DETERMINANTS OF FINANCIAL PERFORMANCE OF AGRICULTURAL COOPERATIVE SOCIETIES IN BARINGO COUNTY, KENYA

JOSEPH KIPRUTO KIMETTO

A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT FOR AWARD OF DEGREE OF MASTER IN BUSINESS ADMINISTRATION (FINANCE OPTION) IN THE JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

OCTOBER, 2017

DECLARATION

This research project is my original work and has not been presented for award of degree in any other university.

…… ……

JOSEPH KIPRUTO KIMETTO **DATE**

HD333-C007-2276/2015

Supervisor

This research project has been submitted for examination with my approval as University Supervisor.

…… …….

DR. KIMANI E. MAINA **DATE**

Jomo Kenyatta University of Agriculture and Technology, Kenya.

DEDICATION

I dedicate this research project to my family for being supportive to me both financially and morally throughout the period of the course of study.

ACKNOWLEDGEMENT

I acknowledge God for care and grace throughout my studies. Secondly, I thank my supervisor, Dr. Kimani E. Maina for his professional guidance on my research project. My family has stood with me and supported my research work. May God bless you. I also acknowledge my classmates for their time on helpful discussions in regard to our course.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

ABBREVIATIONS AND ACRONYMS

ANOVA	Analysis of Variance
GDP	Gross Domestic Product
ICA	International Cooperative Alliance
ILO	International Labour Organization
LED	Local Economic Development
MPC	Marginal Product of Capital
NPV	Net Present Value
ROA	Return on Assets
ROE	Return on Equity
SACCOs	Savings and Credit Cooperative societies
SPSS	Statistical Packages for Social Sciences
USA	United States of America

DEFINITION OF TERMS

Agricultural cooperative societies Agricultural cooperative societies are organizations formed by the farmers through pooling resources to enable them achieve benefits that could not have been attained alone (Francesconi and Heerink, 2011).

Cost of finance Cost of finance means the total expenses associated with securing funds to undertake organization's activities. They include interest payments, financing fees charged by intermediary financial institutions and the charges by personnel to complete a financing process (Kasali, 2013).

Internal control practices Internal control practices means the policies, procedures and organizational structures designed to provide reasonable assurance that business objectives will be achieved and undesired events will be prevented, detected and corrected. It can further refer to a process employed by the organization to prevent fraud and ensure reliable financial reporting (Rezaee, et al, 2001).

Risk management Risk management refers to the process of identifying, assessing and controlling threats to an organization's capital and earnings (Mikes & Kaplan, 2014).

Social capital Social capital is the core relationship between trust and norms of reciprocity, networks and institutions, where every factor influences each other and can reinforce or hinder the degree of cooperation (Kodama, 2007).

ABSTRACT

Cooperative societies strive to perform well in order to grow and increase their value. However, many of these organizations societies in Kenya are yet to achieve their potential due to management and financial difficulties. Furthermore, they have not been able to serve their members as expected and their contribution to economic growth has been limited. Therefore, it was necessary to carry out a study on the determinants of financial performance of agricultural cooperative societies in Baringo County. The study was guided by cost of finance, internal control practices, risk management and social capital as independent variables and financial performance as dependent variable. Theories that relates to the study such as; Cost of capital theory, Merton risk model, Reliability theory and Social capital theory were reviewed. Target population of the study was all accountants and managers of cooperative societies in Kenya. Accessible population for the study was 19 accountants and 19 managers of agricultural cooperative societies in Baringo County, Kenya. Descriptive survey design was employed, involving all 38 respondents with questionnaires as the data collection instruments. A preliminary study was undertaken from 5 accountants and 5 managers of 5 cooperative societies in Nakuru County to determine the reliability and validity of the questionnaires. Data was processed and analyzed by descriptive and inferential analysis with aid of statistical packages for social sciences (SPSS) version 23. Findings were presented by statistical tables. The findings of the study indicated that cost of finance, internal control practices, risk management and social capital influences financial performance of agricultural cooperative societies. It was found that the level of interest rates as elements of costs of finance affected performance. There was positive relationship between risk management and financial management. A strong degree of association was portrayed between cost of finance, internal control practices, risk management and social capital and financial performance. Therefore, it was concluded that proper risk management practices could enable the cooperatives to reduce chances of losses thus improving returns from their operations. The study recommended for establishment of effective organizational financial policies to govern the costs of finance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Cooperative societies are autonomous associations of persons unified voluntarily to meet their economic, social and cultural needs through jointly owned and democratically controlled enterprises (International Cooperative Alliance (ICA, 2010). They play an important role in economic growth and development of countries all over the world particularly through enabling members to achieve a common goal and also by providing employment opportunities (Mwangi, 2010). They exist in the sectors such as agriculture, finance, and housing among others and have unique advantages based on the special relationship they have with their members.

Cooperative societies incur various charges and interests upon acquisition of funds they need to undertake their activities. Cost of each component of capital like shares, debt and capital reserves constitute the cost of finance of cooperative societies (Kumar and Gena, 2015). The financial performance of cooperatives is highly linked to the decisions based on the capital budgeting thus an appropriate estimate of the cost of finance expected is very crucial (Kasali, 2013). Moreover, knowhow on cost of finance and how it is influenced by financial leverage is useful in financial management of agricultural cooperative societies.

Organizations achieve financial performance and other goals through internal control practices by enabling production of reliable financial reports which controls acquisition and utilization of resources (Amudo and Inanga, 2009). Therefore, for the purpose of attaining efficiency in organizational operations, management have to establish appropriate internal control systems. Organizations have policies that safeguard their assets and records but they require proper internal control practices in place to guide them accordingly (Beasley et al., 2000). Cooperative societies always aim to improve their internal control systems to increase members' confidence so as to improve the volume of produce and also perform well in the competitive environments (Crutchley et al., 2007). Effective policies and procedural guidelines help to determine how the control activities are to be carried out. Appropriate

information system avails sufficient information for adequate control over the managers thus enhances financial performance. Therefore, control activities enable cooperative societies to address the financial and operational risks to create an effective platform for set goals and objectives (Karagiorgos et al., 2009).

Risk management practices are very crucial as far as financial performance of organizations is concerned. Companies are mainly exposed to credit and operational risks leading to uncertainty regarding the company's investments and investment opportunities due to product markets dynamics (Maina, 2015). Risks in the market influences financial performance of individual companies and the entire economy at large. Chandresh, (2012) asserted that financial performance can be adequately realized if appropriate risk management practices are employed to safeguard organization from unexpected volatility of returns.

Cooperative societies ought to study the trend of the interests' rates on the loans offered by financial institutions to their members before making recommendation on the same. Moreover, the amount that the members are seeking should be convenient for the organization and they should be advised to utilize such funds for purposes that are likely to generate returns that can benefit the members economically and also repay the loan as required (Muriuki et al., 2014). Credit management is also enhanced by proper documentation and appropriation of financial statements of agricultural cooperative societies since it contributes to efficient financial management.

Members of cooperative societies have long term goals hence it is crucial to have trust upon the managers who are their agents (Francesconi and Heerink, 2011). Management on the other hand should work hard to deliver services to the members according to their expectations so as to maintain loyalty in the organization. Trust and loyalty are important elements of social capital in agricultural cooperative societies that contributes towards loss minimization as well as ensuring organizational financial performance. According to Flap and Volker, (2004), agricultural cooperatives with adequate level of social capital are always in good positions of reducing free-riding problems. Decisions on running cooperatives are mainly made by the owners who also exercise control of these organizations. Therefore, the share capital subscribed by the members is intended to earn but is limited to a fixed rate in many times. This is very important concept mainly because in the cooperative setup, they are distinctly

different from characters of enterprises usually based on the use of risk capital (Ruchira, 2013). The matters of risk and possible returns on the investment as such are only secondary. For instance, cooperatives commonly put a par value on their capital shares. They usually limit the ownership of voting shares to active patrons on the basis of one man one vote.

1.1.1 Global Perspective of Cooperative Societies

Agricultural cooperative societies are the main pillars of economic development of most countries worldwide. However, farmers encounter various obstacles in a bid to raise their living standards whose solutions can be found in strong cooperative societies (Kumar et al., 2015). 85% of the agriculture sector in India is occupied by small and medium scale farmers. Cooperative societies have helped these farmers to expand their crop productivity thus generating more income that has improved their livelihoods. They have also benefited through increased efficiency of various agricultural inputs and making better profit through the efforts of cooperatives.

Agriculture contributes to approximately 35.47% of GDP and about 63% employment opportunities of Bangladesh. Moreover, farmers work under the framework of National cooperative policy of the year 2012 which has immensely improved marketing for their agricultural products (Siddicue, 2015). Famers' cooperative organizations contribute to development as they are viewed as catalyst in the process of wealth creation. It is believed that levels of economic activities normally improve when conditions needed for such improvement are created. However, the study indicated that some farmers have not improved according to their potential in their agricultural activities due to lack of productive resources such as micro-credit, extension services and effective market outlets.

Julie (2006) did a study on the economic culture of U.S.A agricultural cooperatives. She found that industrialization provided an alternative set of norms offered the basis for cooperative identities encompassing more than a connection with producers. Therefore, the norm of cost minimization forced cooperatives to make a choice to enhance financial performance. Industrialization further brought greater prominence to the cooperative executives or managers who could look at commodity production and marketing from a broad systems perspective and advocated for managerial top-

down culture within cooperatives which was deemed as an ingredient of effective financial performance.

Kristina Yngwe (2014) noted that agricultural cooperative societies are very significant in the economy of Sweden. She indicated that the agriculture sector employs 56,900 full time workers and is focused on milk production, pig production, wheat and barley thus greater emphasis on financial performance of these organizations was important. Co-operatives are by nature concerned with democratic and human values as well as caring for the environment as well as enhancing sustainable development, employment and creating awareness according to International Labour Relations (ILO, 2003). Although, the primary objective of forming group farming cooperatives is to increase agricultural outputs, it has been possible to get them involved in marketing of their produce as well.

Akira Kurimoto (2014) asserted that cooperative societies had taken diverse development paths in different sectors of Japan which required application of appropriate methods in order to understand them and promote good financial performance in those organizations. He further argued that government systems such as institutional credit systems had a significant impact on cooperative societies as farmers pressed government to adjust price beyond equilibrium which stimulated overproduction and influenced financial performance. Farmers are the single largest group of users and managers of land, water, and other ecological resources throughout in Japan. Most small-holder farmers require services and information obtainable through agricultural cooperatives. Adoption of appropriate technology and innovative ideas increase agricultural productivity and incomes of the farmers.

1.1.2 African Perspective of Cooperative Societies

In Africa, it has been widely acknowledged that Agricultural cooperative societies make an important contribution to sustainable economic growth by making markets function better for the poor. They therefore play a significant role in food production, distribution and in supporting long-term food security. In South Africa, these organizations are yet to significantly contribute towards poverty reduction and food security. For instance, inadequate funds have contributed to inappropriate management and failure of many cooperative societies in the country. Khumalo

(2014) found that agricultural cooperative societies were supported by local economic development (LED) but some members were excluded in the major initiatives concerning the same. Therefore, they were denied the opportunities associated with LED for job creation in the agriculture and housing sectors. The low capacity and educational levels in agricultural cooperatives is the main reason for weak management, poor governance and inability to effectively run their enterprises on sound business practices.

A study by Odetola., et al., (2015) indicated that cooperative societies had impact on members' welfare and played a role in poverty reduction and capital formation in Nigeria. However, the findings revealed that rural poor farmers were not properly served by formal financial institutions since they refrain from advancing loan to them due to bureaucratic procedures and high cost service involved in lending. Therefore, cooperative societies remained crucial to them as they were better placed to recommend them to financial institutions in regard to acquisitions of credit facilities. There is need for formulation of better policies to provide universal platform for developments in the agriculture industry to ease finance access to cooperative members so that they do more and benefit from their produce.

