

**DETERMINANTS OF FINANCIAL PERFORMANCE OF SACCOs IN  
NAROK TOWN, NAROK COUNTY**

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**A THESIS SUBMITTED TO THE SCHOOL OF BUSINESS AND  
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## DECLARATION

I hereby declare that this Thesis is my original work and has not been presented for award of a degree at any other university.

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## **DEDICATION**

This work is dedicated to my family who gave me invaluable moral support throughout the period. It is dedicated to my wife Ann Salaton, Children Nenkisisa, Olaikooni and Naitagol. To my brother Richmond and sisters, Nashipae and Soile. It is also dedicated to my mother Mary Kipai. Finally, I dedicate this work to God.

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## ABSTRACT

Kenya is among the leading countries in Africa that command a large Savings and Credit co-operative movement. However, the financial performance of Savings and Credit cooperatives is often affected by many internal and external factors that undermine the going concern of SACCOs. The general objective of this study was to establish the determinants of financial performance of Savings and Credit Cooperatives in Narok Town, Narok County. The study examined the effect of Membership size, Dividend pay-out and investments on the financial performance of SACCOs in Narok town, Narok County. This study was guided by Organizational Theory, Trade-off Theory and Bird in Hand Theory. The study adopted cross sectional survey research design. The target population comprised of 213-registered SACCOs, where only 17 were active based on the financial statements. Purposive sampling technique was used where 17 active SACCOs in Narok Town were considered. Secondary data was collected from financial statements of individual SACCO. Linear regression technique was applied to analyse data where the dependent variable Return on Equity (ROE) was regressed against the independent variables ( Membership size, Dividends pay-out and investments).The study established Membership size had no significant effect on the ROE,  $t(87) = 1.71$ ,  $p=0.090$ . Dividend pay-out had a significant positive effect on ROE,  $t(87) = 91.87$ ,  $p<0.001$ . Finally, investment had no significant effect on the ROE,  $t(87) = -0.23$ ,  $p=0.822$ .Based on the significant effects of the underlined variables, this study concludes that the combined effect of the independent variables; membership size, dividend pay-out, investment were significant contributors to the financial performance of SACCOs in Narok Town Narok County. The study recommends that SACCOs need to put more efforts in improving their dividend pay-out, build their membership size to boost their savings and improve on their investment which will increase the level of returns in order to enhance financial performance of SACCOs in Narok Town.

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## **ABBREVIATIONS AND ACRONYMS**

<b>ACCOSCA</b>	African Confederation of Cooperative Savings and Credit Associations
<b>AGM</b>	Annual General Meeting
<b>BOSA</b>	Back Office Service Activities
<b>BPR</b>	Business Process Re-engineering
<b>CEO</b>	Chief Executive Officer
<b>DFID</b>	Department for International Development
<b>DTSs</b>	Deposit Taking SACCOs
<b>FFI</b>	Formal Financial Institutions.
<b>FOSA</b>	Front Office Service Activities
<b>GDP</b>	Gross Domestic Product
<b>ICA</b>	International Cooperative Alliance
<b>ICT</b>	Information and Communication Technology
<b>IFC</b>	International Finance Cooperation.
<b>KNFC</b>	Kenya National Federation of Cooperatives
<b>Ksh</b>	Kenya shilling
<b>KUSCCO</b>	Kenya Union of Savings & Credit Co-operatives
<b>MFI</b>	Microfinance Institutions
<b>NACOSTI</b>	National Commission for Science Technology and Innovation
<b>OCDC</b>	Overseas Co-operative Development Council
<b>ROA</b>	Return on Assets
<b>ROE</b>	Return on Equity
<b>SACCOs</b>	Savings and Credit Co-operatives
<b>SASRA</b>	SACCO Societies Regulatory Authority
<b>Sh</b>	Shilling
<b>SMEs</b>	Small and Medium-Enterprises
<b>SPSS</b>	Statistical Package for Social Sciences
<b>SSA</b>	Sub-Saharan Africa
<b>WOCCU</b>	World Council of Credit Unions

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

This chapter gives a general overview of background information, statement of the problem, research objectives and hypothesis. It further outlines the significance of the study, scope of the study, assumptions and limitations of the study.

Savings and Credit Cooperative societies (SACCOs) give financial service to a number of in developing nations including Kenya. SACCOs promotes financial interest including the wellbeing of members by issuing them with loans for enhancing development and welfare (Cheruiyot *et al.*, 2012).

Savings and Credit Cooperatives (SACCOs) and other types of Micro Finance Institutions serves the mission of getting rid the gap left by Formal Financial Institutions (FFIs) including banks that didn't give financial facilities to the poor people worldwide (Zikalala, 2016). The other financial organizations claim that not to advance loans to poor people because they don't own collaterals such as land, houses in surveyed areas with titles deeds, and other long term assets (Zikalala, 2016; Kadigi, 2015). Furthermore poor people can access credit with reasonable rates of interest and conditions that favors them courtesy of SACCOs. It is crystal clear that without Savings and Credit Cooperatives and MFIs, the poor would perpetually remain poor as indicated by the International Finance Corporation (IFC) which found that about 60%

to 69% of the populations in many African countries had no access to financial services from FFIs (Kariuki& Rai, 2010)

SACCOs have been recognized as essential avenues for the growing of economies in many nations of the world. SASRA (2013) outlined that one billion people are affiliated with Savings Credit Cooperative worldwide as shown in the composition of International Co-operative Alliance (ICA). Countries that have reached to Economic Development have a cooperative sector featuring widespread vibrancy and dynamism (Olweny&Shiphoh, 2011). SACCOs are well in South America developed including countries like Argentina, Brazil, Chile and Uruguay (Ngondi, 2013). In addition in Latin America there are numerous examples of thriving SACCOs, including in Bolivia poultry production SACCOs produces about 60% of the country's chickens and nearly 30% of fertilizer inputs requirement for the country (Mosley, 2015). Savings Credit Cooperatives have experience rapid growth in countries of Africa including South Africa, Kenya and Rwanda. This has enhanced substantial economic growth due to their focus on provision financial services for the benefit of new businesses (Mokua, 2015). Mokua (2015) acknowledges that SACCOs are popular for providing savings and credit investment opportunities to individuals, institutions and group members. Contribution of SACCOs in Tanzania Economy of poor people and the country as a whole cannot be over emphasised. 8,444 SACCOs were registered by December 2018 with approximately 1,218,661 members (Tanzania Cooperative Development Commission, 2018). SACCOs contribute 45% of Kenya GDP and the sector has effectively managed to mobilise Ksh 200 billion deposits and assets worth 210 billion (Hezron & Muturi, 2015).

However the significance and contribution of SACCOs in rendering good services of providing access to financial services among the poor people, has been countered by a myriad of factors that have affected their performances. First and foremost SACCOs in India are faced with problems which include inadequate capital, poor member participation, inadequate managerial skills, corruption, frauds and absence of common brands. The said challenges have created inefficiency and lack of competitiveness in the institutions which has impaired their performance (Siddaraju, 2012). In Malaysia, SACCOs including other cooperatives have encountered many obstacles which include among others; improper governance, poor financial performance, managerial inadequacies and lack of capital (Tehrani *et al.*, 2014). Savings and credit cooperatives (SACCOs) in Africa face same financial challenges common worldwide within and without. Resources that are not sufficient, expertise knowledge, structural governance, and capitals are major impediments from within that undermine progress of SACCOs financially. Moreover factors from without are a great impediment to the SACCOs including government legislation, main stream banks competition including the new technological advancement that led to globalization in the markets. Moreover in Sub Sahara Africa (SSA) as asserted by Meyer (2015) SACCOs face the challenge of check off delay, dormant assets, non-performing loans, illiquid assets, interest rate that are low, operation costs which are high such as staff salaries, and other SACCOs business losses. These impediments affect financial performance of SACCOs.

SACCOs in Uganda face a number of challenges which are undermining their financial performance (Kakungulu *et al.*, 2010). SACCOs in Tanzania have been encountering problems of lack of working capital, high loans delinquency rate, poor management, embezzlement and poor business practice (Mwakajumulo, 2011; Maghimbi, 2010). ).

Ondieki *et al.* (2011) reported that Savings and Credit Cooperative (SACCOs) in Kenya were confronted by myriads challenges such as high level of illiteracy among their members, loan backlogs, poor record keeping, inadequate capital, managerial deficiencies and audit arrears.

Moreover according to Mvula (2013), the common issues that were undermining financial performance of SACCOs in Malawi were poor asset quality, non-compliance, inadequate capital, poor governance, poor profitability and poor liquidity. According to Churk (2015) in Tanzania SACCOs financial performance is being challenged by poor loan repayment especially SACCOs in agriculture sector that highly depend on rain. Churk held that there is need for developing sustainable strategies that would lead to poverty alleviation. SACCOs have low cost structure due to lowest cost of source of income and administration (Onyango, 2016). Various studies including (Zikalala, 2016; Mang'ana *et al.*, 2015; Nkuru, 2015; Maingi, 2014; Gweyi, 2014; Odieki *et al.*, 2011) were conducted on the area of dynamics of SACCOs in regards to investment in information technology, resource mobilization, growth sustainability, social economic, growth of income and performance.

Zikalala (2016) studied the role of Savings Credit and Cooperatives (SACCOs) in promoting access to credit in Swaziland; Mang'ana *et al.* (2015) studied the extent to which SACCOs had invested in Information Technology (ICT); Maingi (2014) evaluated factors that were affecting financial performance of SACCOs in the Kenyan context. Others include Odieki *et al.* (2011) who studied financial performance of SACCOs in Kisii central while Nkuru (2015) dealt with challenges that were undermining the growth of SACCOs within the agricultural sector in Kenya. As clearly



indicated, each of the above mentioned previous authors studied some aspects of SACCOs within certain clearly defined areas. Chahayo, Bureti, and Juma, (2013) asserted that inadequate capital has been a challenge facing SACCOs in Kenya. Other challenges include, loan default, assessment and management of risk leading to loan default and wrong decisions of investments, Liquidity challenges which undermine the advancement of loans and dividends, bad governance and wrong investments decisions (Olando, & Mbewa, 2012). Deposits taking SACCOs have not been able to repay loan from external sources due to lack of funds (SASRA, 2016).

