Profit Before Tax | 655,167 | 962,152 | 1,348,632.00 | 1,738,706 | 2,400,754 | 2,765,890 |
| | Total Assets | 68,452,311 | 71,504,817 | 98,203,213 | 113,848,179 | 144,163,894 | 173,162,992 |
| | Loans | 67,303,801 | 68,691,520 | 96,087,375 | 108,251,409 | 134,319,868 | 155,848,569 |
| | Savings | 27,780,314 | 43,734,185 | 61,301,476 | 79,032,105 | 109,098,304 | 127,029,830 |
| | Dividends\ interest | 2,084,622 | 2,733,387 | 4,291,103 | 5,532,247 | 8,171,310 | 9,514,350 |
| | Membership | 511 | 656 | 797 | 801 | 946 | 900 |

| Name | INDICATOR | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|
| | salaries | | | | | | |
| | Operating costs | 5,189,673 | 6,030,921 | 6,938,950 | 7,556,936 | 7,589,655 | |
| KENCOM SACCO | Profit Before Tax | | | 5,909,167 | 5,043,390 | 7,179,122 | 9,391,999 |
| | Total Assets | | | 311,242,938 | 369,920,235 | 739,305,628 | 771,854,599 |
| | Loans | | | 286,499,624 | 339,538,639 | 384,755,684 | 405,951,775 |
| | Savings | | | 170,679,315 | 214,763,598 | 267,881,565 | 326,328,811 |
| | Dividends/ interest | | | 15,867,042 | 21,345,980 | 2,756,990 | 33,421,080 |
| | Membership | | | 1,716 | 2,522 | 2,943 | 3,397 |
| | salaries | | | | | | |
| | Operating costs | | | 44,699,699 | 52,256,304 | 59,475,389 | 63,337,706 |
| POSTA SACCO | Profit Before Tax | 1,220,342 | 1,203,454 | 1,224,823 | 975,350 | 1,322,247 | 1,432,344 |
| | Total Assets | 222,662,093 | 237,328,255 | 373,686,998 | 249,041,427 | 359,929,370 | 290,191,753 |
| | Loans | 199,397,349 | 219,175,213 | 242,661,479 | 202,417,721 | 235,226,111 | 201,443,050 |
| | Savings | 186,961,156 | 165,586,756 | 214,514,949 | 195,292,696 | 203,171,304 | 230,690,743 |
| | Dividends/ interest | 23,999,534 | 22,499,397 | 25,001,832 | 22,417,626 | 23,322,011 | 26,480,964 |
| | Membership | 1193 | 1192 | 1138 | 942 | 940 | 930 |

| Name | INDICATOR | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|
| | salaries | 3,783,626 | 3,960,453 | 2,754,680 | 3,309,391 | | |
| | Total revenue | 31,933,644 | 34,804,581 | 40,759,426 | 35,759,289 | 40,502,964 | 43,102,613 |
| | Operating costs | | | 14,530,735 | 14,804,346 | 15,310,120 | 15,504,359 |
| COOP BANK SACCO | Profit Before Tax | | 1,103,565 | 1,299,270 | 1,871,855 | 4,952,380 | 10,087,081 |
| | Total Assets | | 276,767,604 | 710,132,318 | 753,704,796 | 947,288,981 | 1,047,801,371 |
| | | | | | | | |
| | Loans | | 253,640,452 | 266,811,361 | 253,640,482 | 920,998,123 | 982,241,523 |
| | Savings | | 233,146,988 | 291,074,100 | 344,682,185 | 430,545,346 | 517,040,870 |
| | Dividends | | 17,486,024 | 24,450,224 | 29,642,667 | 36,763,018 | 39,226,942 |
| | Membership | | 1896 | 2230 | 2733 | 2729 | 2863 |
| | salaries | | 2,840,646 | 3,353,315 | 3,125,700 | 3,058,245 | 5,483,133 |
| | Total revenue | | | 11,663,524 | 19,256,022 | 23,448,870 | 28,910,760 |
| | Operating costs | | | 9,556,393 | 16,507,173 | 17,839,861 | 16,779,388 |
| KENYA BANKERS SACCO | Profit Before Tax | 19,141,782 | 24,884,364 | 29,305,191 | 33,251,296 | 30,792,602 | 15,508,406 |
| | Total Assets | 3,363,620,024 | 3,739,597,172 | 4,178,870,644 | 4,209,947,723 | 4,806,365,523 | 5,166,730,930 |
| | Loans | 2,658,745,566 | 2,804,622,790 | 2,819,268,955 | 3,002,831,529 | 3,176,439,527 | 3,491,494,004 |