According to (Rwekaza & Mhihi., 2016) noted cooperative societies in Tanzania are promoted through cooperative development policy. The biggest challenge is how to determine how the effects of policies are reflected in the cooperative development putting into consideration the actions of cooperative movement in the country. Therefore, members should be involved in the formulation, implementation, monitoring and evaluation of policies. Cooperatives promote equality in the dimension of access to services and goods depending on the needs of the time because they have strength of penetrating and grabbing the available opportunities in services and businesses than an individual person can do in Tanzania. However, Tanzania cooperatives have failed to promote equality in the sense of ownership, control and benefits accrued from the businesses undertaken by these organizations.

Faharat, (2009) noted that the share of agriculture sector in GDP was about 14.5% in the year 2006 in Egypt. He asserted that agricultural cooperative societies contributed to capital formation in the country. However, they encounter the challenges of striving to balance between the maximizing the social and economic potential of

farmers while protecting them from the integrity and quality of the cooperative managers whose competence has been put into question in many occasions. This sector supports livelihoods of many people in the country and increased government involvement is a necessity.

Cooperative societies facilitates adoption of improved technology thus allows farmers to receive better prices in Ethiopia (Getaw, 2010). However, their impact on commercialization is very limited and heterogeneous since only 10% of the marketable surplus pass through cooperatives. This lack of adequate knowledge of cooperative principles and expectations makes members dependent on the government for funding and sustenance, which is a recipe for failure. Besides a lack of understanding the cooperative business model by new participants, there is a plethora of other factors hampering cooperatives from living to their full potential. Due to lack of conflict management skills, infighting within cooperatives remains an obstacle. Limited technical skills result in poor quality services and products, which cannot compete favorably in the market. Owing to the various inadequacies, the channeling of support from the government and other development agencies tends to create yet another challenge of overdependence in Ethiopia.

1.1.3 Kenyan Perspective of Cooperative Societies

In Kenya, the most prominent cooperative societies are the agricultural cooperative societies. They mainly focus on coffee, dairy, pyrethrum, cotton and horticulture. They also major in collection, processing, storage and sale of the produce from the members according to ministry of cooperative development report of the year 2012. These societies also supply members with seeds, fertilizers, machinery and equipment Kenyan cooperative sector has annual turnover of Kshs 436 translating to about 45% of the country's Gross Domestic product (GDP) thus have potential to contribute substantially to financial deepening and intermediation. According to Mwangi, 2010, cooperative societies can provide more jobs to the unemployed and also make improvement in the provision of credit and financial advisory services to their members. They have however encountered various hindrances in their bid to perform well financially. These problems are highly associated with the way financial management is excised in cooperative societies thus members are living poverty due to inappropriate financing structures of their organizations (Gachara, 1990).

Wanyama, 2007 indicated that the growth of cooperative societies was on upward trend due to sector liberalization. He further found that Kenya had 10, 642 cooperative societies which included agricultural and non-agricultural organizations. However, Savings and credit co-operatives (SACCOs) constituted over 70 per cent of the non-agricultural co-operatives and they had been more than all agricultural co-operatives since the year 2003. According to the annual report by co-operative societies in Mogotio sub-county, Baringo County, agricultural cooperative societies are handling little volumes of produce contrary to the potential that exists in the area. Low volume of production leads to little income and growth which compels the organizations to huge external borrowing altering its capital structure. The capacities of societies to offer better services to its members are limited and therefore cannot engage successfully into other businesses. Cooperative societies ought to have adequate resources to carry out their activities effectively but little funds were being received from all operations hence hindering effective financial performance.

1.1.4 Cooperative Societies in Baringo County

Agriculture is widely practiced in Baringo County whereby crops such as coffee and macadamia are grown. They also undertake livestock farming including bee keeping, cattle, goats and sheep. However, dairy farming is one of the major agricultural activities they carry out across Baringo Central, Baringo North, Mogotio and Koibatek sub-counties. Farmers in this county have similar goals thus agricultural cooperative societies have been established in this area to help them fulfil their common needs. There are 19 agricultural cooperative societies and they realized a turnover of Kshs. 470,735,000 according to annual report of 2015 by Department of Industrialization, Commerce, Tourism & Enterprise Development, Co-operative Development and Marketing Division of Baringo County. As such, it is evident that production of crops by the farmers in the county is still very low compared to the potential that exists.

The majority of the members of the society are dormant hence the volume of produce handled by the societies is inadequate. The growth and strength of societies is strongly linked to volume of production. The capacities of societies have been put into doubt due to mismanagement that is hindrance to better services to the members. Low production has also limited the possibilities of societies to diversify into other areas of

business as a result of poor operational financial performances. Members need to be conversant not only how to produce high quality and quantity of produce to be marketed by the society, but also knowledge of the co-operative organization itself since they are the owners and decision-makers of the society. Capacity building at all levels is required but there have been limitation of funds both from the societies and other possible support partners. The carrying out of activities concerning cooperative societies requires adequate resources but on contrary, little is received for all operations thus leading to insufficient financial performance.

1.2 Statement of the Problem

Agricultural co-operative societies play a major role in resources mobilization, agro-processing and marketing of agricultural produce. However, their financial performance has been insufficient thus have not served their members effectively. Cooperative societies are undergoing difficult moment trying to adjust to economic liberalization and little has changed recently. For instance, stiff competition has largely affected them due to unmatched strength of other cooperatives such as commercial cooperative societies. They have of late experienced inadequate financial resources and low volumes of produce thus limiting their service delivery to the members. As such, the potential of cooperative societies in the country has hence been hindered by inadequate financial performance.

1.3 Objectives of the Study

The study was guided by both general and specific objectives.

1.3.1 General Objective of the Study

The main objective of the study was to assess the determinants of financial performance of agricultural cooperative societies in Baringo County.

1.3.2 Specific Objectives of the Study

Specific objectives include the following:

i. To assess the effects of cost of finance on financial performance of agricultural cooperative societies in Baringo county.
ii. To establish the influence of internal control practices on financial performance of agricultural cooperative societies in Baringo county.
iii. To determine the effects of risk management on financial performance of agricultural cooperative societies in Baringo county.
iv. To find out the effects of social capital on financial performance of agricultural cooperative societies in Baringo county.

1.4 Research Hypotheses

H_{01}: The relationship between cost of finance and financial performance of agricultural cooperative societies is not statistically significant.

H_{02}: The relationship between internal control practices and financial performance of agricultural cooperative societies is not statistically significant.

H_{03}: The relationship between risk management and financial performance of agricultural cooperative societies is not statistically significant.

H_{04}: The relationship between Social capital and financial performance of agricultural cooperative societies is not statistically significant.

1.5 Significance of the Study

Financial performance is a major concern for cooperative societies and it has to be effective for them to serve members adequately. Most of cooperative societies in Baringo County have lagged behind because of insufficient financial resources and low volume of produce. Their existing potential has not been fully realized. Therefore, the current study will benefit the cooperative society's managers by enabling them make informed decisions considering the aspects of internal control practices and cost of finance in regard to financial performance. The ministry of cooperatives and development at county levels will also benefit from the research when making policies concerning cooperative societies. Other researchers are also set

to benefit by referring to it for proper guidelines in their works especially in the field of cooperatives.

1.6 Scope of the Study

The study was carried out from the accountants of agricultural cooperative societies in Baringo County, Kenya. It was guided by theories; Cost of capital theory, Merton model, reliability theory and social capital theory, and the aspects of cost of finance, internal control practices, risk management and social capital. It was undertaken from the month of March, 2017 to May, 2017.

1.7 Limitations of the Study

The researcher experienced difficulties while undertaking the research. There were minor limitations which included accessibility problems to agricultural cooperative societies in Baringo County. Moreover, the researcher struggled trying to convince the respondents to provide information that was meant for academic purpose and their confidentiality would be kept. Some respondents further cited lack of time thus took long to fill the questionnaires which sometimes leading to inconveniences.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The researcher reviewed the past literature which is related to the topic of study. It included theories, empirical studies, conceptual framework, summary of literature review and concepts touching on the determinants of financial performance of cooperative societies.

2.2 Theoretical Review

Theories that assist in describing financial performance in regard to agricultural cooperative societies have been reviewed. They include; cost of capital theory, Merton risk model, reliability theory and social capital theory.

2.2.1 Cost of Capital Theory

Graham, (2001) developed cost of capital theory which describes the return required by the financial institutions and other organizations providing finance to corporate or individuals for the purpose of acquiring assets and ensuring continuation of other business operations. The cost of acquiring funds must be reflected in the capital structure used to finance the investments by the cooperative societies hence inclusion of the cost of equity and debt is necessary. This model further states that the cost of capital can be used as the discount rate in net present value of the investment project appraisal techniques applied by the cooperative societies. Therefore, investments with positive net present values at the cost of capital are accepted because they earn more than the investors' required rate of return and will add to their wealth. Negative NPV investments are rejected because they reduce the members' wealth by earning less than their target rate of return (Barbuta, 2009). The cost of capital therefore has a pivotal role to play in the financial management of cooperative societies through linkage between investment decisions and the finance decisions.

According to (Ogbulu, 2012), the models used to calculate the cost of each source of finance all start from the premise that the required rate of return is a function of the investors' expectations of future cash-flow returns, expressed as a percentage of the

current value of their investment. The cost of equity share capital is calculated using the dividend valuation model. The usual assumption made is that future dividends are expected to grow at a reasonably even rate. Preference share capital usually pays a constant dividend each year, so no growth function is required. For debt, the future cash-flow stream is the interest payments. As with preference shares, these cash flows are constant, but, given that a company can deduct interest payments in determining taxable profits, it will experience a tax saving on the interest it pays.

Graham, (2001) noted that tax shield reduces the cost of debt finance from the company's perspective. Most projects draw on the company's general pool of finance, which incorporates funds from all of the company's finance providers. As a firm increases its gearing, the proportion of this cheap finance within the capital structure increases. All other things being equal, this will reduce the cost of finance. As a company gears up, shareholders' returns become increasingly volatile, owing to the fixed interest bill that must be repaid before they are given their cut. This extra risk increases their required rate of return. All other things being equal, this increasing cost of equity will increase the cost of capital.

Pandey, (2009) asserted that in a market with no imperfections, getting obsessed about where the money comes from is indeed misguided hence businesses should focus on the quality of their investment decisions. The problem is that the world is not perfect. In particular, the presence of taxation gives debt finance an additional advantage. Because interest is tax-deductible, the use of debt finance gives rise to a tax saving. In the real world, companies do not raise their debt-to-equity ratios to such extreme levels. This is because at high levels of gearing the costs of financial distress that may lead to liquidation are much more likely. This means that the cost of equity and debt increase significantly at high levels of gearing, causing the cost of capital to increase. Given market imperfections, the cost of finance is affected by changes in the gearing level within the company. It is clear that the weighted average cost of capital lies at the heart of finance, linking together the key areas of the investment and finance decisions to measure whether the business has created or destroyed value.

2.2.2 Merton Risk Model

The Merton risk model was developed by Merton in (1974) and argued that organizations ought to understand their ability to meet financial obligations such as servicing of the existing debts. This model is applicable in cooperative societies who borrow to undertake their activities effectively and also guarantee their members for loans from financial institutions. They get to learn more about risk management and undertake appropriate measures to avoid getting into credit default. It is important for cooperative societies to retain solvency by clearly analyzing the debts accrued and the maturity dates. Credit risk concerns the possibility of financial losses due to changes in the credit quality of market participants (Bhamra et al., 2010). The most radical change in credit quality is a default event.