The headquarters of Narok County is in Narok town. The county is located in the Rift Valley and borders the Republic of Tanzania to the Northern part and other six Counties in Kenya namely; Nakuru, Bomet, Migori, Nyamira, Kisii and Kajiado. Narok County is situated in the Southern part of the Great Rift Valley. It is cosmopolitan with a population projected at 1,130,703 persons as at 2019. Pastoralism, crop farming, tourism and trade are major economic activities. SACCOs registered in Narok amount to 213 as Directorate of cooperative development Narok County (2017). The size of membership in is 7845; Assets level was Ksh 929670186, where total equity amount Ksh 16, 864, 765, members deposit amounted to Ksh577, 667,072, loan advanced Ksh656, 275, 092, finally the amount of turnover is Ksh 70,119,095. There were 213 SACCOs that were registered in Narok Town, Narok County as per Narok County Directorate of Cooperate Development (2019) and only 17 were active.

KNA (2017) indicate that the main challenge facing the SACCOs in Narok County is capital. Narok County has the potential to earn as much as Ksh.3Billion annually from the SACCO sector up from the Ksh42.5million earned in 2016 .However capital

challenges make SACCO growth retrogressive compared to other Counties. In Consequently the research sort to see effects of the size of membership, dividend pay-out and investments influence the performance of SACCO in Narok Town, Narok town, Kenya.

Financial performance refers to how firms can strategically use their resources progressively for more yield in order to enhance maximum revenue (Nwaolisa & Chijindu, 2016). The significance of performance is that it reveals sustainability (Swain & Partnaik, 2013). The perpetual existence of a firm is revealed and influence investment decision by the potential investors. Determination of financial performance is guided by the ROE (Nwaolisa & Chijindu, 2016). ROE is the proportion of total profits to total equity. Return on Asset reveals profit generated out of the amount invested by shareholders (Pagach & Warr, 2010). When ROE rate are high it is an indication that there good performance. ROE is a good indicator of performance as it shows unit holder returns.

The World Council of Credit Unions (2009) noted that because of variations in how different SACCOs evaluate their performance it has been difficult to make comparison of the various SACCOs to be able to make any appropriate recommendations. Through their research and monitoring systems the union has come up with recommendations that have formed the basis for improved performance indicators for the SACCOs to rely on. These standardized financial indicators eliminate the diversity and provides an effective tool for comparing the performance of these SACCOs. Since 1990, the World Council of Credit Unions has been using a set of financial ratios known as “PEARLS.” Measures key areas of operations: Protection, Effective financial structure, Asset

quality, Rates of return and cost, Liquidity and Signs of growth. By using this evaluation system it is now much easier to gauge SACCOs financial performance in order to eliminate diversion.

## **1.2 Statement of the Problem**

Kenya is applauded for having the most vibrant and dynamic Savings and Credit Cooperative Societies (SACCOs) sector in Africa ranging from Agricultural and livestock Savings and Credit Cooperative Societies in rural areas to the financial SACCOs that are prevalent in urban areas. In provision of financial services SACCOs play a major role besides directing of money intended for creating wealth through investments which in turn spur economic growth powered domestic savings (Ratemo, 2015). However, the current literature indicates limitations in the way SACCOs have carried out their mandate. Mwende and Kalio (2014) in their study noted that lack of sufficient internal capital and mismanagement led SASRA to withdraw licenses of SACCOs such as Nest SACCO, Green Hills SACCO, Maono Daima SACCO, Ufundi and Transcom SACCOs. Narok Town SACCOs are performing poorly because of loan default, gauging and diversification of risk on loan and investments, unfavourable liquidity levels leading to low dividend pay-out, membership withdrawals and poor investment decisions which frustrates the perpetual existence of SACCOs (KNA, 2017). SACCOs in Narok have collapsed including Jua Kali SACCOs due to lack of funds, membership withdrawals, wrong investment decision, loan default and poor management (KNA, 2017). SACCOs in Narok are being pervaded by this situation. There are 213 SACCOs in Narok mostly formed during 2017 election campaigns (Directorate of Cooperative Development Narok County, 2020). However by the time of this study there were only 17 active SACCOs meaning the rest have either collapsed

or are dormant. Based on the number of SACCOs that have collapsed in Narok Town this study intention was to see determinants of financial performance of SACCOs in Narok Town, Narok County, based on four selected financial indicators; membership size, dividend pay-out and SACCOs' investments among SACCOs in Narok Town, Narok County.

### **1.3 Research Objectives**

#### **1.3.1 General Research Objective**

The general research objective of the study was to find out the determinants of financial performance of SACCOs in Narok Town, Narok County.

#### **1.3.2 Specific Research Objectives**

The study was guided by the following specific research objectives:

- i. To examine the effect of membership size on financial performance of SACCOs in Narok Town, Narok County.
- ii. To assess the effect of dividend pay-out on financial performance of SACCOs in Narok Town Narok County.
- iii. To determine the effect of investments on financial performance of SACCOs in Narok Town, Narok County.

### **1.4 Research Hypotheses**

The study sought to test the following null hypotheses:

H<sub>01</sub>: Membership size has no significant effect on financial performance of SACCOs in Narok Town, Narok County.

H<sub>02</sub>: Dividend pay-out has no significant effect on financial performance of SACCOs in Narok Town, Narok County.

H<sub>03</sub>: Investments have no significant effect on financial performance of SACCOs in Narok Town, Narok County.

### **1.5 Significance of the Study**

The results will be of importance to SACCOs Board of directors including managers in developing savings mobilization and lending tactics. The directors will also use these findings to develop solutions to the factors influencing service delivery of SACCOs in relation to savings and loans which are its major products.

In policy making the Sacco Societies Regulatory Authority (SASRA) will get vital information that is useful in policies formulation which will enhance regulation of SACCOs. As SACCOs grow the authority must come up with policies that address their specific challenges within the sector so as to facilitate faster growth with minimum setbacks. County co-operative commissioners will get information to guide SACCOs in coming with strategies which would help in enhancing financial soundness of the SACCOs sector in general.

The government of Kenya will use the study findings in making informed decisions on administration and execution of SACCOs subsidized ventures including tax subsidies that could be utilized to figure and actualize strategies to lessen non-performing advances that could adversely influence the economy and increment the execution of business, which could emphatically impact the economy.

Scholars and researchers will find relevant knowledge on the determinants of financial performance of SACCOs on the area of loan default, membership size, dividend pay-out and investments.

### **1.6 Scope of the Study**

The determinants of financial performance of SACCOs in Narok Town were explored by this study. The sample consisted of only those SACCOs that were active according to the department of cooperative societies in Narok County. The data was collected from financial report from 2013- 2018.

### **1.7 Assumptions of the Study**

It was assumed that data collected was accurate and best representative of the state of affairs of all Narok County SACCOs.

### **1.8 Limitations of the Study**

In determining the financial performance SACCOs in Narok Town other factors may have been left out. Consideration was given only to the financial performance, whereas, there could be non-financial indicators of performance. Time was a major limitation in collecting and analysing the data.

## 1.9 Operational Definition of Terms

<b>Determinants</b>	Factors, which decisively affects the nature or outcome of something.
<b>Dividend Pay-out</b>	The surplus amount of money paid to the SACCO members per year, out of the total profit after tax Kariuki (2014)
<b>Financial Performance</b>	Objective measure of how well a SACCO is using its financial resources to generate revenues (Nwaolisa&Chijindu, 2016).
<b>Loan default</b>	Failure of a member of the SACCO to repay a loan advanced to him/her according to the loan policy (Nancy, 2013).
<b>Membership size</b>	Number of SACCO members as at the end of financial period (Bwana &Mwakujonga, 2013).
<b>SACCOs Investments</b>	The amount of money allocated by SACCOs to various projects to generate income (Kimathi, 2014).

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a review of the relevant literature. It contains theoretical review, the empirical review which is a summary of studies conducted in relation to SACCOs financial performance. The chapter also presents a critique of the existing literature, research gaps and summary of the review.

#### **2.2 Theoretical Framework**

The structure that supports a theory in research study is referred to as theoretical review (Longman, 2010). Theoretical review exposes and clarifies theories that show the reason for existence of the research problem under study. A theory is a set of systematic interrelated concepts, definitions and propositions that are advanced to explain and predict phenomena (Cooper & Schindler, 2011). This study was guided by three theories to explain factors determining financial performance of SACCOs in Narok Town Narok County which includes Organizational Theory, and Trade- off Theory and Bird in Hand

##### **2.2.1 Organizational Theory**

Kimberly (1976) introduced this theory. The organizational theory states that organizational performance can be measured based on firm size. It shows the profitability being an element of performance based on the firm size. Organization efficiency is explained based on control cost, agency cost and management of transaction costs. Industry profitability, vertical organization integration and Sunk costs are associated with the size of the firm, hence determine the financial wellbeing.



Big firms are able to diversify the cost of operation. Variety of products can be traded and differentiation of services to meet client's needs (Jones, 2012). Risk management can be enhanced through diversification thus promoting better performance According to organizational theory, large firms have strategic advantage in achieving good performance than small firms, and hence it is important to expand as much as possible. Organization theory was applicable on the membership size because the theory states that organizational performance can be measured based on its size.

The competitive advantage of acquiring economies of scale that helps in cost reduction depends on the size of the firm (Odhiambo & Ochieng, 2018). This theory was useful in this study that assessed the determinants of SACCOs financial performance. Membership size in SACCOs determines the level of revenue collection in term of transaction fee, interest from loan, commissions and members' contribution.

This theory emphasize performance based on size of the firm. Therefore the larger the membership of a SACCO the better the performance hence influence thereof. However the size of members may not guarantee more revenue as some members may not save more due to lack of training and other personal challenges.