| Name | INDICATOR | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|
| | Savings | 2,561,927,746 | 2,791,759,682 | 3,029,745,109 | 3,267,518,876 | 3,443,520,752 | 3,789,921,374 |
| | Dividends /interest | 256,192,774 | 348,969,960 | 378,718,138 | 408,439,859 | 430,440,094 | 473,740,000 |
| | Membership | 14,650 | 15487 | 16138 | 16565 | 17476 | 18083 |
| | Total revenue | | | | | | |
| | Operating costs | | | | | | |
| NYUMBA SACCO | Profit Before Tax | 315,466 | 914,128 | 618,450 | 2,150,556 | 2,137,543 | 2,625,256 |
| | Total Assets | 30,423,630 | 37,138,730 | 54,464,906 | 62,136,142 | 81,976,583 | 107,713,803 |
| | Loans Disbursed | 27,056,922 | 35,152,167 | 40,324,164 | 58,251,639 | 63,494,797 | 96,732,139 |
| | Savings | 19,541,682 | 22,953,542 | 30,292,378 | 38,877,723 | 50,754,003 | 65,339,692 |
| | Dividends paid | 1,563,335 | 2,080,000 | 2,726,400 | 3,798,995 | 4,466,173 | 6,967,079 |
| | Membership | 205 | 215 | 273 | 321 | 367 | 425 |
| | Salaries | 292,000 | 332,000 | 394,000 | 521,993 | 714,836 | 809,552 |
| | Total revenue | 2,632,262 | 4,374,911 | 5,342,106 | 8,719,615 | 9,043,852 | 13,882,184 |
| | Operating costs | 2,316,796 | 3,460,783 | 4,723,656 | 6,569,059 | 6,906,309 | 11,306,925 |

**Appendix IV: List of SACCOs in Kenya Banking Sector**

1)      Kencom Sacco Ltd

2)      Co-operative Bank Sacco

3)      Equity Bank Sacco

4)      Family Bank Sacco

5)      Nyumba Sacco

6)      Kenya Bankers Sacco

7)      Postbank Sacco

| Type of Variable | Data Collection method | Type of Scale | Variable Name | Type of analysis | Indicator | Level of analysis |
|---|---|---|---|---|---|---|
| Dependent Variable | Data Sheet | Nominal | Financial Performance | Quantitative | Profit Total assets Membership Dividends Savings Loans | Descriptive and Inferential statistics |
| Independent Variable | Questionnaire and informal Interview | Interval and Nominal | Competition from commercial banks | Qualitative and Quantitative | Bank saving products Advertisements of loans Customer service | Descriptive and Inferential statistics |
| Independent Variable | Questionnaire & Interview | Interval and Nominal | Internal Politics | Qualitative and Quantitative | AGM interruption Manipulation of loan approvals | Descriptive and Inferential statistics |
| Independent Variable | Questionnaire & Interview | Interval and Nominal | Operating costs | Qualitative and Quantitative | Salaries Rent AGM Expenses | Descriptive and Inferential statistics |
| Independent Variable | Questionnaire & Interview | Interval and Nominal | Savings Culture | Qualitative and Quantitative | Savings targets Saving awards | Descriptive and Inferential statistics |
| Independent Variable | Questionnaire & Interview | Interval and Nominal | Investment policies | Qualitative and Quantitative | Policy document Amount invested | Descriptive and Inferential statistics |

**Appendix V: Operational Definition of Term**