Chen, (2009) noted that operationally, for medium to large capital firms, default is normally triggered by a failure of the firm to meet its debt servicing obligations, which usually quickly leads to bankruptcy proceedings. Thus default is considered a rare and singular event after which the firm ceases to operate as a viable concern, and which results in large financial losses to some security holders. Under Merton's model, a default event is deemed to occur for a firm when its assets reach a sufficiently low level compared to its liabilities. The Merton model takes an overly simple debt structure, and assumes that the total value a firm's assets follows a geometric Brownian motion under the physical measure of the mean rate of return on the assets and the asset volatility.

Merton, (1976) stated that organizations strive to spread risks to minimize exposure to credit risks in regard to assets and liabilities. A good risk indicator in Merton's framework is the ratio of debt to asset and in the spread is indeed an increasing function of leverage. Merton model has the highly appealing feature of connecting credit risk to underlying structural variables. It provides both an intuitive economic interpretation and an endogenous explanation of credit defaults, and allows for applications of option pricing methods. Therefore, it does not only facilitate security valuation, but also address the choice of financial structure of an organization.

2.2.3 Reliability Theory

According to (Mane, 2014), Reliability theory explains the capability of the control system to effectively undertake its role and accomplish it within the required amount of time. Therefore, it states how various organizational components of general internal controls can be integrated to spearhead the company to good financial performance. Each element of the system should work appropriately for the whole practice to bear fruits. The reliability of a component of internal control system is determined on the basis of indicating that it can contribute to the success of a company (Jokipii, 2010). The main objective of the organization is to maximize wealth and failure to do so is not an option. Moreover, many entities have wrongly designed their internal control systems and this may be the reason that they are not performing well.

Gnedenko et al., (2014) argues that internal control practices play a greater role in the identification, assessment and mitigation of risks. They detect and prevent error on timely basis which enables the organization from incurring huge losses. Organization ought to ensure that their internal control systems are strong by giving full support from the top management. Poor internal control practices are uneconomical and the organization incurs huge operational costs leading to little net gains from their businesses. The internal control systems should be realistic and cost effective thus there is a need for appropriate evaluation and judgment. After the formulation of the process and internal control system reliability estimates, financial performances of the organization from the past and present should be compared to provide a framework for judgment of the impact of an internal control system on the firm's costs and returns. Reliability theory is of importance to both internal and external auditors since it helps them to gain more insight on the internal control practices thus helping them to ensure that the level of compliance is attained.

According to Rausand, (2014), many developments have arisen giving opportunities to the enterprise managers' strategies to establish and maintain proper internal control systems. It is upon the corporate leaders to undertake routine supervisory on the systems to ensure that they are always accurate for effective financial performance. Failure to acknowledge and adopt new changes in the accounting practices has contributed largely to the poor financial performance of organizations. For instance,

technological advancements has provided loopholes for fraud and lack of interest and support from the top management to improve internal control systems to counter the menace has negatively affected them (Hoque, 2006).

2.2.4 Social Capital Theory

Valentinov, (2004) asserted that through Social capital theory, social capital reduces costs in organizations since trust and reputation among the members and managers reduces the requirements for unnecessary and expensive pre-cautionary measures. Therefore, management is able to make decisions that enhance organizational financial performance without many hindrances (Gabre-Madhin, 2001). Social capital theory suggest that social capital contributes immensely to the cooperation in cooperative societies which leads to effective operations and costs minimization thus plays a major role in determining the success or failure of an organization (Krause et al., 2007).

Paldam and Svendsen, (2000) argues that cooperative societies need social capital at a great extent since they are network organizations whose purpose is to provide mutual benefits to the members. Agricultural cooperative societies are designed to bring members together to take farm produce, to create and coordinate resources and to undertake other activities for the interests of the members. Therefore, individual member farmers running their farms on their own are joined together voluntarily as one entity for their mutual benefits, participating in cooperative business as customers and owners and acting collectively (Lin, 2002). As such, there should be trust among themselves to good running their organization as argued by the social capital theory. As a result, marketing of their products and purchasing their raw materials through their cooperative becomes easier due to the commitments they make.

According to Paldam and Svendsen, (2000), the reciprocity among members enables them to take advantage of collective actions. Cooperative society members may not be familiar with financial markets but social capital can enable them find financial resources. They should trust the price received through cooperative for their products so as to maintain collective marketing. Especially in bad times, members hurt economically and might estrange themselves from the cooperative. Members have to

unite and trust managers in order to overcome short-term problems especially in difficult economic times.

2.3 Empirical Review

This section outlines previous studies related to cost of finance, internal control practices, social capital and risk management.

2.3.1 Cost of Finance

Onugu, (2014) carried a study on the financial performance of cooperative societies in Enugu state, Nigeria. The study found that cost of financing is the main issue considered by organization when deciding of the type of capital. The value of the investments and projects undertaken by cooperative societies is highly linked to the costs of financing them thus have to be put into account for the managers to make informed decisions. Cooperative societies find it difficult to measure the impact of financing costs on their capital structure decisions in regard to their investing activities. However, this study did not exhaust all aspects of cost of finance which contributes to the financial performance of cooperative societies at large.

Akhtar et al., (2012) undertook a research on the relationship between financial leverage and financial performance of energy sector in Pakistan. It was noted that organizations with inadequate investment opportunities often engage in insufficient projects where risks analysis is not easy thus the costs of financing are likely to increase. Size of the firm was used as control variable for indirect measure of financing costs. Therefore, the largest firms have greater negotiation power and thus lower average financing costs. It was further argued that most of large organizations tend to diversify to control capital costs. The study did not describe the uncertainties associated with financial leverage and how they can be managed in order to determine its influence towards organizational financial performance.

Sikuka (2010) examined comparative performance of selected agri-business companies and cooperatives in the Western Cape of South Africa. Financial performances were measured based on financial ratios obtained from income statements and balance sheets. The relative financial performance of cooperatives to companies were compared across different financial ratios mainly, through profit

margin, return on assets (R.O.A), return on equity (R.O.E), current ratio, debt to asset ratio, asset turnover ratio, asset growth, revenue growth and economic value added. The overall results confirmed that, companies had the strongest relative financial performance in most of the financial ratios mainly profit margin, ROE, current ratio, debt to asset ratio, asset turnover ratio, asset growth, revenue growth and economic value added and their relative financial performance were improved. Cooperatives only showed a clear advantage on ROA and sometimes ROE. In this study, the concept of transaction costs which are connected to the funds for acquiring assets was not clearly explained.

Wanjiru, (2013) sought to find out the factors influencing financial performance of cooperative societies in Mathira, Nyeri county. The study indicated that the knowledge of the cost of finance and how it is influenced by financial leverage is useful in making decisions aimed at enhancing organizational financial performance. It is also important in many other areas of decision making such as dividend decision, working capital decision and so on. A firm generally finances its projects by utilizing various sources of funds such as common stock, bonds, debentures, long and short term borrowings and retained earnings. Each source of funds has its cost. Odetola et al., 2015 noted that appropriate decisions made on the cooperative capital funds assists in minimization of long-term average cost of finance. The cooperatives raise funds by issuing shares, borrowing loans and retaining earnings and also largely depend on borrowing from external financing agencies. The study did not elaborate on the fact that value of issued shares are subject to changes in economic conditions and is likely to affect organizational cost of borrowing.

Mutunga, (2009) did a study on corporate governance practices and challenges by co-operative societies in Nairobi. The study indicated that the proportion of share capital and retained earnings in many of the cooperatives was low. It was therefore important to understand the difficulties involved in computing the cost of finance and establish appropriate procedures to aid calculation of the same in cooperative societies. For example, issues may arise when determining the actual rate of interest on loans acquired by members from financial institutions requiring instalments in different modes of payments. Therefore, the actual annual rate of interest for such a loan depends upon the amount of such instalment payments, the frequency of the

instalment payments, the number of instalment payments and other costs associated with the loan such as closing or servicing costs. The actual annual rate of interest on this type of loan is often camouflaged by the suppliers by charging interest for the year on the principal balance outstanding at the beginning of the year even though repayments on principal are made at regular intervals during the year. The study did not state how cooperative organizations get their members understand all issues surrounding interest rates.

2.3.2 Internal Control Practices

Chaddad, (2012) carried out a study on Advancing the theory of the cooperative organization: the cooperative as a true hybrid. The study suggested that cooperative societies like other organizations should have procedures and policies to track, manage and report its financial resources and transactions as indicated in the financial statements such as cash flow statements, budget sheets, accounting systems and operating ratios. This enables these organizations to undertake their activities effectively. Internal control systems have to be installed for the organization to achieve their goals and objectives. These controls display seriousness about certain matters and are adopted largely to positively influence financial performance towards achievement of organizational goals. However, the success of systems in an organization requires full support of the top management. This has not been sufficiently explained in the study.

Robson et al, (2012) did a descriptive study of the management auditing methods used by public sector organizations conducting audits of workplaces and found that effective application of internal control measures helps to protect the assets of the entity from being misappropriated. Cooperative societies aim to deliver services to the members and ensure that they are all satisfied. This can be enhanced by effective internal control systems which aid implementation of management policies meant for attainment of goals. Failure to detect errors and frauds committed in the books of accounts results in financial mismanagement leading to increased inaccuracy and lack of reliability in cooperative societies.

A study by Karagiorgos et al., (2009), on the contribution of Internal Auditing to Management showed that poor financial performances of organizations cooperative

societies included, are associated with ineffective financial control practices which causes financial mismanagement. As a result, they find themselves with inadequate funds to acquire and avail major farm inputs for production at the appropriate time and at the right prices to the members. Lack of stable financial control systems in cooperative societies has deterred government efforts to develop efficient and effective input procurement and distribution systems that would have ensured timely delivery of adequate quantity and quality of farm inputs to farmers. The study fails to describe how financial information of cooperative organization is availed and explained to members.

A study by Amudo and Inanga (2009) on evaluation of internal control systems in Uganda indicated that insufficient capacity among the cooperative societies' managers has not helped small scale farmers who do not have adequate capital to expand their scale of operations and/ or take advantage of profitable packages of technology to boost productivity. The bulk of capital injection by this category of farmers comes from owner's equity and informal credit sources. Increased costs of production and significantly increased the working capital needs of agricultural activities have therefore hindered the financial performance of cooperative societies. The research did not describe how the existing internal control systems kept the track of the members' capital injection.

2.3.3 Risk Management

Mikes and Kaplan, (2014) in their study 'Towards a contingency; Theory of enterprise risk management, they noted that organizations are concerned with risk management practices of their organizations thus lay a great emphasis on this matter in order to balance between debt and equity for good financial performance. Cooperative societies are not an exception hence have to manage their risk exposure and conduct proper analysis to avoid losses and other financial problems. Muriuki, (2014) however, asserted that most cooperative societies do not undertake proper risk analysis thus their returns are negatively affected and the members incur a lot of losses which makes them to remain in poverty. Credit risk management activities are influenced by the risk behavior of managers in cooperative organizations and if they adopt appropriate strategies for risks mitigation, financial performance can be

enhanced. The study lacks detailed statement on the risk policy that should guide the organization.

Mwangi, (2013) undertook a study on the effects of liquidity on performance of deposit taking micro financial institutions in Kenya. He asserted that organizations ought to have policies in place that determine the amount to borrow and the appropriate time to do the same based on the loaning laws and regulations. Financial institutions such as microfinance are mostly concerned with the ability of the cooperative societies to repay the amount borrowed with all terms and conditions adhered to. Therefore, they have to work hard to raise their credit ratings as well as improving the confidence of the creditors. Baliwen (2009) established that almost all cooperative societies in Nigeria had policies concerning credit and were well implemented; Share capital and collaterals were put into consideration for borrowing loans. However, not all cooperative members have those requirements thus it would have been more clear if it was explained how the management handles such members in regard to loan acquisition.