### **2.2.2 Trade-Off Theory**

Kraus and Litzenberger established this theory in 1973. The theory states that organizations trade-off the tax shield which is a benefit associated with debt financing and the cost that come along side with bankruptcy (Kraus & Lichtenberger, 1973). Debt financing has an advantage of tax shield and a disadvantage of cost of financial distress. This theory has been criticized by various scholars (Mwatu, 2018). The criticism is

based on the fact that taxation is certain while bankruptcy is rare. Trade off theory is only relevant to organizations with large debt. On the other hand trade off theory remain a major concept of capital structure due to the flexibility of the model (Ghazouani, 2013).

On investments this theory is relevant as it shows how SACCOs trade-off between using the internal capital or borrowed capital in their investments.

The cash flow is affected through choices made by management concerning the borrowing and retained capital financing. Management competence influence decision made. Human resource policies of the SACCOs dictates they can employ qualified managers and Board of Directors who can make cutting edge decisions. Borrowing and capital financing revolve around trade off theory. SACCOs should balance the ratios required by the relevant authorities that are intended to enhance performance. Debt and equity financing affects the capital levels of SACCOs. Supervision by the relevant authorities is essential in ensuring that SACCOs are within the borders of the minimum capital requirement for sustainable operations. It is worth noting that trade off theory doesn't cater for SACCOs with limited borrowing power due to lack of collaterals.

### **2.2.3 Bird in Hand Theory**

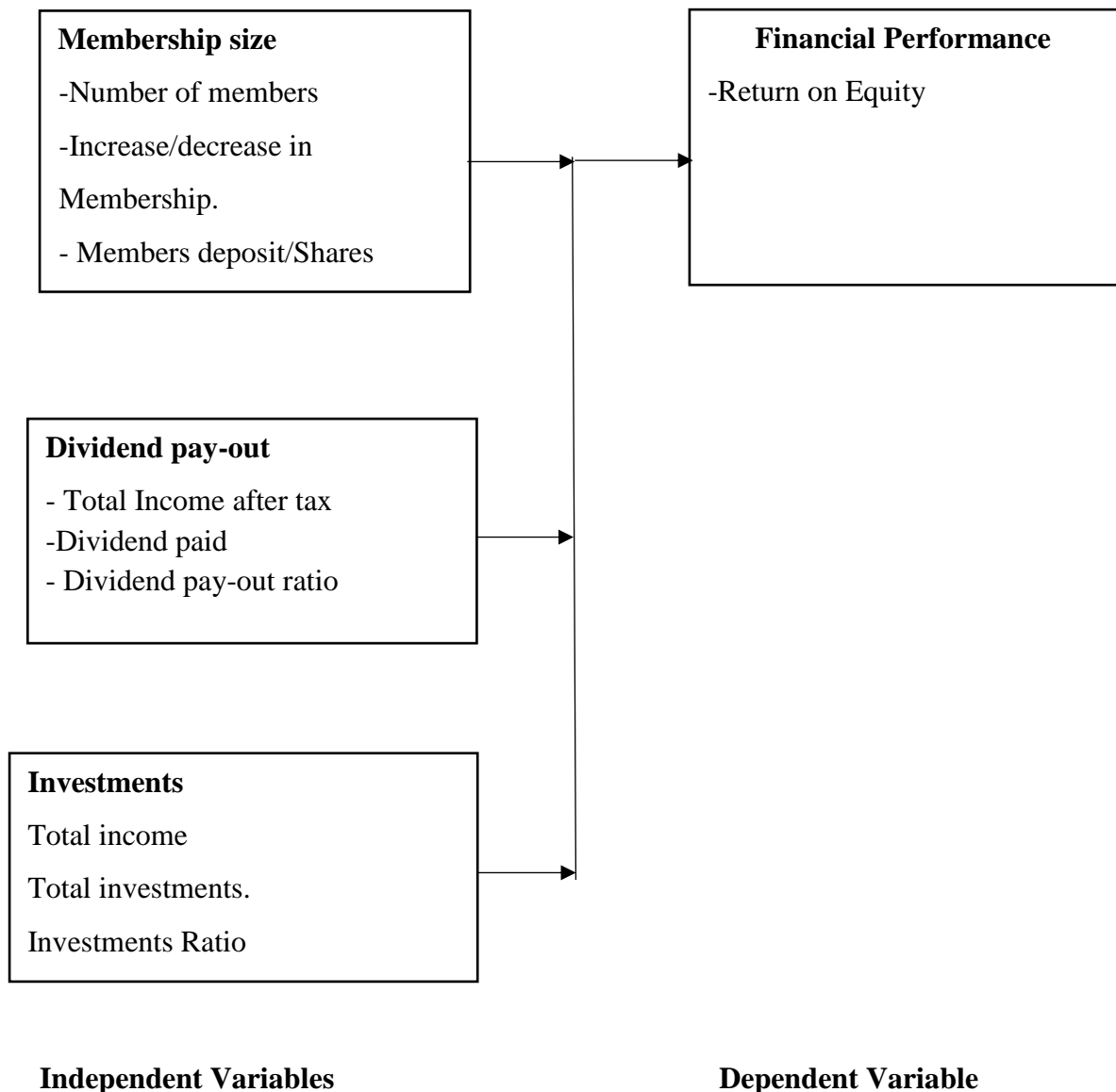
The theory was put forward by Gordon (1959) and Lintner (1962). The theory states that stakeholders of firms prefer of dividends as opposed to having the retained earnings, which generate capital gains. Investors who are low-income earners like the retirees prefer stable dividends unlike the stakeholders who have more income like those who are in the employment and are still young and strong to make more earnings. The investors in this theory are not sure of future investments to be undertaken by the

firms retained earnings but they are sure of the dividends at hand since they can see them and put them into use.

SACCOs could apply this theory to decide whether to pay dividends or invest in other profitable ventures that would earn more income for the SACCOs in future. However, the bird in hand theory may not apply during initial stages of SACCO operation before the break event point is attained.

### **2.3 Conceptual Framework**

The Conceptual framework for this study is a functional relationship between the four predictor variables, which are, Membership size, Dividend pay-out ratio and investment and financial performance as the dependent variable. The financial performance was gauged by relating net income after tax to return on equity. According to Revitch and Riggan (2012), conceptual framework illustrates the relationship of dependent and independent variables in a study. The relationship between membership size, Dividends pay-out, investments and financial performance of SACCOs in Narok Town, Narok County is illustrated in Figure 2.1.



**Figure 2. 1: Conceptual Framework**

### **2.3.1 Membership Size and Financial Performance of SACCOs**

First and foremost the member of a SACCO is a person who belong to that SACCO willingly by filling the form of membership and paying the membership fee thereof. Moreover SACCO members have a common bond either of occupational or production in nature. This characteristic makes a SACCO to be an association of people who have

come together with common agenda intended to enhancing their livelihood economically (SACCO's operations report, 2016).

Share is the capital of the SACCO society and an asset to members. Savings Credit Cooperative (SACCO) sector in Kenya, the members' contribute Shares and SACCO deposits in form of monthly contributions. SACCOs deposits are refundable at the request of the members based on the SACCO by laws; however shares cannot be refunded but transferable among members. This is to protect the SACCO from any loss and to give the member the chance of having dividend for the period to stays as a member within the society.

Kivuvo and Olweny (2014), found the ability to make income determines SACCOs progress. This ability depends on membership size of a SACCO holding other factors constant. This will to a higher level of income. In this regard, SACCO the size of membership shows its financial progress (Bwana & Mwakujonga, 2013). Membership withdrawal is characterized by poor services in regards to finances. Worst of all the potential members may lose hope in SACCO thus the common requirements cannot be fulfilled. The level of income also determines the membership size. SACCOs ought to take initiatives of properly educating the members on how they can do business and improve their income. Sensitivity to cost of funds obtained by SACCO members determines their future requests for the same. If they are unfavourable, then such members are likely to withdraw their membership (Hausknecht & Holwerda, 2013)

Share contribution account constitute the biggest part of credit union funding accounts, as per Central Bank of Kenya (2015). However, in Kenya as in many other countries,

shares are not withdrawn able and are used as security for loans to members (Jesse, 2016). Saving and Credit Co-operative Society accords members an opportunity for saving regularly, accumulating the savings and thereby creating a pool from which they can borrow exclusively for productive purposes at fair and reasonable rates of interest than would be obtained in other financial firms.

Membership size in SACCOs is a very paramount factor influencing financial performance of SACCOs. It goes without say that SACCOs with larger numbers of members have more chances of accumulating large amount of working capital and consequently issue huge amount of loans as opposed with the one with few members. In addition, large number of membership in SACCOs guarantees flow of revenue and consequently enhances its financial performance.

It is worth noting that under the Kenyan law SACCOs may close their businesses if they don't meet the minimum threshold. The minimum membership of 30 people is required for a SACCO to be registered. The 10million capital adequacy must be met by members. SACCO investments in non-core business not be more than 10% of its total assets. Moreover 15% of SACCO assets be in cash form to adequately provide for its liquidity requirements. SACCOs will also be expected to make adequate provision for loan losses as is done by the commercial banks and other financial institutions (SASRA, 2012). Despite the continuous growth of SACCOs in Kenya, members have been withdrawing their membership status due to financial losses of then SACCOs.

Based on SASRA (2013), the significance of SACCO membership is clear as it provides a source of business and hence economic viability of the SACCO. However, at the commencement of the SACCO, the founders will be interested with members in the same geographical location or the same occupation. This ensures that all members have a common goal to pursue and a common interest in the affairs of the SACCOs.

Recently, due to fear of losing money through the widespread corruption members have withdrawn from SACCOs. For instance, when in 2016 The Sacco Societies Regulatory Authority (SASRA) revoked the licences of five credit unions and effectively barring them from taking deposits from the public, most of the Members had to withdrawal their membership immediately to avoid loss of funds, shares and any benefit accumulated from their savings.

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

Onsase, Okioga, Okwena and Ondieki (2013) assessed the effects of performance management practices on provision of financial services by savings and credit cooperative societies. The study findings that efficiency and effectiveness influenced

performance via appropriate performance management practices. They did explain how performance management affected the membership. The issue of concern to members is the management of their savings that can guarantee benefits such as easier access to loans. The current study shows that lack of or inappropriate performance management practices leads to withdrawals in membership that will directly affect financial performance of SACCOs.

Loyalty of members to the SACCO is determined by interest rates on loans, modes of payments (cash, cheques, mobile banking) and variety of products hence members loyalty is the key determinant to maintenance of membership size by SACCO. Membership size may guarantee continued flow of revenue hence this enhances SACCO performance (Koskei & Naibei, 2017). The more the members the more available funds gain through membership fee and more contribution by members. This money will be advanced in terms of loans, which will bring more revenue to the SACCO through interest charged to members. The SACCO also earns revenue through commissions and bank charges charged to members after undertaking various transactions. This has a paramount effect in enhancing financial performance of SACCOs. Mumanyi (2014) states that education is an important ingredient that helps the members to invest the loans they acquire into viable projects and enhances their retention in the SACCOs.

The main activity of SACCO is offering credit to their members after accumulating savings from the SACCO membership. Front Office Sections attract non-members who open savings accounts, thus improving customer deposits. The membership of the SACCO grows both in FOSA and Back Office Sacco Activity (BOSA). This improves



the volume of transactions, thus improving the revenue income of the society hence improved performance. Jared (2013) asserts, the rapid development of the SACCOs movement in Kenya can be pinned on the fact that they have for long periods specialized in offering cheap loans at an 'affordable' repayment history to their clients. This gesture has attracted an exodus of clients from the formal financial institutions such as banks seeking their services (ACCOSCA, 2012). In Kenya some SACCOs have developed Front Office Services Activities (FOSA) to offer the essential services they render to clients. FOSAs have proved to be one of the key profit centres members and SACCOs have appreciated the services offered by these FOSAs attracting more members hence increasing significantly the SACCO's customer base boosting the share savings greatly.

### **2.3.2 Dividend Payout and Financial Performance of SACCOs**

Dividends are returns on investments by shareholders of any corporate entity like SACCOs, Banks, Insurance firms and many others. Dividends can be paid in form of cash or by acquiring more shares instead of receiving the cash. Companies that are successful generate income. The income can be retained in the company (spent or re-invested), pay off dividend, pay off liabilities or used to repurchase shares. Issues that arise if a company decides to distribute its income to shareholders include the proportion to which such income would be distributed to shareholders; whether the distribution should be as cash dividends or cash buying back some shares and how stable the distribution should be. There are many reasons why companies should or not pay dividends. Yet figuring out why companies pay dividends and investors pay attention to dividend is one of the many dividend puzzle which is still problematic and this study is trying to bleach the gap that exists by analysing the importance of paying

or reinvest dividend and the relationship that exist between dividend pay-out and the financial performance variables.

The dividend policy of a firm determines the size of the firm and its level of growth which are non-financial indicators as per researches done by (Uwuigbe, Jafaru&Ajayi, 2012) on dividend policy and firm performance in Nigeria. Firms decisions to payout dividends impacts on other operations of the firm either positively or negatively. Research has been conducted to determine either whether a firm's dividend policy has an impact on the future performance of the firm financially or otherwise (Abrahamsen &Balchen, 2010).The payment of dividends by firms has different impact according to the various performance indicators. The use and usefulness of non-performance measures to determine the extent to which firms combine financial, nonfinancial and subjective performance measures and that every kind of measure affects a firms operations differently.Signalling theory says that information is accessed by investors about future earnings is signalled from the dividend announcement which indicates a firm's stability (Khrawish, 2011). Due to the signalling effect SACCOs that pay more dividends attract more members from outside who contribute more deposit making money available for issuing of loans. The signalling effect also make the existing members to deposit more with a mind of earning more dividends which make it possible for SACCOs to get more money without necessarily incurring extra cost of external borrowing. In this regard, financial performances of SACCOs are enhanced.

Velnampy, Nimalthasan and Kalaiarasi (2014) researched on dividend policy and firm performance from manufacturing companies listed on Colombo Stock Exchange in Sri Lanka. In their research, a set of listed companies were investigated using data for the

periods 2008-2012. Profitability and Return on Equity were used as determinants of firm performance whereas dividend payout and Earning per share were used as measures of dividend policy. Statistical tests used were correlation, Regression analysis and descriptive statistics. They found out that determinants of firm performance such as Return on Equity and Profitability are not significantly correlated with dividend payout and Earnings per share meaning firms do not properly practice dividend policy guidelines.

Kariuki (2014) studied the relationship between dividend and performance of SACCOs with the objective of determining the relationship between dividends and the performance of SACCOs in Nairobi County. A descriptive research design was employed in this study. A census was conducted on the target population of 43 SACCOs in Nairobi County. Secondary data was collected from the financial statements of target population for the last five years. Regression model was used to find the relationship between the dependent variable (performance) and independent variables (Dividend, asset growth rates and organization growth).

### **2.3.3 Investments and Performance of SACCOs**

Capital allocation in modern time is a function of finance (Pandey, 2015). This function includes committing the firm funds on long term assets. Investments determine value of the firm by pushing its risks, profitability and growth. Reasons for investments decisions are; impact on firm long term growth, risks of the firm, involve large amount of funds, they are irreversible and are the most difficult decisions to make.

An investment is the outlay of a sum of money in the expectation of a future return, which more than compensates for the original outlay plus a premium to cover inflation, interest foregone and risk (Kimathi, 2014). High investment in non-earning investments and inadequate managerial competence contributes to the failure of SACCOs in Kenya (Kimathi, 2014). SACCOs should limit their investment on non-productive assets such as land, buildings, vehicles, furniture and cash, to a maximum of 5% of the total assets and thereby invest 95% of their funds into those assets that earn a return greater than the cost of funds and operating costs [Financial Services Deepening (FSD, 2009)]

Annual delegate meetings and department of cooperatives are to be blamed for investments activities undertaken by SACCOs because they are the one who approve investments (Mwaura, 2015). However profit/loss was not highlighted to qualify the argument. Investments that are not profitable should be avoided because though huge amount of money committed, returns are minimal which led to reduction of capital (KUSCCO, 2013).

According to Jeremiah and Bichanga (2014) SACCOs basically invest their finances in: loans to members, housing schemes, shares, fixed deposits, real estate and stocks. Major investments are in loans, buildings and other financial investments in that order. The return from each of these investments is my area of concern so as to find out what each contributes.

According to Mumanyi (2014) investments that are long term will enhance SACCOs financial performance which enable the SACCOs to effectively meet financial demands

of their members; the most effective idea for promoting this is transparent management system. KUSCCO has been instrumental in encouraging growth in SACCOs since 1993 through of FOSAs and offering a platform to invest. However the has been challenges such capacity building , change of attitude , dependence, cost cutting due to funding unviable projects and lack of saving culture. Raising income from interest is fundamental for SACCOs through creating ways to access more funds to lend to innovative members thus resorting in external borrowing and broadening the lending parameters.

Low members' confidence occasioned by low expectations of achieving capital gain from their savings can be overcome by investing in various avenues including Government bonds, KUSCCO, Cooperative bank, real estates among others. This will encourage more savings from members with expectations of high returns as dividends. Members who are motivated will lead to maximum benefit, variety of products offered, increased deposits which in turn enhance profitability growth and overall liquidity position to more reasonable levels. (Khrawish, 2011).

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

Karago and Okibo (2014) study concluded that, investments decisions by SACCO influence SACCO`s financial performance hence recommended that SACCOs required to invest in prudent projects in order to achieve better returns. Their study indicated that 68% of SACCO`s funds are invested on advancing loans to members out of which 70%

are non-performing hence raising need for SACCOs to consider diversifying their investments in prudent projects to achieve better returns.

### **2.3.4 Financial Performance of SACCOs**

This is the dependent variable in the study measured by ROE. Return on Equity (ROE) falls within the domain of financial performance measures and tracks SACCO's ability to generate income based on its equity. The ratio excludes non-operating income and donations. Financial profitability is the ability of a finance lending institution to cover all of its costs through interest and other income paid by its clients (Ayay&Sene, 2010). ROE provides a broader perspective compared to other measures as it transcends the core activity of finance lending institutions namely, providing loans, tracks income from operating activities including investment, and assesses profitability regardless of the finance lending institution's funding structure. It is a ratio of Income to its total asset (Khrwish, 2011). It measures the ability of the SACCOs management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Khrwish, 2011). Wen (2010), states that a higher ROE shows that the company is more efficient in using the equity.

### **2.4 Empirical Review**

The empirical review focuses on the studies done by other researchers on this field. It is a direct investigation books and periodicals (Zikmun, 2010). It is an in-depth search of other researches similar to this study.

#### **2.4.1 Membership Size and Financial Performance**

Koskei and Naibei (2017) studied determinants of member loyalty in SACCOs. The study was to; establish the influence of interest rates on loyalty of SACCO members; determine the influence of the mode of disbursement of funds on loyalty of SACCO members; to determine the influence of variety of SACCO products on loyalty of SACCO members and to determine the influence of collateral required by SACCOs to SACCO products by SACCO members in the selected SACCOs. A survey of selected SACCOs in Kericho County, Kenya was done. Data was collected using Self-administered questionnaires. Data was analysed by use of correlation analysis and regression analysis. They established that SACCOs member's loyalty is determined by interest rates, mode of disbursement and variety of financial products. They suggested that there was a need of providing competitive interest rates and improving on efficiency in disbursements of funds. Customer loyalty is a key determinant to maintenance of membership size by Sacco. However, this has not been clarified in the study. Membership size guarantees continued flow of revenue in terms of share contribution, deposits, commissions and transactions costs, which will, enhances financial performance of SACCOs

Motompa (2016) looked at factors influencing growth of saving and credit cooperative societies in Kenya: a case study of Kajiado east Sub County. The study was guided by the following objectives; to determine how management skill influence growth of savings and credit cooperative societies in Kenya, to find out how members participation influence growth of saving and credit co-operative societies in Kenya, to find out how political interference influence the growth of savings and credit cooperative societies in Kenya, and to establish how technology influence the growth

of saving and credit cooperative societies in Kenya. Descriptive research design was used in this study. The study targeted all the SACCOs in Kajiado Sub County which are 57 in numbers. Data collected was analysed using descriptive analysis tools. Members participation was found to have a positive and significant impact on SACCO growth and recommends SACCOs to educate their members as well informed members are more versatile in understanding the advantages of SACCOs and could easily be convinced to take part actively in governance and doing business in their SACCOs.