A study by Ondieki (2011) sought to find out the effects of external financing on the performance of Cooperative societies in Kisii District. He found out that poor governance, lack of transparency and weak Information technology infrastructure influenced risk management thus financial performance of cooperative societies. Organizations utilize credit risk management practices to mitigate risks as a basis for objective credit risk appraisal by relying on the discretion and ability of portfolio managers for effective credit risk management practices (Chirwa, 1997). Borrowing from external sources alone did not cover the issue of financial performance of cooperative societies in regard to risk management.

2.3.4 Social Capital

Tsujinaka, (2002) did a study on the cultural dimension in measuring social capital in Japan. It was found that the linkage among cooperative members was contributed by social capital. They have similar goals and this leads to tight internal relationships thus reinforcing identities and strengthening networks. Members of agricultural cooperative societies are required to be committed to market their produce and purchase their inputs through the cooperative because the financial performance of

their organizations depends on their ability to establish and maintain trust and confidence among themselves. However, the study did not state what should be done in order to maintain the link and the confidence among cooperative members in the long term.

A research work by Fischer and Qaim, (2012) on linking smallholders to markets; determinants and impacts of farmer collective action in Kenya showed that cooperative members expect to obtain advantages from the coordination of production decisions, shared access to inputs, enhanced market power and more effective bargaining capacity. Therefore, theses commitments are intrinsically based on mutual trust and reciprocity among members.

Cooperative societies must ensure that members gets tangible benefits otherwise there will be no successful cooperation due to ineffective costs of reducing opportunism. Social capital is an essential factor in the financial performance of cooperative societies. In this context, voluntarism does not only depend on individual choice but also on the surrounding institutions, norms and social networks. The study lacks strategies in place for the cooperative management to influence member's commitments and reciprocity.

Francesconi and Heerink, (2011) carried out a study on Ethiopian agricultural cooperatives in an era of global commodity exchange. It was noted that cooperatives management ought to enhance trust among members and ensure that they are loyal to the organization so as to create social networks to facilitate joint decision-making and access to information for collective action that are vital to maintain delivery commitments with the group. High trust and reciprocity are vital to control free-riding since better organized and more integrated agricultural cooperatives are more reliable on financial market agencies and thus have easier access to finance. Collective action is considered as an asset for economic growth and poverty alleviation. This claim is based on the key role of bonding social capital for successful management of common pool resources, considering that cohesion in social networks contributes to both higher resource use efficiency and improved welfare. The study did not indicate the platforms upon which cooperative members could have been linked to the financial market agencies to enhance their financial performance.

A study by Pretty et al., (2011) on sustainable intensification in African agriculture noted that cooperative performance is operationalized focussing on access to finance and deliveries of farm produce. Major emphasis is laid on the opportunities for mobilizing trading capital to guarantee timely payments to the cooperative members upon delivery of the harvest. This is considered a fundamental condition for maintaining trust with the cooperative organization. Productivity can be enhanced by improved cooperative services and/or pooling of resources to reap the benefits of economics of scale and scope. Improved loyalty is usually the result of strict internal systems of rewards and sanctions that enable farmers to invest time and resources for upgrading their production systems. The study however did not reiterate that there is need for knowledge sharing systems that bonds networks among cooperative members and even third parties provide access to markets for their produce.

2.4 Conceptual Framework

Conceptual framework outlines the association between independent and dependent variables. In this case, Figure 2.1 illustrates the relationship between (cost of finance, internal control practices, risk management and social capital) and the financial performance of cooperative societies.

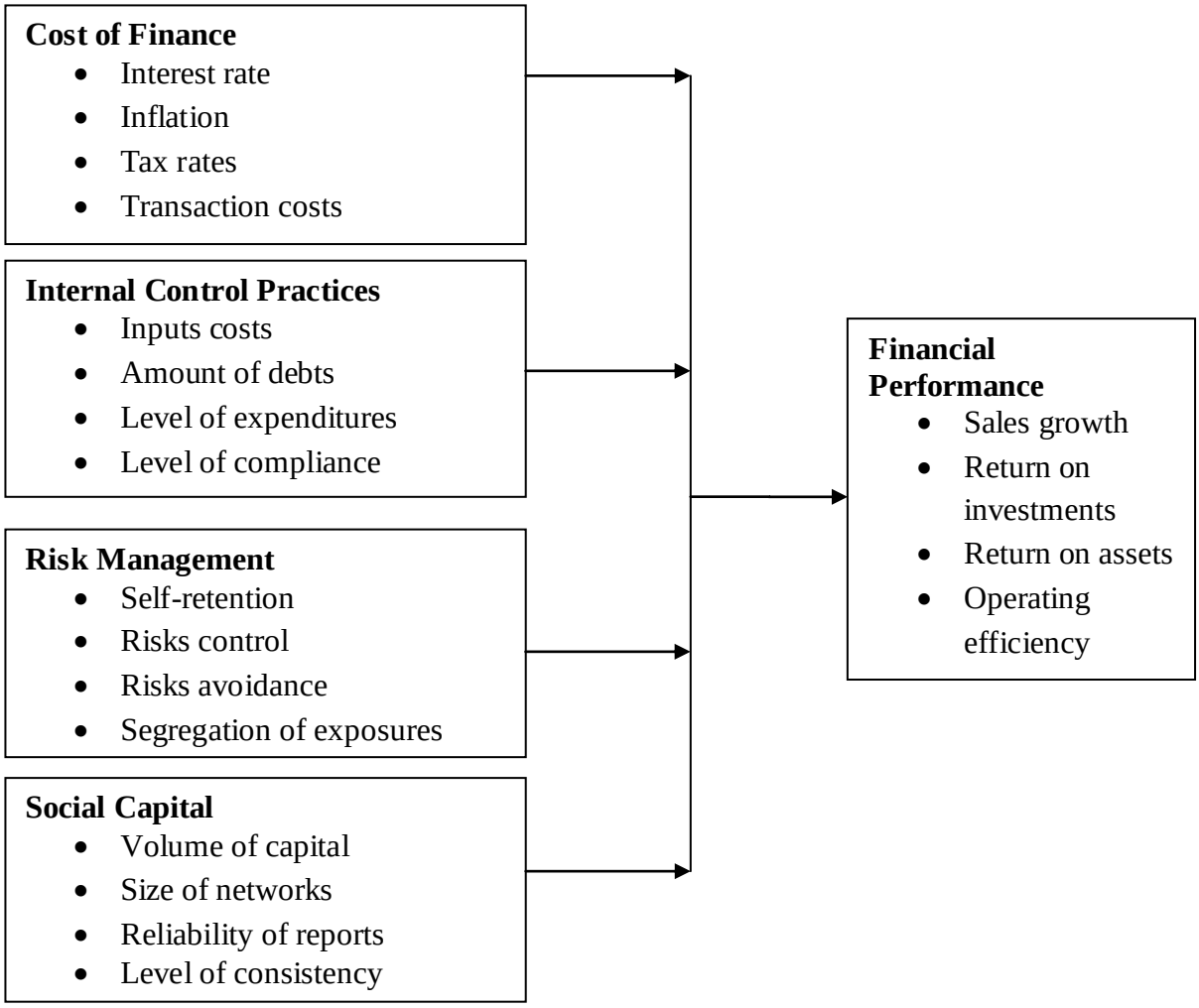

Figure 2. 1: Conceptual framework for determinants of financial performance of agricultural cooperative societies in Baringo County.

2.5 Summary of Literature Review

Cost of capital theory suggests that charges incurred from acquiring funds must be reflected in the capital structure used to finance the investments by the cooperative societies hence inclusion of the cost of equity and debt is necessary. Financing costs can be used as the discount rate in net present value of the investment project appraisal techniques applied by the cooperative societies. Therefore, investments with positive net present values at the cost of capital are accepted because they earn more than the organization' required rate of return and will maximize their wealth.

The Merton risk model enables organizations to adopt appropriate risk management practices in order to be able to settle financial obligations effectively. Cooperative societies may be required to borrow from financial institutions to invest and also carry out other functions well. They also help their members to secure loans from banks and micro financial institutions which are prone to default. It is through the Merton's model that they get to learn more about risk management and undertake appropriate measures to avoid ending into financial and credit risky situations. Therefore, effective risk analysis is necessary in order to maintain solvency.

Reliability theory argues that appropriate and accurate documentation of policies and procedural guidelines helps to determine how the control activities are to be executed. This control activities ensure that all necessary actions should be taken with the aim to address risks so that organizational objectives are achieved. Internal control system comprises of components that are interrelated and each for component, there needs to be a defined measure of success. As such, the state of a component is determined by whether the component is successful or not successful. The reliability of a component is defined as the probability of the component being found in the success state.

Social capital theory suggests that cooperatives ought to develop a large enough initial coalition of the potential memberships and build a sufficient number of members so as to realize economies of scale. Social capital can enable and sustain collective action among potential members and community to establish an agricultural cooperative. However, the incentives to join the agricultural cooperative are farmers' economic needs and expectation in terms of improving their economic situation. Collective action can represent a form of integration for members' businesses, especially important where market failure is occurring and to reduce transaction costs.

2.6 Research Gaps

Previous studies on the cooperative societies did not fully cover the issue of the determinants affecting financial performance of agricultural cooperative societies. Therefore, gaps have been identified and the proposed study seeks to fill them. A study by Wanjiru, (2013) on the factors influencing performance of cooperative societies in Mathira, Nyeri County, Kenya, found that the knowledge of financial leverage is useful in making decisions aimed at enhancing organizational financial

performance. It is also important in many other areas of decision making such as dividend decision, working capital decision and so on.

The study by Wanjiru covered only a constituency in Nyeri County but the current study covered wide area; a whole County of Baringo thus a more detailed information was obtained. Financial leverage is about trading on equity where an organization utilizes debt finance to obtain additional assets. Debt finance involves various costs which were not clearly described by in research. The current study has sought to fill that gap by keenly explaining the cost of finance and how well they can be managed to achieve positive effect on performance cooperative societies.

A recent research undertaken by Odetola et al., 2015 on impact of cooperative society on fish farming commercialization in Lagos state, Nigeria noted that appropriate decisions made on the cooperative capital funds assists in minimization of long-term average cost of finance. Their study was limited on organizational decisions in regard to capital funds and costs of finance. There are some of cooperative societies that have strong capital base and they depend less on the external borrowing contrary to the above study. Based on their argument therefore, it becomes difficult to establish how the decisions made by the organizations on capital funds alone affect the financing costs and the financial performance. The current study has gone further to include decisions on working relationship between cooperative members and the managers aided by appropriate social capital. Moreover, issues of risk management and general control mechanisms have provided a more clear understanding of financial performance of cooperative societies.

A study by Ondieki, (2011) on the effects of external financing on the performance of cooperative societies in Kisii District, found out that poor governance, lack of transparency and weak information technology infrastructure influenced risk management thus financial performance of cooperative societies. Organizations are concerned on risk management strategies to minimize risks and improve financial performance. The variables used are equivalent of the company internal factors and they cannot alone influence the financial performance of cooperative societies. It is evident that cost of finance, internal control practices, risk management and social capital influences the financial performance of cooperative societies.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology that was used to carry out the research. It contains research design, target population, census survey, data collection instruments, pilot study, data collection procedure and data processing and analysis.

3.2 Research Design

Research design is the framework under which the study is undertaken. Kothari, (2008) stated that research design is an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance with research purpose. This study therefore adopted descriptive survey design to come up with sufficient and relevant information for the research. It is moreover, deemed appropriate since it enhances collection of data from sample without manipulation and the description of concepts under the study. It also enabled detailed description of each study variable in a bid to emphasize on the issue of financial performance of agricultural cooperative societies. According to Mugenda and Mugenda, (2009), survey studies are usually evaluated against strengths and weaknesses of statistical, quantitative research methods and analysis which tally with present study. Therefore, this design helped to explain and facilitate critical evaluation of agricultural cooperative societies in regard to all study constructs.

3.3 Target Population

Population refers to the aggregate number of people or individuals with similar features or characteristics (Mugenda & Mugenda, 2009). The target population of the study was all the accountants and managers working in agricultural cooperative societies in Kenya. Accessible population is the part of target population that the researcher access to draw a study sample. Therefore, the accessible population for the study was 19 accountants and 19 managers from 19 agricultural cooperative societies in Baringo County.

3.4 Census Survey

The current study adopted census survey technique. Therefore, respondents comprised of all 19 accountants and 19 managers of 19 agricultural cooperative societies in Baringo county. This led to elimination of sampling errors and bias.

3.5 Data Collection Instruments

The researcher used structured questionnaires to collect data from the accountants and the managers. These questionnaires helped the respondents to fill them in a structured manner by giving them enough time to express their opinions effectively without bias. Furthermore, questionnaires are very convenient data collection tools since respondents read the questions and answer them to best of their understanding. They were administered on a 5-point scale whereby each point indicated the level of agreement or disagreement with the statements. Drop and pick method was used.

3.6 Pilot Study

A preliminary study before the main study is important for a research. Therefore, a pilot study was conducted for the current study. The researcher engaged 5 accountants and 5 managers of 5 agricultural cooperative societies from Nakuru County who were not part of the respondents. This was done in order to determine whether the questionnaires needed any adjustments to fit the requirements of the study. As a result, reliability and validity of the data collection instrument was achieved.

3.6.1 Reliability of Research Instrument

Kothari (2008) described the reliability as the consistency of the data collection instrument considering the results it gives out after different tests. Chronbach alpha coefficient is the most recommended method to test reliability of the data collection instrument (Kimberlain & Winterstein, 2008). Therefore, this study used Chronbach alpha (α) with coefficients ranging from 0.00 to 1.00 to indicate the reliability of the questionnaire concerning all variables. All variables reached a threshold of 0.7 and above as shown in Table 3.1.

Table 3. 1: Reliability test results

Variables	Items tested	Chronbach alpha value
i. Cost of Finance	7	.717
ii. Internal Control	5	.704
iii. Risk Management	6	.762
iv. Social Capital	5	.710
v. Financial Performance	5	.728

3.6.2 Validity of the Research Instrument

According to Mugenda & Mugenda, (2009), validity of data collection instrument means that it actually measures what is intended to measure. The researcher sought expert opinion from the university supervisor for appropriate guidance on statements concerning study variables while using content validity.

3.7 Data Collection Procedure

Before commencing the study, the researcher obtained a letter to authorize data collection from Jomo Kenyatta University of Agriculture and Technology. Permission from management of cooperative societies from Baringo County was also sought. The questionnaires were given to the accountants and managers and collected later after the time agreed to fill them had elapsed.

3.8 Data Processing and Analysis

Data analysis refers to the process of breaking complex information into smaller elements that can be easily clarified and understood (Kothari, 2008). Therefore, data collected from the sampled accountants and managers was sorted, edited, coded and analyzed by descriptive and inferential statistics. Descriptive analysis tools included the means, standard deviations and variance. The study furthermore used inferential analysis applying Pearson moment correlation and regression analysis. Regression analysis was used to establish the relationship between each independent variable and the dependent variable. Analysis was executed with an aid of Statistical packages for social sciences (SPSS) version 23. The findings from the research were presented by statistical tables.

The following regression model was applied in the analysis;

$$\mathbf{Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon.}$$

Whereby;

Y	represents	Performance
β_0	represents	Constant
$B_1, \beta 2, \beta 3, \beta 4$	represents	Regression coefficients of independent variables.
X_1	represents	Cost of Finance
X_2	represents	Internal Control Practices
X_3	represents	Risk Management
X_4	represents	Social Capital
ε	represents	Error Term

CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter outlines the response rate, background of the respondents, descriptive and inferential analysis of the data obtained from the accountants and managers of Agricultural Cooperative societies in Baringo County, Kenya.

4.2 Response Rate

The researcher achieved response rate of 84% that was sufficient for the study. The target population was 19 accountants and 19 managers of agricultural cooperative societies in Baringo County. 15 (79%) and 17 (89%) questionnaires were filled and returned from managers and accountants respectively. Therefore, 32 out of 38 respondents led to 84% response rate which was adequate for the study. Table 4.1 illustrates the results.

Table 4. 1: Response Rate

Respondents	**Number of issued questionnaires**	**Number of filled and returned questionnaires**	**Response Rate (%)**
Managers	19	15	79
Accountants	19	17	89
Total	**38**	**32**	**84**

4.3 Background of the Respondents

The study sought to establish the background information of the respondents in regard to highest level of education, work experience in cooperative societies, time of operation and period of time of working with the current organization.

4.3.1 Level of Education of Respondents

The study sought to establish the highest education level of the managers and accountants of the cooperative societies that were involved in the study. Table 4.2 shows the findings.

Table 4. 2: Highest Level of Education of Respondents

Highest Level of Education	Frequency	Percentage
Diploma Level	21	65.6
Degree Level	10	31.3
Masters Level	1	3.1
Total	**32**	**100.0**

The findings indicate that the majority of the respondents; 21 (65.6%) had diploma as their highest level of education. It was also found that 10 (31.3%) and 1 (3.1%) had undergraduate and master's degrees respectively. This therefore shows most respondents had diploma levels of education. It can be implied that level of education of respondents was fairly suited for functions of cooperative societies and if well applied could have influenced their financial performance positively.

4.3.2 Working Experience with Cooperative Societies

The study sought to establish the number of years that the respondents had spent working with the cooperative societies. Table 4.3 illustrates the results.

Table 4. 3: Working Experience with Cooperative Societies

Duration	Frequency	Percentage
Less than 1 year	2	6.2
1-5 Years	10	31.2
6-10 Years	14	43.8
Over 10 Years	6	18.8
Total	**32**	**100.0**

The findings indicate that the majority of the respondents; 14 (43.8%) had been working with cooperative societies for a period of 6-10 years. The least experienced respondents were at 2 (6.2%) having worked with cooperative societies for less than 1 year. The most experienced respondents 6 (18.8%) had been with these organizations for more than 10 years while 10 (31.2%) had worked with cooperative societies for 1-5 years. Overall, accountants and managers at cooperative societies in Baringo County had a considerable work experience. This implied that work experience may not have contributed significantly to the inadequate financial performance evidenced in the aforementioned organizations.

4.3.3 Period of Time in the Current Organization

The study aimed at establishing the number of years spent by the respondents in the current organizations. Table 4.4 outlines the findings.

Table 4. 4: Period of Time in the Current Organization

Time in Years	Frequency	Percent
Less than 1 year	3	9.4
1-5 Years	11	34.4
6-10 Years	13	40.6
Over 10 Years	5	15.6
Total	**32**	**100.0**

The findings indicates that majority; 13 (40.6%) of the respondents had worked with their current organization for a period of 6-10 years. Only 3 (9.4%) of them had worked for less than 1 year while 11 (34.4%) and 5 (15.6%) had been there for 1-5 and over 10 years respectively. The amount of time spent in the current cooperative societies by the most respondents is deemed enough to be aware of how these organizations work and what is required of them. Therefore, it can be concluded that experience with the current cooperative societies did not contribute significantly to their betterment in terms of financial performance.

4.4 Period of Time of the Cooperatives' Operation

The study sought to establish the period of time that the cooperative societies had been in operation. Table 4.5 shows the findings.

Table 4. 5: Period of Time of the Cooperatives' Operation

Time of Operation	Frequency	Percentage
Less than 1 year	8	25.0
1-5 Years	7	21.9
6-10 Years	12	37.5
Over 10 Years	5	15.6
Total	**32**	**100.0**

The findings indicated that the majority of the cooperative societies in Baringo County; 12 (37.5%) had been in operation for a period of 6-10 years. 8 (25%) organizations had been there for less than 1 year. 7 (21.9%) and 5 (15.6%) had been operating for a period of 1-5 and over 10 years respectively. Despite the differences in the years of operation by various cooperatives, they encountered almost similar challenges in regard to financial performance. This meant that the period of time of operation had little effect on financial performance of cooperative societies in Baringo County.

4.4 Descriptive Analysis

The study sought the views of the agricultural cooperatives' accountants and managers in relation to: cost of finance, internal control practices, risk management and social capital. The study findings have been analysed descriptively and discussed based on the objectives of the study.

4.4.1 Effects of Cost of Finance on Financial Performance

The study sought to establish the effects of cost of finance on financial performance of agricultural cooperative societies in Baringo County. The findings of the study are shown in Table 4.6.

Table 4. 6: Effects of Cost of Finance on Financial Performance

Statements	N	SA	A	N	D	SD	Mean	Std. Dev
Level of interest rates influence costs of finance thus affects performance of cooperative societies.	32	18 (56.3%)	10 (31.3%)	3 (9.3%)	1 (3.1%)	-	4.41	.798
Performance of cooperative societies is influenced by inflation rates.	32	7 (21.9%)	14 (43.8%)	6 (18.7%)	4 (12.5%)	1 (3.1%)	3.69	1.061
Tax rates increases financing costs thus determining trends in the performance from one time to another.	32	14 (43.8%)	13 (40.6%)	4 (12.5%)	1 (3.1%)	-	4.25	.803
Transaction costs incurred by cooperatives affect their performance.	32	11 (34.3%)	17 (53.1%)	4 (12.5%)	-	-	4.22	.659
Large cooperative societies have economies of scales and advantage in regard to costs of obtaining funds.	32	13 (40.6%)	13 (40.6%)	6 (18.8%)	-	-	4.22	.751
Appropriate financial management enhances control of cost of capital in an organization.	32	15 (46.8%)	12 (37.5%)	3 (9.4%)	2 (6.3%)		4.25	.880
Costs of finance are determined by competition in financial institutions and this affects performance of cooperative societies.	32	12 (37.5%)	15 (46.9%)	4 (12.5%)	1 (3.1%)	-	4.19	.780

It was found that respondents strongly agreed (mean =4.41; std dev=0.798) that the level of interest rates influence costs of finance thus affects performance of cooperative societies and (mean=4.25; std dev=0.803) that tax rates increased financing costs thus determining trends in the performance from one time to another. However, there were differing opinions (mean=3.69; std dev=1.061) on whether

inflation rates had a considerable influence performance of cooperative societies. Moreover, most accountants and managers agreed (mean =4.22; std dev=0.751) that large cooperative societies with economies of scales have an advantage in regard to costs of obtaining funds. The respondents also concurred (mean=4.25; std dev=0.880) that appropriate financial management enhanced control of cost of finance while agreeing (mean=4.19; std dev=0.780) competition in financial institutions also influenced the same matter. It is also evident that they admitted (mean=4.22; std dev=0.751) that transaction costs had an effect on the cost of finance hence overall performance. This implies that cost of finance influence financial performance of cooperative societies.

4.4.2 Influence of Internal Control Practices on Financial Performance

The study further assessed the influence of internal control practices on financial performance of cooperative societies and the results are outlined in Table 4.7.