Muriuki (2010) researched on SACCO financial performance in Tharaka Nithi teachers SACCO with objectives to assess the effect of governance on performance, establish the effects of education on performance, assess how various market risks affect and establish the effect of membership based on SACCO performance. Descriptive research design where questions based on the research objectives were administered to the respondents. The data was analysed through descriptive statistics. The research revealed that dividend payment was influenced by profitability, growth opportunity, cash flow and size. Risk had a negative effect on the dividend pay-out ratio. However, the study did not clarify on the size. Size of an organization is majorly about the number of members. In that case, the membership size affected the performance that determined the dividend pay-out ratio.

Onsase, Okioga, Okwena and Ondieki (2017) assessed the effects of performance management practices on financial service delivery by SACCOs. The objectives were to: determine the extent to which Performance Management Practices were undertaken in the Sacco; evaluate the level of Performance of financial services in the Sacco;



establish the extent of the relationship between Performance Management Practices and the level of performance of financial services. The study adopted a descriptive design. Data were analysed using descriptive statistics. The findings showed that efficiency and effectiveness influence performance through appropriate performance management practices. Performance management was explained and how it affected membership. The main issue of concern to members is management of their savings which will guarantee the benefit of access to loans and dividends. This research established the lack appropriate performance management practices leads to inadequate financial performance of SACCOs.

Makena (2014) carried out a research on rebranding strategy and SACCOs performance. The objective of the research was to investigate the effect of rebranding strategy on performance of SACCOs in Meru County, Kenya. The survey incorporated both branded and non-branded SACCOs in Meru County. In the study it was established that branding had a good influence on membership of SACCOs membership retention, increase in membership contribution and increases in savings and shareholding. In line with the result, it is established rebranding has great value for SACCOs which seek to portray a new image in securing more market share. However the research didn't show how SACCOs could optimize revenue through increased membership. Members can be influenced to contribute more funds for increased common benefits as shown by the current study.

Mumanyi (2014) analysed SACCOs opportunities and challenges in light with devolved system of government of Kenya; a case of Mombasa County. Descriptive design was adopted in the study. Data were analysed using descriptive statistics. The objectives determine the challenges facing SACCOs operations in Kenya's current Devolved

Government, find opportunities available for the SACCOs in Kenya, find measures which have been put in place by the Kenyan government and other institutions to assist the SACCOs and recommendation in future for the SACCOs. The study indicated that education was a major setback for SACCOs in Mombasa County. However the study did explain how education to members will enhance their stay as well as contribution to the SACCO. Education is an important ingredient that helps the members to invest the loans they acquire into viable business ventures.

(Odhiambo Simon & Peter Ochieng (2018) carried out a study on determinants of financial performance of savings and credit cooperative societies in Nakuru town Kenya. Research objectives were membership size, frequency of supervision and management practices of employment. Descriptive survey research design was employed to capture of important information for the study. Inferential and descriptive statistic was used to analyse the data. Membership size was concluded to have significant effect on financial performance of SACCOs because it determined the level of organizational revenue from members deposit fees and commissions.

#### **2.4.2 Dividend Pay-out and Financial Performance**

Chumari (2014) did a research on the link between dividend pay-out on firms trading in stock exchange and financial performance in Kenya. The objective was to determine the link between dividends pay-out and the following four financial performance variables namely; profitability, sales growth, cash flow and market to book value. The research study adopted a descriptive research design. The study revealed there was a significant relationship between cash flow and dividend paid cash flows and dividend paid. There was a negative relationship in the case of the following two financial

variables which included, sales growth and market book value and dividend pay-out. This study confirmed that there is a positively and relationship between dividend pay-out and financial performance of SACCOs in Narok Town, Narok County

Kariuki (2014), studied the similarities between dividend –pay out and financial performance of SACCOs under the SASRA regulation in Nairobi County. A descriptive research design was employed in this study. A census was conducted on the target population of 43 SACCOs registered by SASRA in Nairobi County. Regression model was used to find the relationship between the dependent variable (Financial performance) and independent variables (Dividend, leverage and organization growth).The study found out that there was a positive relation on financial wellbeing of SACCOs regulated by SASRA in Nairobi County with dividend pay –out , leverage and organizational growth. Dividends leverage and growth affected positively the financial performance. However it didn't discuss the impact of capitalizing profit rather paying dividends.

This study confirmed that there is a positively and relationship between dividend pay-out and financial performance of SACCOs in Narok Town, Narok County.

Odhiambo (2015) carried a research on dividends pay-out affected market capitalization of firms quoted in Nairobi stock exchange. The research design used was descriptive to establish the relationship between dividend pay-out ratio and market capitalization. Multiple regression analyses were used in the data analysis with an objective of testing any existing relationships or interdependence between the two variables, the independent variable (dividend pay-out ratio) and dependent variable (market

capitalization. The study established that dividend pay-out affects the value of shares in the long run with a positive significant relationship. This clearly shows how relevant dividend policy is in affecting the share price of an organization and its worth as opposed to theories that show dividend policy is not relevant. The dividend pay-out ratio was addressed in this study to justify the extent to which it will affect financial wellbeing of SACCOs in Narok Town, Narok County due to increase of membership and members deposits.

Matendechere (2015) studied the relationship between financial performance and dividend pay-out of registered SACCOs in County of Nairobi by collecting data through questionnaire and use of secondary data. She used regression model to analyse the outcome, the study findings indicate a high and strong correlation between the performances of SACCOs in Nairobi County, with its dividend pay-out growth rates and asset growth rates. The findings show a positive correlation between profitability and dividend pay-out. This study used secondary data collected from financial statement as a basis of establishing financial performance because secondary data is more verifiable. The current study looked to see how dividend pay-out affects SACCOs performance and found that dividend has a significant effect on the financial performance of the SACCOs in Narok Town, Narok county which is in line with the findings that were made by Matendechere (2015) who also established that the when SACCOs pay dividends they are likely to motivate their members to deposit more money and hence this improves their performance.

Nibissa (2015) carried a study that aimed to identify the factors influencing financial performance of savings and credit cooperative societies in Case of Derash and Alle

Woreda in SNNPRG, Ethiopia. The study used descriptive research design and quantitative research approach were used and the primary sources of data were collected from 220 staff members of SACCOS from Derash and AlleWoreda Southern Region. The sampling techniques were stratified sampling method. Data analysis was done using descriptive statistics including mean, std. deviation, frequency and percentages were used. In his finding, he noted that dividend is the case which makes SACCOS odd from other financial services, because even if members pay high interest rate on borrowing they get back it in the form of the dividend. From the analysis made, seems that dividends have a positive relationship of (0.08) with loan size and it is strongly significant at 1 per cent significance level and similarly it has the positive relationship of (0.03) which statistically has a weak significant level. From this observation, he concluded that dividend paid to members highly determines the outreach of SACCOS positively. This implies that SACCOS which pay a high dividend to members attracts more members, at the same time motivates members to increase the amount of SACCOS deposits, which contributes highly to the financial performance of SACCOS positively.

#### **2.4.3 Investments and Financial Performance**

Makori, Munene and Muturi (2013) carried a research on the challenges facing SACCOS in Gusii region in Kenya. The objectives of this study included determining the challenges facing SACCOS“ regulatory compliance in Kenya. The research was carried out using various methodologies which included structured questionnaires, interviews, observations, focused discussions with selected persons and available documentation in the selected institutions. The data was analysed using inferential statistics. The research revealed poor management and investment in none earning

investments contributed to the failure of SACCOs in Kenya. Structured questionnaires, focused discussion and interview with selected persons were used to collect data. The primary data collected using questionnaires are subject to manipulation compared with secondary data from financial report which was used in this study.

An investigation was carried by Olao (2014) of stability of front office operation SACCOs. Descriptive survey was adopted. It targeted a population of 34 deposit taking SACCOs. Secondary data was used from sampled SACCOs. Financial stability was concluded as positively and significantly influences performance of DTS. However the study did indicate how SACCO investments could lead to financial stability.

Murage (2010), in her survey on investments procedures among Nairobi SACCOs concluded that investment practices undertaken by SACCOs impacted financial performance and their levels of return. Mutisya (2010), researched on Factors Contributing to Poor Financial Management in Savings Credit and Cooperative Societies in Kenya. He sampled 25 SACCOs societies in Nairobi County and found that over reliance on borrowing negatively affected effective financial services delivery. He further pointed out that poor investment decisions also impacted negatively on SACCOs' financial performance as it pushed SACCOs towards investing in unprofitable business ventures. He recommended a need for SACCOs to come up with investment policies, dividend policies and liquidity management policies to guide SACCOs on decision-making.

Karago and Okibo (2014) researched on financial factors influencing performance of SACCOs. The specific objectives of the study were fund misappropriation, investment

decisions, loan default and SACCO's members withdrawals. Multiple regressions to analyse fund misappropriation, investment decisions, loan default and SACCOs member's withdrawals and concluded that investment decisions made by SACCOs influences their performance and hence should invest in prudent project. However the extent to which investment affects the performance was not given. The study did not also look at other financial management decisions such as working capital management and capital structure.