Table 4. 7: Implications of Internal Control Practices on Financial Performance

Statements	N	SA	A	N	D	SD	Mean	Std. Dev
Agricultural inputs costs incurred by the cooperative affects its performance.	32	12 (37.5%)	10 (31.3%)	9 (28.1%)	1 (3.1%)	-	4.03	.897
Amount of debts accrued by the cooperative society influences its performance.	32	10 (31.3%)	13 (40.6%)	9 (28.1%)	-	-	4.03	.782
Performance is determined by the level of expenditures.	32	10 (31.3%)	12 (37.5%)	7 (21.9%)	1 (3.1%)	2 (6.2%)	3.84	1.110
Compliance levels links to the performance.	32	6 (18.8%)	21 (65.6%)	4 (12.5%)	1 (3.1%)	-	4.00	.672
Internal control leads to accountability among cooperative managers.	32	4 (12.5%)	17 (53.1%)	10 (31.3%)	1 (3.1%)	-	3.75	.718

The respondents concurred (mean=4.03; std dev=0.897) that agricultural inputs costs which are supposed to be under proper control incurred by the cooperative affected their performance. It was also admitted (mean=4.03; std dev=0.782) that the debts accrued and (mean=3.84; std dev=1.110) level of expenditures influenced the level of outputs. The respondents furthermore agreed (mean =4.00; std dev=0.672) on the link between compliance levels and financial performance. However, there were differing views (mean=3.75; std dev=0.718) on contribution of internal controls to accountability among cooperative managers. The above findings showed that at least the accountants and managers agreed with the statements relating to internal control practices thus confirming its influence on the financial performance.

4.4.3 Effects of risk management on financial performance

The study analyzed the respondents' views regarding the influence of risk management in cooperative societies on their financial performance. The results of the analysis are illustrated in Table 4.8.

Table 4. 8: Effects of risk management on financial performance

Statements	N	SA	A	N	D	SD	Mean	Std. Dev
Self-retention costs influence organizational performance.	32	12 (37.5%)	14 (43.7%)	3 (9.4%)	3 (9.4%)	-	4.09	.928
Effectiveness of risk control measures affects performance.	32	10 (31.3%)	17 (53.1%)	3 (9.4%)	1 (3.1%)	1 (3.1%)	4.06	.914
Risks avoidance strategy has a direct link to performance.	32	6 (18.8%)	17 (53.1%)	21 (21.9%)	1 (3.1%)	1 (3.1%)	3.81	.896
Segregation of risks enhances performance.	32	14 (43.7%)	10 (31.3%)	6 (18.8%)	1 (3.1%)	1 (3.1%)	4.09	1.027
Proper risk management ensures security of cooperative data used to make decisions.	32	9 (28.1%)	16 (50%)	7 (21.9%)	-	-	4.06	.716
Assets in portfolio reduce risks and contributes to good performance.	32	5 (15.6%)	19 (59.3%)	6 (18.8%)	2 (6.3%)	-	3.84	.767

The study findings indicates that respondents agreed (mean=4.09; std dev=0.928) that Self-retention costs incurred by cooperative societies influence affect their performance. It was also admitted (mean=4.09; std dev=1.027) that risks segregation and avoidance strategies (mean=3.81; std dev=0.896) lead to good performance. The respondents moreover concurred (mean=4.06; std dev=0.716) that proper risk management ensured security of cooperative data used to make decisions. They also at least agreed (mean=3.84; std dev=0.767) that putting assets in portfolios helps to reduce risks and improves the levels of output. The agreement with the above prepositions in relation to risk management indicates that it indeed affects the financial performance of cooperative societies.

4.4.4 Effects of Social Capital on Financial Performance

The study sought to determine the influence of social capital on financial performance of cooperative societies in Baringo County. Table 4.9 indicates the results.

Table 4. 9: Effects of Social Capital on Financial Performance

Statements	N	SA	A	N	D	SD	Mean	Std. Dev
The volume of capital gained as a result of good working relationship among managers and members contributes to better performance.	32	7 (21.9%)	14 (43.7%)	11 (34.4%)	-	-	3.88	.751
The size of networks among members influences growth and performance.	32	11 (34.4%)	18 (56.2%)	3 (9.4%)	-	-	4.25	.622
Reliable financial reports from the cooperative society are influenced by Trust among the managers and members.	32	11 (34.4%)	14 (43.8%)	5 (15.6%)	1 (3.1%)	1 (3.1%)	4.03	.967
Consistency in performance comes as a result of reciprocity.	32	12 (37.5%)	14 (43.8%)	6 (18.7%)	-	-	4.19	.738
Social capital provides a platform for association between cooperative societies and financial institutions.	32	6 (18.8%)	17 (53.1%)	9 (28.1%)	-	-	3.91	.689

The respondents at least concurred (mean=3.88; std dev=0.751) that the social capital is gained as a result of good working relationship among managers and members and (mean=4.25; std dev=0.622) that the size of network influences financial performance. Cooperative societies' accountants and managers also agreed (mean=4.03; std dev=0.967) that reliable financial reports from the cooperative society are influenced by trust among the stakeholders. Moreover, they agreed (mean=4.19; std dev=0.738) that consistency in financial performance comes as a result of reciprocity. The respondents also admitted (mean=3.91; std dev=0.689) that social capital provides a platform for association between cooperative societies and

financial institutions. All prepositions shows respondents admission on the effects of social capital. As such, the nature and volume of social capital in agricultural cooperative societies determines their financial performance.

4.4.5 Financial Performance

The study sought to establish the respondent's views in regard to financial performance putting into account the elements of cost of finance, internal control practices, risk management and social capital. Findings are illustrated in Table 4.10.

Table 4. 10: Descriptive Statistics on Financial Performance

Statements	N	SA	A	N	D	SD	Mean	Std. Dev
Trends in sales growth of cooperative society states its performance.	32	27 (84.4%)	4 (12.5%)	1 (3.1%)	-	-	4.81	.471
Returns on investments determine influences financial growth.	32	16 (50%)	12 (37.5%)	3 (9.4%)	1 (3.1%)	-	4.34	.787
The value of a cooperative society is affected by the return on assets.	32	8 (25%)	14 (43.7%)	8 (25%)	2 (6.3%)	-	3.87	.871
Operating efficiency reduces costs of equity and debt thus enhancing organizational performance.	32	20 (62.5%)	11 (34.4%)	1 (3.1%)	-	-	4.19	.738
Appropriate risk management strategies leads to better performance.	32	19 (59.4%)	9 (28.1%)	4 (12.5%)	-	-	4.47	.718

The findings shows that most cooperative managers and accountants strongly agreed (mean=4.81; std. Dev=0.471) that financial performance is indicated by the trends in sales growth of cooperative society. Respondents also concurred (mean=4.34; std dev=0.787) it is determined by returns on investments and assets. They furthermore admitted (mean=4.19; std. Dev=0.738) that consistency in performance comes as a result of reciprocity which is an element of social capital. Accountants and managers strongly agreed (mean=4.47; std=0.718) that appropriate risk management strategies leads to better performance. The strong agreement with the above statements implied that there were huge concerns with financial performance of cooperative societies in Baringo County. It also shows that cost of finance, internal control practices, risk management and social capital influenced it.

4.5 Inferential Analysis

The study adopted inferential analysis to determine the relationship or association between independent variables and dependent variable. Pearson correlation coefficient was used to determine the strength and direction of the relationship. On the other hand, regression model was utilized to establish the association by predicting the variation of the dependent variable from independent variables.

4.5.1 Correlation Analysis

The study sought to establish the relationship between each independent variable and the dependent variable. Therefore, Pearson correlation analysis was performed for cost of finance, internal control practices, risk management and social capital to determine their influence and association with financial performance.

4.5.1.1 Correlation Analysis for Cost of Finance

The study aimed at determining the effects of cost of finance on financial performance of agricultural cooperative societies. After correlation analysis, findings are illustrated in Table 4.11

Table 4. 11: Correlation Analysis for Cost of Finance

		Performance
Cost of finance	Pearson Correlation	.879**
	Sig. (2-tailed)	.000
	N	32

**. Correlation is significant at the 0.01 level (2-tailed).

The study findings shows that the relationship between cost of finance and financial performance is strong, positive and statistically significant ($r = 0.879$; $p < 0.01$). This implied that insufficient financial performance experienced in agricultural cooperative societies in Baringo County is likely to be influenced by inappropriate management of costs that are incurred in acquisition of funds. Therefore, there is a possibility of lack of effective analysis and proper decisions upon costs of either equity or debt finances in cooperative societies.

4.5.1.2 Correlation Analysis for Internal Control Practices

The study assessed the effects of internal control practices on financial performance of agricultural cooperative societies in Baringo County and the results of the assessment are as outlined in Table 4.12**.**

Table 4. 12: Correlation Analysis for Internal Control Practices

		Performance
Internal control practices	Pearson Correlation	.699**
	Sig. (2-tailed)	.000
	N	32

**. Correlation is significant at the 0.01 level (2-tailed).

The findings indicated that the relationship between internal control practices and financial performance was strong, positive and statistically significant (r=0.699; p<0.01). The findings led to rejection of the second null hypothesis (H_{02}). Financial performance is enhanced by high emphasis on internal control practices. In case of cooperative societies in Baringo County, there is unlikelihood of having or adherence to organizational general internal control mechanisms. This means that inadequate financial performance was influenced by lack of compliance and control over things such as acquisition and utilization of debts as well as organizational expenditures.

4.5.1.3 Correlation Analysis for Risk Management

The researcher wanted to establish how risk management influenced financial performance of agricultural cooperative societies in Baringo County. The findings are illustrated in Table 4.13.

Table 4. 13: Correlation Analysis for Risk Management

		Performance
Risk management	Pearson Correlation	.621**
	Sig. (2-tailed)	.000
	N	32

**. Correlation is significant at the 0.01 level (2-tailed).

The findings from correlation analysis indicates that there is strong and positive relationship between risk management and financial management which is statistically significant (r=0.621; p<0.01). This means that third null hypothesis (H_{03}) was rejected. Therefore, proper risk management practices enable the cooperatives to reduce chances of losses thus improving returns from their operations. It is difficult to avoid risks and losses without effective risk manage and this contributes to low financial resources. Cooperative societies receive low volumes of produce due to weak financial muscle that can be associated with risks management.

4.5.1.4 Correlation Analysis for Social capital

The researcher sought to establish the relationship between social capital and financial performance of agricultural cooperative societies in Baringo County. The findings are illustrated in Table 4.14.

Table 4. 14: Correlation Analysis for Social Capital

		Performance
Social capital	Pearson Correlation	.733**
	Sig. (2-tailed)	.000
	N	32

**. Correlation is significant at the 0.01 level (2-tailed).

The study findings indicates that the relationship between social capital and financial performance is strong, positive and statistically significant ($r = 0.733$; $p < 0.01$). Fourth null hypothesis (H_{04}) was rejected. This is because social capital influences financial performance of agricultural cooperative societies. Trust and reciprocity are important in forming a good working relationship between managers and members. It therefore implies that managers of cooperative societies in Baringo County did not sufficiently prioritize the interests of the members as anchored in the financial performance.

4.5.2 Regression Analysis

Regression model was applied to determine the combined effect of cost of finance, internal control practices, risk management and social capital on financial performance. The results are shown on Table 4.15.

Table 4. 15: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.927[a]	.859	.838	.15904

a. Predictors: (Constant), cost of finance, internal control, risk management, social capital

According to the study findings, the correlation coefficient (R=0.927). This indicates that the independent variables are very strong good predictors of the dependent variable. Coefficient of determination (R^2=0.859) is the proportion of variance in the dependent variable that can be explained by the independent variables; the proportion of variation accounted for by the regression model. In this case, 85.9% variability of the dependent factor is explained by independent factors. As such, strong degree of

association has been illustrated between cost of finance, internal control practices, risk management and social capital and financial performance.