## **2.5 Critique of Existing Literature and Research Gaps**

Developed nations have been focused by many studies at expense of developing countries. (Dunn et al., 2010; (Alfred, 2011; Clement & Martin, 2012; Gekara& Joseph, 2013; Pandey, 2015).It is not clear how varied factors relate and the way they affect financial performance is not clear. Alfred, 2011; Gekara& Joseph, 2013; Clement &Martin, 2012; Mwaura, 2015; Kithunzi, 2014 KUSCCO, 2013; Pandey, 2015) Deposit taking SACCOs were neglected in existing studies despite the role they play to propel the economies. (KUSCCO, 2013; Mwaura, 2015; Kanu&Okorafor, 2013; Odera, 2012; Wasike, 2012; Mwangi, 2012; Clement and Martin, 2012) used primary data which is subject to manipulation because the data cannot be verified, Makori, Munene&Muturi (2013). Most of the reviewed studies used primary data in their analysis. This data has a limitation in the sense that it relies on the opinion of the respondents which is very subjective. It is also noted that most of these studies have focused on SACCOs in large town where most of the members have high commitment level. Towns in counties such as Narok have not been a centre of focus by most researchers hence the need for this study. It is also noted that most studies have not

considered a cross sectional design where data collection is from various SACCOs over a long period of time in order to see the trends. The current study sought to fill the gap.

## **2.6 Summary of the Review**

The literature reviewed for this study showed that performance of most SACCOs experience changes that arise from a combination of various factors. Performance of SACCOs has had mixed findings due to the opposing theories the use of different indicators of performance and the different contributing factors. Studies conducted clearly indicates that the importance factors for consideration by a firm in calculation of dividends are projected as profitably, cash flows and liquidity of the firm. Though, most scholars have the idea that there is a positive relationship, others like Michaely (1995) and Gwilym et al., (2004) who believe that there is no such relationship that exist. The regulations by SASRA clearly stipulate how SACCOs with FOSA should be managed which includes restrictions of how much should the retained earnings and ownership of capital. The study sort to find out whether still with strict measures the positive relationship between financial performance and dividend still hold or no.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter covers the methodology applied in structuring the process of the research of collecting data so as to analyse the outcome in order to respond to the objectives of the research. It presents the design of the research, target population, sample size and sampling procedure, data collection, analysis of data, validity, reliability and model specification, and ethical consideration.

#### **3.2 Research Design**

The study used a cross sectional research design. Cross sectional design is a type of research design in which data is collected from many different individuals at a single point in time. Since the study collected secondary data from SACCOs within Narok Town, Narok County over a period of time a cross sectional survey research design was adopted. The design also relied on deductive reasoning or deductions and makes use of a variety of quantitative analysis techniques that range from providing a simple description of the variables involved, to establishing statistical relationships among variables through complex statistical modeling (Khalid, Hilman& Kumar, 2012). The cross-sectional design was used to establish the nature of the relationship between the variables of the study and hence test the hypotheses of the study at a 5% level of significance.

### **3.3 Target Population**

Population is a list of all units in the whole population under study as specified by objectives of the research; it is the universe from which the sample is to be selected (Ghuri & Gronhaug, 2005). According to Mugenda and Mugenda (2003), the study population should have some evident distinctiveness upon which one can generalize the findings of the study. According to the Directorate of Cooperative Development Narok County (2017) the number of SACCO in the county is 213.

### **3.4 Sampling Frame and Sampling Procedure**

The number of SACCOs were 213(Directorate of Cooperative Development Narok County, 2017).However at the time of the study only 17 SACCOs were active and operating in Narok Town. The study therefore used purposive sampling where all the 17 active SACCOs operating within Narok Town were considered.According to Kothari (2014) and Orodho (2009) purposive sampling method is used to select those items of a certain characteristic considered for study.

### **3.5 Data Collection**

The research collected secondary data from financial statements which were published and were available at the head office of the SACCOs in Narok Town Narok County. The data was collected from the 17 registered and active SACCOs operating in Narok town. A list of the SACCOs was obtained from the Directorate of Cooperative Societies in Narok County. From each year data on loan default, total amount of loans advanced, total assets, total equity, dividend paid and total amount of investment made were obtained from SACCOs under the study. Before data collection the researcher sought permission from the Directorate of Cooperatives Societies in Narok Town, after being

given an introduction letter from the Dean School of Business and Economics Maasai Mara University. The permit from National Commission of Science, Technology and Innovation (NACOSTI) was sought to facilitate data collection.

### **3.6 Validity and Reliability**

Secondary data was obtained from the financial statements of the 17 SACCOs. This data was derived from the financial statements as they had been effectively presented for auditing by an external expert for the purpose of ascertaining their validity. This data was therefore deemed to be accurate and reliable for analysis. The data was also considered valid and reliable considering the fact that similar test items were considered from the data sources and their comparison was done to establish the consistency. Based on the collected data Cronbachs alpha reliability coefficient was used to test the reliability using SPSS version 23. The results showed that the cronbach alpha reliability coefficient was 0.873. This was greater than 0.7 thresholds according to Kothari (2014).

### **3.7 Data Analysis**

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

Descriptive statistics such mean, minimum, maximum and standard deviation were used in the study to show the distribution of the quantitative data sets collected by the

study. Correlation analysis was carried on to assess existence of a linear relationship between the measures of financial performance (ROE) and the factors that assumed to affecting the financial performance of the organization. Multiple linear regression analysis was used to determine the effect of each individual factor assumed to be affecting the financial performance of the SACCO. Lastly, the Eta effect size was used to measure the amount of effect of each individual factor on the measures of financial factor based on the fitted regression equation. The inferential statistical tests were carried out at 95% level of confidence.

### 3.7.1 Correlation analysis

Correlation analysis was used to measure the existence of a linear relationship between each independent variable and dependent variables and also correlation between independent variables themselves.

The analysis was carried out at 95% level of confidence based on the following null and alternative hypothesis;

$$H_0 : r = 0$$

Against

$$H_0 : r \neq 0$$

The correlation coefficient analysis test was assumed to follow a t distribution with (n – 2) degrees of freedom. The test statistic t for the analysis was given as;

$$t = \frac{r}{\sqrt{\frac{1-r^2}{n-2}}}$$

Where r is the correlation coefficient and n is the number of observations.

When the test led to the rejection of the null hypothesis, the two variables were determined to have a linear relationship between them, otherwise the variables were declared not have a linear relationship between them.

The correlation coefficient  $r$  values within the range of -1 and 1 where negative correlation coefficient depicted an inverse relationship between the two variables while a positive correlation coefficient depicted a direct relationship between the variables.

The degree of association based on the correlation coefficient was interpreted as illustrated in the table below;

**Table 3. 1: Correlation analysis**

<b>Absolute Correlation Coefficient</b>	<b>Interpretation</b>
0	No relationship
0.00 to 0.30	Very weak relationship
0.30 to 0.50	Weak relationship
0.50 to 0.70	Moderate relationship
0.70 to 0.90	Strong relationship
0.90 to 1.00	Very strong relationship
1	Perfect relationship

Source (Turk, 2018, available at

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6107969/>)

### **3.7.2 Regression Analysis**

In order to determine if each of the factors affected the performance of the SACCOs, linear regression equations were fitted for the measures of financial performance of the SACCOs (ROE) against the individual factors that were assumed to be affecting the financial performance of the SACCOs. The following regression equations were fitted;

Model 1

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon_i$$

Where

$$Y_1 = \text{ROE}$$

$\beta_i$  and  $\alpha_i$  are regression parameters

$X_1$  = Membership

$X_2$  = Dividend pay-out

$X_3$  = SACCO investments ratio

$\varepsilon_i$  is the Error term

### 3.7.2.1 Test for adequacy of the regression mode

The adequacy of the two regression models was tested at 95% level of confidence based on the following null and alternative hypothesis;

Model 1

$$H_0 : \beta_0 = \beta_1 = \beta_2 = \beta_3 = 0$$

Against

$$H_1 : \beta_0 \neq \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$$

Model 2

$$H_0 : \alpha_0 = \alpha_1 = \alpha_2 = \alpha_3 = 0$$

Against

$$H_1 : \alpha_0 \neq \alpha_1 \neq \alpha_2 \neq \alpha_3 \neq 0$$

The test was based on an F-distribution with  $p - 1$  numerator degrees of freedom and  $n - p$  denominator degrees of freedom. The test statistic F was calculated as;

$$F \text{ statistics} = \frac{MS_R}{MS_E} = \frac{MS \text{ Model}}{MS \text{ Residuals}}$$

Decision to reject or accept the null hypothesis was dependent on the p values of the test. If the p value is greater than the specified significance level ( $\alpha = 0.05$ ), the null hypothesis was rejected and the model was declared adequate meaning that at least one of the parameters was significantly different from zero. Otherwise, the null hypothesis was not rejected and the model was declared to be inadequate meaning that all the parameters were not significantly different from zero.

### 3.7.2.2 Test for adequacy of individual parameters

After the test for adequacy of the model showed that at least one of the individual parameters was significantly different from zero, it was important to investigate the particular coefficients that were significant. This was assessed using the individual parameter tests for the adequacy of individual parameters. The test was carried out at 95% level of confidence based on the following null and alternative hypothesis for the first and second models;

Model 1

$$H_0 : \beta_i = 0$$

Against

$$H_1 : \beta_i \neq 0$$

Model 2

$$H_0 : \alpha_i = 0$$

Against

$$H_1 : \alpha_i \neq 0$$

The test was based on a t distribution with  $n - 1$  degrees of freedom. The test statistic  $t$  for the first and the second models were given as;

Model 1

$$t = \frac{\beta_i}{SE(\beta_i)}$$

Model 2

$$t = \frac{\alpha_i}{SE(\alpha_i)}$$

The decision on whether to reject the null hypothesis or not was based on the p-value where the p-value was determined to be greater than or equal to the significance level ( $\alpha = 0.05$ ), the null hypothesis was rejected meaning that the variable that was coefficient by the regression parameter had a significant effect on the financial performance of the SACCO. Otherwise, the null hypothesis was not rejected and the variable coefficient by the given regression parameter was said not to affect the financial performance of the SACCO.