Table 4. 16: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.146	4	1.036	40.974	.000[a]
	Residual	.683	27	.025		
	Total	4.829	31			

a. Predictors: (Constant), cost of finance, internal control, risk management, social capital

b. Dependent Variable: performance

The researcher was determined to test whether the overall regression model was a good fit for the data. Therefore, Analysis of Variance (ANOVA) was undertaken. The study findings indicates (Table 4.14) that the independent variables statistically significantly predict the dependent variable, $F(4, 27) = 40.974$, $p < 0.01$ confirming that the regression model was a good fit of the data. Moreover, ANOVA results shows that cost of finance, internal control practices, risk management and social capital put together had influence on financial performance of agricultural cooperative societies in Baringo County. This calls for major emphasis on the above factors by managers and other stakeholders in order to improve cooperative performances.

Table 4. 17: Results from Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**t**	**Sig.**
1	(Constant)	1.870	.419		4.463	.000
	Cost of finance	.736	.073	.879	10.079	.000
	Internal control Practices	.671	.125	.699	5.360	.000
	Risk management	.435	.100	.621	4.334	.000
	Social capital	.680	.115	.733	5.897	.000

a. Dependent Variable: performance

The results from the regression analysis shows that indeed financial performance can be predicted from cost of finance, internal control practices, risk management and social capital. The coefficients from Table 4.16 indicate that the independent constructs contributes significantly to the model at 0.01 level of significance

The regression function; $Y= \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$. was applied to further explain the regression analysis results whereby;

Y represents Financial Performance

β_0 represents Constant

$B_1, \beta 2, \beta 3, \beta 4$ represents Regression coefficients of independent variables.

X_1 represents Cost of finance

X_2 represents Internal Control Practices

X_3 represents Risk Management

X_4 represents Social Capital

ε represents Error of Margin

The regression findings were explained and interpreted as; $\mathbf{Y=1.870 + 0.736X_1 + 0.671X_2 + 0.435X_3 + 0.680X_4}$. The first null hypothesis **(H_{01})** was rejected since the relationship between cost of finance and financial performance was statistically significant at 0.01 level of significance. The findings moreover indicated that

financial performance was affected by internal control practices thus leading to rejection of second null hypothesis **(H_{02})**. The third **(H_{03})** and fourth **(H_{04})** null hypotheses were also rejected due to the influence of risk management and social capital on the dependent variable. When all independent variables were taken together ($t=4.463$; $p<0.01$), they constituted a strong and significant relationship with the dependent variable hence showing that they affected financial performance of agricultural cooperative societies in Baringo County, Kenya.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter outlines the summary of major study findings from the descriptive and inferential analysis. It also incorporates assertions and inferences obtained from the results. The researcher made relevant recommendations and suggestions for further studies regarding financial performance of agricultural cooperative societies and the factors that contribute to the same.

5.2 Summary

This section covers the key descriptive and inferential findings in relation with the objectives and the problem that triggered the research.

5.2.1 Cost of finance

The study found that that the level of interest rates on the funds obtained for organization activities affected performance of cooperative societies. It was also concurred that the level of tax and inflation rates partly contributed to the trends in performance from one time to another. Furthermore, it was agreed that appropriate financial management was important in achieving sustainable costs of finance hence determining progress of cooperative societies. Correlation analysis results found that there was strong positive and statistically significant relationship between cost of finance and financial performance ($r = 0.879$; $p < 0.01$). This implied that appropriate management of costs of finance improved effectiveness and led to better financial performance of cooperative societies. As such, the findings shows that inadequate performance experienced in cooperative societies in Baringo County was influenced by lack of sound decisions on the costs of finance.

5.2.2 Internal control practices

The study found that agricultural general internal control mechanisms on inputs costs by the cooperatives influenced their financial performance. The control over debts accrued and level of expenditures also affected performance. The respondents furthermore reiterated the significance of internal controls in regard to compliance

and accountability among cooperative managers. Correlation analysis findings showed positive strong relationship between internal control practices and financial performance statistically significant ($r=0.699$; $p<0.01$). This meant that organizational general internal control practices could control acquisition of debts and expenditures to improve performance.

5.2.3 Risk management

The study findings indicated that indeed risk management strongly affected the performance of cooperative societies. Most respondents agreed that Self-retention costs incurred by cooperative societies influenced their returns on assets and investments. It was further admitted that assets in portfolios, risks segregation and avoidance strategies could increase operational efficiency and lead to good performance. The findings from correlation analysis indicates that there was positive relationship between risk management and financial management which was statistically significant ($r=0.621$; $p<0.01$). This implied that effective risk management practices were key to cooperatives' success.

5.2.4 Social capital

The findings from the study showed that the size of network among the managers and cooperative members led to good working relationship. These contributed to social capital that influenced their performance. It was also agreed that reliable financial reports from the cooperative society are influenced by trust and consistency in performance comes as a result of reciprocity. The respondents also admitted social capital provides a platform for association between cooperative societies and financial institutions. The association between social capital and financial performance is strong, positive and statistically significant ($r = 0.733$; $p < 0.01$). Trust and reciprocity are important in forming a good working relationship between managers and members that contributes to better performance.

5.2.5 Financial performance

The findings indicated that cost of finance, internal control practices, risk management and social capital whether taken individually or collectively influenced financial performance of cooperative societies. Multiple correlation coefficient (R=

0.927) was very strong for good level prediction of the financial performance. As such, strong degree of association was portrayed between cost of finance, internal control practices, risk management and social capital and financial performance. Therefore, all independent variables taken together ($t=4.463$; $p<0.01$), affected the dependent variable.

5.3 Conclusions

The following conclusions were made in line with study findings;

5.3.1 Cost of Finance

The study concluded that the inappropriate costs of finance deterred effective financial performance in cooperative societies. This means that the insufficient volumes of produce handled by these organizations were influenced by inadequate capital due to problems associated with costs of finance. Inflation rates leads to devaluation of money and cooperative societies finds themselves in a difficult situations to adjust to the problem. Tax rates decreases the returns by the cooperative societies and remain with little to cater for charges associated with the funds obtained from financial institutions.

5.3.2 Internal control practices

It can be concluded that the agricultural cooperative societies' financial performance is affected by their internal control practices. Therefore crucial items such as acquisition of debts and expenditures have to be keenly controlled. The financial difficulties that have hindered the progress of cooperative societies come partly from misuse of available funds thus showing importance of adherence to compliance levels that is linked to performance.

5.3.3 Risk management

In conclusion, it is evident from the study that risk management affects financial performance of agricultural cooperative societies. It has been confirmed that there is need for appropriate management of self-retention costs incurred by organizations. Lack of proper segregation and avoidance of risks means ineffective risk management. This leads to big losses hence poor performance from cooperatives.

5.3.4 Social Capital

The study acknowledged that the volume of capital is gained as a result of good working relationship among managers and members were important for good performance. Therefore, there was need for establishment of firm networks among themselves. Trust and reciprocity are important in that managers can put interests of the members thus working hard to improve financial performance.

5.4 Recommendations

After the study findings, the researcher recommended that Cooperative societies should establish and implement financial policies to enable them to manage the costs of finance effectively. They should also establish internal control systems that will make control of various actions such as administrative expenditures much easier. It is furthermore recommended that cooperative societies should fully engage all the members in the affairs of the organization. This means that nothing should be done without notifying and inviting them for critical discussions. This will increase the social capital thus good working relationship. Cooperative societies should moreover, formulate and implement appropriate risk management strategies to enable them manage risks, minimize losses and improve performance.

5.5 Suggestions for Further Studies

The researcher suggests that further studies should be carried out on role of capital structure on performance of agricultural cooperative societies and determinants of financial sustainability of agricultural cooperative societies.

REFERENCES

Akhtar S., Javed, B., Maryam, A., and Sadia H., (2012). Relationship between Financial Leverage and Financial Performance: Evidence from Fuel & Energy Sector of Pakistan. *European Journal of Business and Management, 4*(11), 7-17.

Akira Kurimoto., (2004). Agricultural Cooperatives in Japan. An Institutional Approach. Consumer Cooperative Institute of Japan Tokyo. *Journal of Rural Cooperation, 32*(2), 111-128.

Amudo, A., and Inanga, E. L. (2009), "Evaluation of Internal Control Systems: A Case Study from Uganda", *International Research Journal of Finance and Economics,1*(27), 124-144.

Barbuta, M. N., (2009). The Financial Structure Influence on the Cost of Capital and Enterprise Value. *Economics and Applied Informatics, 15*(2), 77-84.

Baringo County, (2015). *Annual Report*. Department of Industrialization, Commerce, Tourism & Enterprise Development, Co-operative Development and Marketing Division.

Beasley, M. S., Carcello, J. V., Hermanoon, D and Capides, R. P. (2000), *"Fraudulent Financial Reporting: An Analysis of Technology, Health Care and Financial Services Fraud Cases",* Accounting Horizons, 441-454.

Bhamra, S., Kuehn, L. A., Strebulaev, I. A., (2010). The Levered Equity Risk Premium and Credit Spreads: A Unified Framework. *Reviewed Financial Studies, 23*(2), 645–703

Chaddad, F. (2012). Advancing the theory of the cooperative organization: the cooperative as a true hybrid. *Annals of Public and Cooperative Economics, 83*(4), 445-461.

Chandresh B., (2012). Financial Ratio Analysis of Krishak Bharti Cooperatives Ltd. *International Journal of Marketing, Financial Services & Management Research, 1*(10) 98-107

Chen, N., Kou, S. (2009). Credit Spread, Implied Volatility, and optimal capital structures with jump risk and endogenous defaults. *Journal of Finance, 1*(9), 34–78

Chirwa, E. A. (1997). An econometric analysis of the determinants of agricultural credit payment in Malawi. *African Review of Money Finance and Banking, 1*(2), 75-87

Faharat A., (2004). *The role of agricultural cooperatives in agricultural development*. *The case of Menoufiya Governnovafe*, Egypt.

Fama, E. F., & French K. R., (2002). *Corporate stakeholders and corporate finance. Financial Management* (Spring): 5-14.

Flap, H and B. Völker, (2004). *Creation and returns of social capital: a new research program London*; New York: Routledge.

Francesconi, G. N., & Heerink, N. (2011). Ethiopian agricultural cooperatives in an era of global commodity exchange: Does organisational form matter?. *Journal of African Economies, 20*(1), 153-177.

Fredrick O. Wanyama. (2013). *Impact of liberalization on cooperative movement in Kenya*. Maseno University.

Fischer, E., & Qaim, M. (2012). Linking smallholders to markets: determinants and impacts of farmer collective action in Kenya. *World Development, 40*(6), 1255-1268.

Gabre-Madhin, E. Z. (2001). *Market institutions, transaction costs, and social capital in the Ethiopian grain market* (Vol. 124). Intl Food Policy Res Inst.

Gachara, D. (1990). *A Study of Cooperative Sector in Kenya.Cooperatives as Means of Economic Recovery and Poverty Reduction.* McMillan Publishers., 1st Edition.

Getaw, T., (2013). *Agricultural cooperatives in Ethiopia. Emerging issues and currentevidences. International food policy and research institute.* Addis Ababa, Ethiopia.

Gnedenko, B. V., Belyayev, Y. K., & Solovyev, A. D. (2014). *Mathematical methods of reliability theory*. Academic Press.

Graham, J. R., Harvey, C. R. (2001). The theory and practice of corporate finance: evidence from the field. *Journal of Finance, 1*(60), 187-243.

Hoque, Z. (2006). *Methodological issues in accounting research: theories, methods and issues*. Spiramus Press Ltd.