### **3.7.3 Post modelling analysis**

In order to make sure that the conclusions that were drawn from the fitted regression models were not spurious, the tests for crucial assumptions of regression analysis were carried out to justify the conclusion given by each model. The assumption tests that were carried out include; Multi-collinearity and Test for Equal Variance



### 3.7.3.1 Multi-collinearity test

Multi-collinearity refers to the correlation between two independent variables especially when these factors are a bit redundant. This makes some independent variables to be insignificant in the model since multi-collinearity increases standard error of these highly correlated independent variables. Multi-collinearity was tested using Variance Inflation Factor (VIF) which assesses how much the variance of an estimated regression coefficient increases if the independent variables are correlated. If no variables are correlated, the VIFs will all be =1, but VIF greater than 1 means moderate correlation. VIF between 5 and 10 indicates high correlation that may be problematic and VIF above 10 assumes that the regression coefficients are poorly estimated and therefore you remove one factor from the model.

$$VIF = \frac{1}{1 - R_i^2}$$

### 3.7.3.2 Test for Equal Variance

Equal variance is one of the key characteristics which should be tested when performing any regression analysis. It assumes that although different samples can come from population with different means, their variances are the same. To test for the variance equality, the Breusch-pagan Godfrey test was used. The test statistic was calculated as:

$$n * R^2 \text{ (with } k \text{ degrees of freedom)}$$

Where

n is the sample size.

K is the number of independent variables

R<sup>2</sup> is the Coefficient of determination of the regression of squared residuals from the original regression.

The test statistic approximately follows a chi-square distribution with the hypothesis stated as:

$H_0$ : Constant Variance

Against

$H_1$ : No constant Variance

A small chi-square value along with an associated large p value showed that the null hypothesis is true, meaning the constant or equal variance.

### **3.7.4 Goodness of fit test**

This test helps us to understand how good our model is in terms of inclusion of the predictor variables in the model. The study used the Ramsey RESET test to test for the good of fit of the regression models. The test followed an F distribution. The test was carried out at 95% level of confidence based on the following null and alternative hypothesis. In general, it is a specification test for the linear regression model. The hypothesis for this test is stated as follows:

$H_0$ : Model has no omitted variable

Against

$H_1$ : Model has omitted variable.

This statistic tests whether the non-linear combination of the fitted values helps explain the response variable. The decision on rejection of the null hypothesis was based on the p values in which if the p-value was determined to be greater than the significance level alpha then the model was said not to have fitted good otherwise the model was said to have fitted good.

### 3.7.5 Effect size

The effect size is a number measuring the strength of relationship between two variables or sample-based estimate of that quantity. There are different types of effect size estimations based on the different types of analysis examined. In the study, since the study was dealing with multiple regression analysis, Cohen's  $f^2$  effect size method was used to determine the effect size of each independent variable. The Cohen's effect sizes were calculated as;

$$f^2 = \frac{R^2}{1 - R^2}$$

Where  $R^2$  is used as the squared multiple correlation.

### 3.8 Variable Description

The following variables were used to measure the performance the SACCOs;

- i. **Return on Equity (ROE)** is the proportion of total profit after tax to total equity. It is the measure of net profit as a rate of shareholder's value. ROE is calculated as:

$$\text{Return on Equity} = \text{Total profit/Total equity.}$$

On the other hand, the following variables were conceptualized to affect the financial performance of the SACCOs

- i. **Membership size** is the total number of registered and active members of a SACCOs as at the end of a financial year. A SACCOs with more members is expected to have more turn over resulting to high levels of profits.

- ii. **Dividend Pay-out** is dividend declared by the SACCOs compared with total income after tax. Dividend Pay-out rate=  $\frac{\text{Total dividend}}{\text{Total earning (total income after tax)}} \times 100$
- iii. **Investments** the amount of money that the SACCOs have invested in comparison to the total income after tax.  
Investment rate =  $\frac{\text{Total Income after Tax}}{\text{Total Investment}}$ .

### 3.9 Ethical Considerations

The researcher obtained permission for data collection from the relevant authorities including Maasai Mara University, National Commission for Science, Technology and Innovation (NACOSTI) and county department of cooperatives. A letter of authorisation from the Graduate School of Maasai Mara University allowing the researcher to carry out the research was issued. The researcher used the letter to apply for authorisation permit to conduct the study from the (NACOSTI). Data collection was guided by the ethical considerations of confidentiality, anonymity, responsibility, respect, competence, consent, security and understanding. Permission was sought from the SACCOs' management so that the researcher could obtain the required data. This was important to ensure that they are all aware of the use of the SACCOs data for academic research. The researcher also had the opportunity to indicate to them that the data collected was to be used purely for the academic research.

## **CHAPTER FOUR**

### **FINDINGS AND DISCUSSIONS**

#### **4.1 Introduction**

This chapter presents the analysis of the data and the results. The research objectives were; effect of Membership size on financial performance of SACCOs, effects of dividend pay-out on financial performance of SACCOs and the effect of Investments on financial performance of SACCOs in Narok Town, Narok County. The performance of the SACCOs was measured using Return on Equity. The chapter presents the descriptive analysis using percentages and frequencies while inferential analysis was computed using correlation analysis and simple linear regression analysis.

#### **4.2 Effects of Membership Size on Financial Performance of SACCOs**

The first objective of the study was to examine the effect of membership size on the financial performance of SACCOs in Narok Town since 2013 to 2018.

Descriptive analysis was carried out to see how membership size affects performance of SACCOs in Narok Town. The study sought to see whether the SACCO membership was expected to have a direct correlation with the performance of the SACCOs. In order to determine the relationship the study collected data on membership size of the SACCOs. The data was first analyzed using the mean and the results are presented in Table 4.1.

**Table 4. 1: Membership Size**

No. of Members	No. of SACCOs *						Mean
	Year						
	2013	2014	2015	2016	2017	2018	
Below 201	14(82.3)	14(82.3)	13(76.5)	12(70.6)	11(64.7)	11(64.7)	12(73.5)
201-400	1(5.9)	0	1(5.9)	1(5.9)	2(11.8)	2(11.8)	1(6.9)
401-600	0	1(5.9)	1(5.9)	2(11.8)	2(11.8)	2(11.8)	1(7.8)
Above 600	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)
<b>Total</b>	17(100)	17(100)	17(100)	17(100)	17(100)	17(100)	17(100)

\*% in Parenthesis

The results in Table 4.1 show that most of the SACCOs (73.5%) had an average membership size of between 1-200 members, followed by 11.8% with a membership of more than 600. Another 7.8% of the SACCOs had a membership size of between

401 and 600 while only 6.9% of the SACCOs had a membership of between 201 and 400.

The average membership per year for the SACCOs was then calculated and results are presented in Table 4.2

**Table 4. 2:Average Membership**

Years	2013	2014	2015	2016	2017	2018	Mean
Membership size							
for all SACCOs	4394	4728	5186	6205	6521	6523	5592
No of SACCOs	17	17	17	17	17	17	17
Average membership size							
for all SACCOs	258	278	305	365	384	384	329

The results in Table 4.2 show the average membership for the 17 SACCOs per year as ranging from 258 to 384. This is computed by taking the total membership of all the 17 SACCOs divided by the number of SACCOs. The results were further presented in Figure 4.2 so as to show the trend on membership more clearly for the study period between 2013 to 2018.

In order to show the trend in average membership through the years, the findings are presented in figure 4.1.



**Figure 4. 1: Average Membership of SACCOs over the Study Period**

The results in Figure 4.1 show the average number of members in SACCOs for five years have shown a steady increase as indicated on figure 4.1. The results show that there is a steady increase from an average of 258 to 384 for the years 2013 to 2018 respectively. This implies that the average membership in the SACCOs has increased.

In regards to SASRA (2013), membership of SACCOs provide a source of business which leads to economic viability of SACCOs. However, during a SACCO formation, the promoters will be interested with members who are in the same occupation or geographical area. This will ensure members have a common goal to pursue and common interest in the affairs of SACCOs.

Moreover, ROE was used to access the effect of membership size on SACCOs performance. The results are presented in the table 4.3

**Table 4. 3:Results of Regression Coefficients of Membership Size on ROE**



ROE	Coef	std. err.	t	P> t	[95% CI]
<b>LnMembp</b>	1.82037	1.4529027	4.02	0.000	2.708044
<b>_cons</b>	-7.622535	2.353524	-3.24	0.001	-3.009713

The study negates the null hypothesis that membership size had no effect on financial performance in that ROE ( $t = 4.02$ ,  $p=0.000$ ). This implies that a unit increase in the natural logarithm of membership size was determined to increase ROE by 1.82037.

This study has shown that membership size has a significant effect on the financial performance of the SACCOs in Narok County which is in line with the findings that were made by Motompa (2016). Motompa looked on factors influencing growth of SACCOs in Kenya: a case of Kajiado east Sub County. Member's participation was found to have a significant impact on SACCOs growth and recommendations were made that SACCOs should educate their members because informed members are more versatile in understanding the advantage of SACCOs and could easily be convinced to take part actively in governance and doing business in their SACCOs.

This is line with Kivivo and Olweny (2014) who established that revenue generating capacity affect the financial performance of SACCOs. The ability to generate revenue is determined by number of members who belong to a SACCO when other factors are held constant leading to more revenue. Hence, the number of members determine the financial performance of a SACCO. (Bwana & Mwakujonga, 2013).

#### **4.3 Effects of Dividend Payout on Financial Performance of SACCOs**

The second objective of the study was to assess the effect of dividend pay-out on financial performance of SACCOs in Narok Town, Narok County. The researcher

determined the dividend pay-out ratio by dividing the amount of dividend paid with the total income after tax and the results are presented in Table 4.4.

**Table 4. 4:Dividend Amount Paid**

Amount '000'ksh	No. of SACCOs*						Mean
	Years						
	2013	2014	2015	2016	2017	2018	
Below 501	15(88.2)	15(88.2)	15(88.2)	14(82.4)	14(82.4)	13(76.5)	14(84.3)
501-1,000	0	0	0	1(5.9)	1(5.9)	2(11.8)	1(3.9)
1,001-1,500	0	0	0	0	0	0	0
1,501-2,000	0	0	0	0	0	0	0
Over 2,000	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)
Total	17(100)	17(100)	17(100)	17(100)	17(100)	17(100)	17(100)

\*% in Parenthesis

The results presented in Table 4.4 show that most of the SACCOs 14 (84.3%) paid up to Kshs 500,000 in dividends per year during the study period. The results show that only 2 (11.8%) of the SACCOs paid an average of over Ksh 2,000,000 in dividend per year, and only 1(3.9%) paid between Kshs 501,000 and Ksh 1,000,000 in dividends. This implies that the majority of the SACCOs operating in Narok paid their members dividends of up to Kshs 500,000 per year.