International Cooperative Alliance (ICA, 2010), report for the year 2009

International Labour Organization (ILO, 2003)

Jensen, K. L. (2003), "A Basic Study of Agency-Cost Source and Municipal Use of Internal Versus External Control", *Accounting and Business Research, 35*(4), 33-48.

Jokipii, A. (2010). Determinants and consequences of internal control in firms: a contingency theory based analysis. *Journal of Management & Governance*, *14*(2), 115-144.

Julie A. H., (2006). The economic culture of U.S.A agricultural cooperatives. *Journal of culture and agriculture, 28(2)*

Karagiorgos, T., Drogalas, G., Gotzamanis, E. and Tampakoudis, I. (2009), "The Contribution of Internal Auditing to Management", *International Journal of Management Research and Technology, 3* (2), 417-427.

Kasali & Adejobi., (2013). Analysis of cooperative financial performance in Ibadan metropolis, Oyo state, Nigeria. *International journal of cooperative studies, 2*(1), 10-15.

Khumalo, P., (2014). Improving the Contribution of Cooperatives as Vehicles for Local Economic Development in South Africa. *African studies, 14*(4)

Kimberlin, C. L., & Winterstein, A. G., (2008). *Research fundamentals. Am J Health-Syst Pharm,.* 65

Kodama, Y., (2007). New role of cooperatives in Ethiopia: the case of Ethiopian coffee farmers cooperatives,' African Study Monographs 35, 87–108.

Kumar V., Wankhede, K. G., & Gena, H. C., (2015). Role of cooperatives in improving livelihood of farmers on sustainable basis. *American journal of educationalresearch, 3*(10), 1258-1266

Kothari, C. R., (2008). *Research Methodology; Methods and techniques*. New Delhi, India: New Age International Publishers.

Krause, D. R., Handfield, R. B., & Tyler, B. B. (2007). The relationships between supplier development, commitment, social capital accumulation and performance improvement. *Journal of operations management*, *25*(2), 528-545.

Lin, N. (2002). *Social capital: A theory of social structure and action* (Vol. 19). Cambridge university press.

Maina P. C., & Hannah O. B., (2015). The effect of market forces on performance of dairy industries in Kenya. A case of Kenya Cooperatice Creameries. *Journal of business and management*, 7(35)

Mane, K. (2014). Structural reliability theory and its applications. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS), 12*(1).

Merton, R. C., (1974). "On the Pricing of Corporate Debt: The Risk Structure of InterestRates," *Journal of Finance, 1*(29), 449-470

Merton, R. C. (1976). Option pricing when underlying stocks are discontinuous. *Journal of economics, 3*(1), 125-144

Mikes A. & Kaplan R. S., (2014). *Towards a contingency. Theory of Enterprise Risk Management*. Working Paper 13-063. 53 Muli, M.S. (2003).

Ministry of Cooperative Development, (2012), *Annual report for 2011*

Mugenda & Mugenda (2009). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: ACTs Press.

Mwangi, A. K. (2010). *The Effect of Risk Management Practices on the Financial Performance of Commercial Banks in Kenya, Unpublished MBA Project*. University of Nairobi.

Mwangi, M. N., (2013). *The effects of liquidity on Performance of deposit taking microfinance institutions in Kenya. MBA research project*. University of Nairobi.

Mwatsuma K. M., Mary C. M., & Owen B. A., (2015). Performance of Kilifi county cooperatives under Kenya devolved system of government. *International journal of economics, commerce and management, 3*(6)

Muriuki K. M, Guyo S., & Ibuatha C. N., (2014). Factors influencing growth of dairy farming business in Imenti south, Meru, county. *Journal of business and management, 16(4), 21-31.*

Odetola S. K., Awoyemi T. T. & Ajijola S., (2015). Impact of cooperative society on fish farming commercialization in Lagos state, Nigeria. *African journal of agricultural research.*

Ogbulu, O. M., Emeni, F. K. (2012). Capital structure and firm value: Empirical evidence from Nigeria. *International Journal of Business and Social Science, 3*(19), 252- 259.

Onugu C. U. & Abdulahi T. O., (2014). The performance of agricultural cooperative societies. Enugu state, Nigeria. *Review of public administration and management, 1*(2)

Ostrome & Ahnt, K., (2007). The *meaning of social capital and its link to collective action,* Working Paper No. 2696. Social Science Research Network (SSRN).

Paldam, M., & Svendsen, G. T. (2000). An essay on social capital: looking for the fire behind the smoke. *European journal of political economy*, *16*(2), 339-366.

Pandey, I. M. (2009). *Financial management 10th Edition, Indian Institute of Management Ahmedabad*. Vikas Publishing. House P.VT. LTD. 289-350.

Pretty, J., Toulmin, C., & Williams, S. (2011). Sustainable intensification in African agriculture. *International journal of agricultural sustainability*, *9*(1), 5-24.

Rausand, M. (2014). *Reliability of safety-critical systems: theory and applications*. John Wiley & Sons.

Robson, L. S., Macdonald, S., Gray, G. C., Van Eerd, D. L., & Bigelow, P. L. (2012). A descriptive study of the OHS management auditing methods used by public sector organizations conducting audits of workplaces: Implications for audit reliability and validity. *Safety science*, *50*(2), 181-189.

Ruchira Prasad (2013) "A Case Study of Amul Cooperative in India in Relation To Organizational Design and Operational Efficiency" *International Journal of Scientific & Engineering Research, 4*(1), 1-9

Rwekaza, G. C., & Bikolimana M. (2016). Co-operative Development in Tanzania: A Tool for Equality and Socio-Economic Development. *Journal of economics andsustainable develop, 7*(6)

Sidique, (2015). The role of cooperative society for marketing agricultural products in Bangladesh. *Global journal of management and business research.*

Sikuka, 2010). *A comparative performance of selected agri-business companies and cooperatives in the Western Cape of South Africa.*

Tsujinaka, Y. (2002). The cultural dimension in measuring social capital: perspectives from Japan. *Social Capital: The Challenge of International Measurement, London*, *25*, 27.

Valentinov, V. L. (2004). Toward a social capital theory of cooperative organisation.

Wainaina, S. W. (2011), *"An Evaluation of the Internal Control Function: The Case of Kenya Polytechnic University College",* Unpublished MBA Thesis, University of Nairobi, Kenya.

Wambugu, S., Lillian, K., & Opiyo, J., (2011). *Productivity and performance of dairy farming in Kenya. Tegemeo institute of agricultural policy and development*. Egerton University, Kenya.

Wanjiru R. M., (2013). *Factors influencing dairy cooperative societies performance in Mathira and Kieni constituencies, Nyeri county, Kenya*. MBA research project.

Woolcock, M., & Narayan, D., (2000). *Social capital: implications for development theory, research, and policy,'* World Bank Research Observer, 15(2), 225–250.

World Bank, (2008). *Development Report 2008: Agriculture for Development*, Washington DC: The World Bank.

Yngwe K., (2014). Agricultural knowledge and information systems in Sweden. Report for the AKIS inventory (WP3) of the AKIS project. *Online resource:www.proakis.eu/publicationsuandevents/pubs*

APPENDICES

Appendix I: Introduction Letter

Dear Sir / Madam,

I am a student at Jomo Kenyatta University of Agriculture and Technology pursuing a Master of Business Administration (Finance) degree. I am currently carrying out a research on **"DETERMINANTS OF FINANCIAL PERFORMANCE OF AGRICULTURAL COOPERATIVE SOCIETIES IN BARINGO COUNTY, KENYA".** I would like to collect data from you based on your views in regard to determinants and performance of cooperative societies. Information given here will be treated with confidentiality and will be used for academic purpose only.

Thank you in advance.

…… ….. …….

Joseph Kipruto Kimetto — Student

Dr. Kimani E. Maina — University Supervisor

Appendix II: Questionnaire

The information given on this questionnaire is strictly meant for academic purpose and will remain confidential. You are kindly requested to fill in the questionnaire in the spaces provided.

Background information of the respondents

1. Name

   …….(Optional)

2. Education level

   Primary level [ ] Secondary level [ ] Diploma level [ ]

   Degree level [ ] Masters level [ ]

3. How long have you worked in cooperative societies?

   Below 1year [ ] 1-5 years [ ]

   6 -10 years [ ] Over 10 years [ ]

4. How long have you been in the current organization?

   Below 1year [ ] 1-5 years [ ]

   6 -10 years [ ] Over 10 years [ ]

5. How long has your cooperative society been in operation?

   Below 1year [ ] 1-5 years [ ]

   6 -10 years [ ] Over 10 years [ ]

On a 5-point Likert scale, kindly indicate how much you agree with the following statements under each part: 1: Strongly Disagree 2: Disagree 3: Neutral 4: Agree 5: Strongly agree

Cost of finance

Statement	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
1. Level of interest rates influence costs of finance thus affects performance of cooperative societies.					
2. Performance of cooperative societies is influenced by inflation rates.					
3. Tax rates increases financing costs thus determining trends in the performance from one time to another.					
4. Transaction costs incurred by cooperatives affect their performance.					
5. Large cooperative societies have economies of scales and advantage in regard to costs of obtaining funds.					
6. Appropriate financial management enhances control of cost of capital in an organization.					
7. Costs of finance are determined by competition in financial institutions and this affects performance of cooperative societies.					

Internal Control Practices

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Agricultural inputs costs incurred by the cooperative affects its performance.					
2. Amount of debts accrued by the cooperative society influences its performance.					
3. Performance is determined by the level of expenditures.					
4. Compliance levels links to the performance.					
5. Internal control leads to accountability among cooperative managers.					

Risk management

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Self-retention costs influence organizational performance.					
2. Effectiveness of risk control measures affects performance.					
3. Risks a voidance strategy has a direct link to performance.					
4. Segregation of risks enhances performance.					
5. Proper risk management ensures security of cooperative data used to make decisions.					
6. Assets in portfolio reduces risks and contributes to good performance.					

Social Capital

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The volume of capital gained as a result of good working relationship among managers and members contributes to better performance.					
2. The size of networks among members influences growth and performance.					
3. Reliable financial reports from the cooperative society are influenced by Trust among the managers and members.					
4. Consistency in performance comes as a result of reciprocity.					
5. Social capital provides a platform for association between cooperative societies and financial institutions.					

Performance

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Trends in sales growth of cooperative society states its performance.					
2. Returns on investments determine influences financial growth.					
3. The value of a cooperative society is affected by the return on assets.					
4. Operating efficiency reduces costs of equity and debt thus enhancing organizational performance.					
5. Appropriate risk management strategies leads to better performance.					

Thank you for your time and corporation

Appendix III: List of Accessible Cooperative Societies in Baringo County

1. Mwachon Farmers' Cooperative Society Limited
2. Torongo Farmers' Cooperative Society Limited
3. Mumberes Farmers' Cooperative Society Limited
4. Arama Farmers' Cooperative Society Limited
5. Langas Farmers' Cooperative Society Limited
6. Sigoro Farmers' Cooperative Society Limited
7. Sabatia Farmers' Cooperative Society Limited
8. Kabimoi Dairy Farmers' Cooperative Society Limited
9. Kiplombe Farmers' Cooperative Society Limited
10. Emining Farmers' Cooperative Society Ltd
11. Mogotio Farmers' Cooperative Society Limited
12. Kiptoim Farmers' Cooperative Society Limited
13. Kisanana Farmers' Cooperative Society Limited
14. Ngetmoi Farmers' Cooperative Society Limited
15. Sirwa Farmers' Cooperative Society Limited
16. Kabimoi Coffee Farmers' Cooperative Society Limited
17. Tiriony Farmers' Cooperative Society Limited
18. Tenges Farmers' Cooperative Society Limited
19. Poi Farmers' Cooperative Society Limited

Source: Department of Cooperative Development, Baringo County (2015)