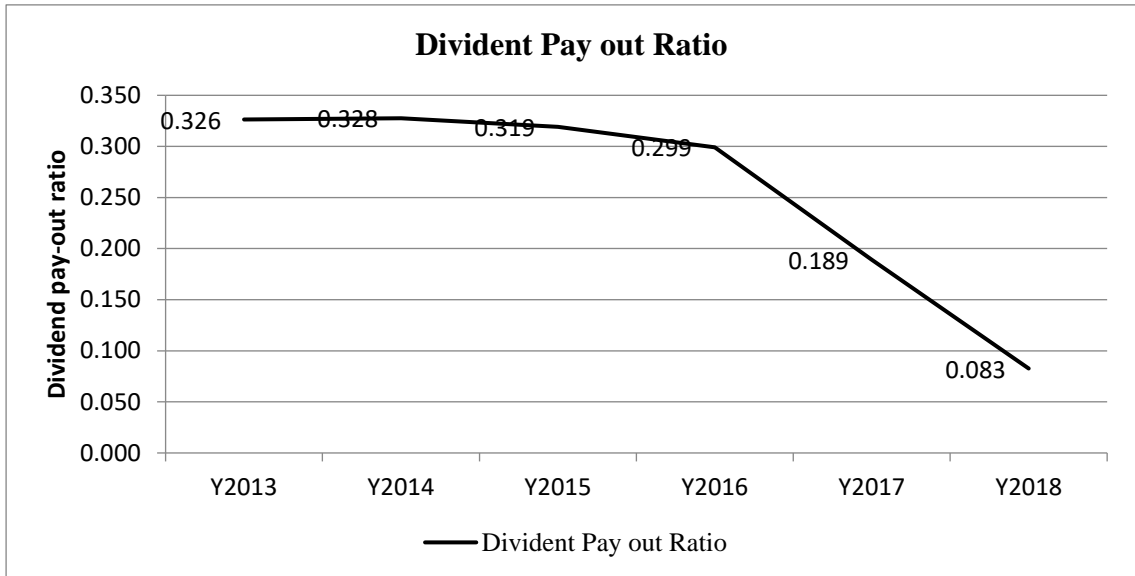
The study also sought to find out the mean dividend payout ratio for the five years from 2013 to 2018 for the SACCOs. Dividend payout ratio was computed as a ratio of Total dividend to total earnings as shown in Table 4.5

**Table 4. 5:Dividend Pay Out**

<b>Year</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Mean</b>
Total dividend paid							
(kshs 000)	26,235	29,878	30,233	30,024	17,878	7,406	23,609
Total income after tax							
( kshs 000)	80,393	91,219	94,737	100,337	94,588	89,626	91,817
Dividend pay-out ratio	0.326	0.327	0.319	0.299	0.189	0.083	0.257

The results in Table 4.5 show that there was an increase in the total dividend paid by the SACCOs over the years of the study period. The results show that there was a steady growth in the amount of dividend declared from 2013 to 2016 from Kshs 26,235,000 to Kshs 30,233,000. Then 2017 and 2018 saw a great decline from Kshs 30,024,000 to kshs 7,406,000. In regard to the total income after tax 2016 had the highest amount kshs 100,337,000. The highest dividend pay-out ratio was in 2014 at a value of 0.327 while 2018 had the lowest dividend pay-out ratio of 0.083.

Further analysis was done to show the trend of the dividend pay-out ratio over the five year period as shown in Figure 4.2.



**Figure 4. 2:Dividends Pay-out Ratio by SACCOS**

The results in figure 4.2 shows that there was an downward growth in the amount of dividend declared by the SACCOS with 2014 having the highest mean of the dividend declared for the period.

Finally the effect of dividend pay-out on financial performance based on the two measures of financial performance with ROE was analysed as shown in table 4.6

**Table 4.6: Results of Regression Coefficients of Dividends Payout on ROE**

ROE	Coef	std. err.	t	P> t	[95% CI]
<b>DVDEND</b>	1.40772	7.01410	99.82	0.000	1.435763
<b>_cons.</b>	0.00597	44.06877	0.09	0.93	1.1425945

The study established that with respect to ROE dividends pay-out had a significant effect on financial performance with ( $t = 99.82$   $P = 0.000$ ). A unit increase in dividend is determined to increase ROE by 1.40772.

This shows that dividend has a significant effect on the financial performance of the SACCOs in Narok County. This agrees with the study by Matendechere (2015) who studied the relationship between financial performance and dividend pay-out of registered SACCOs in County of Nairobi and found that there was a positive correlation between profitability and dividend pay-out

#### **4.4 Effect of Investment on SACCOs Financial Performance**

The third objective of the study was to determine the effect investment on financial performance of SACCOs. In determining the impact, the amount of investment was extracted from the records of the SACCOs. The rate of investment was computed based on the total investment and the total income after tax.

The study sought to find out the investments of the SACCOs. The study also sought to establish the investments ratio and the impact thereof on the financial progress of the SACCOs in Narok Town, Narok County. The results are presented in Table 4.6.

**Table 4. 6: The amount of investment**

<b>Amount</b> (‘000’ksh)	<b>No. of SACCOs</b>						<b>Mean</b>
	<b>Year</b>						
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	
Below 501	15(82.2)	15(88.2)	15(88.2)	14(88.4)	13(76.5)	13(76.5)	14(83.3)
501-1,000	0	0	0	1(5.9)	2(11.8)	2(11.8)	1(4.9)
1,001-1,500	0	0	0	0	0	0	0
1,501-2,000	0	0	0	0	0	0	0
Over 2,000	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)
<b>Total</b>	17(100)	17(100)	17(100)	17(100)	17(100)	17(100)	17(100)

\* % in Parenthesis

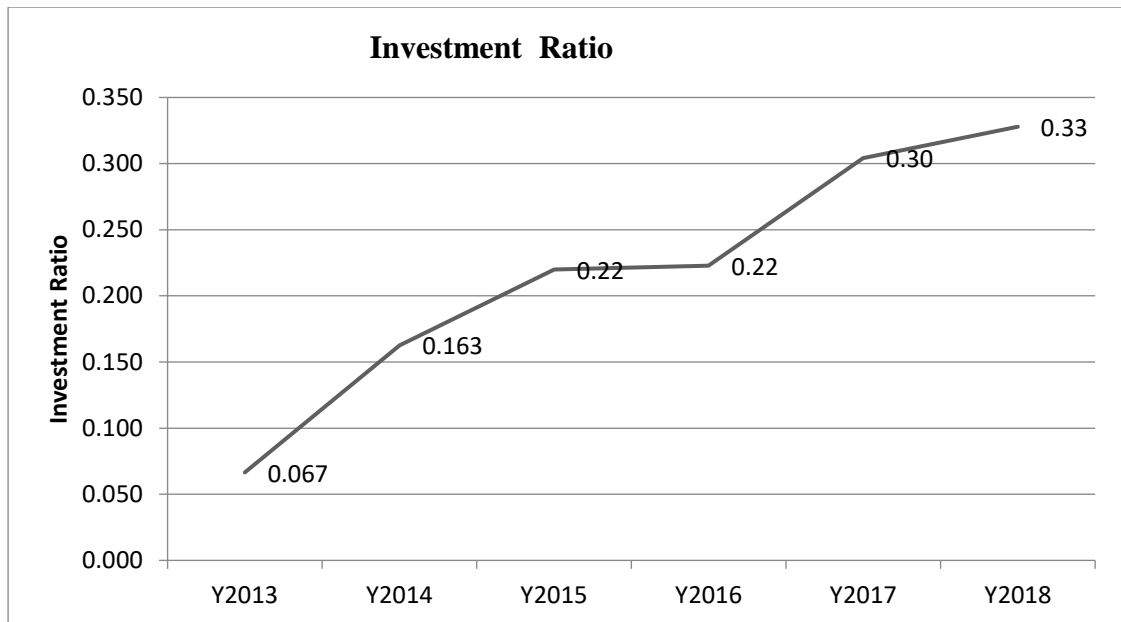
The results shown in Table 4.6 indicate that the majority of the respondents (83.3%) had average investment of Kshs 500,000 and below per year. This was followed by 11.8% of the SACCOs that had average investments of over Ksh2, 000, 000 per year.

In order to determine the investment ratio, the total investment and total income after tax data was used as presented in Table 4.7.

**Table 4. 7:Investment Ratio**

<b>Item</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>MEAN</b>
Total Investment							
(000)Ksh	5,347	14,828	20,827	22,361	28,776	29,386	20,254
Mean Investment							
(000)Ksh	315	989	1,388	1,315	1,693	1,729	1,238
Total Income After							
Tax (000)Ksh	80,393	91,219	94,737	100,337	94,588	89,626	91,817
Investment Ratio	0.067	0.163	0.22	0.22	0.30	0.33	0.221

The results in Table 4.7 indicate that average investment over the six year was Kshs 20,254,000. With the mean investment across the years being Kshs 1,238,000, the investment to total income ratio shows an upward trend from a low of 6.7% in 2013 to 33.0% in 2018. The mean investment ratio for the 17 SACCOs was estimated at 22.1% over the six year period. This shows an increase in the utilization of the income generated by the SACCOs for investments and this is likely to have affected the performance of the SACCOs. This compares well to the WOCCU requirements that the total investment in both long term and short term investment should add up to 30%. The trend is shown in Figure 4.3.



**Figure 4. 3: Mean Investment Ratio of the SACCOs**

The results presented in figure 4.3 show the mean investment ratio, which was measured by considering the total investment per year over the total income after tax generated by the SACCOs over the study period. The results show that there is a steady increase in the investment ratio of the SACCOs from 0.067 to 0.33 from 2013 to 2018. It is a major contributing factor to the level of investment among the SACCOs in Narok town. In their study, Makori, Munene & Muturi (2013) indicated that the performance of SACCOs was influenced by the rate of investments. Makena (2014) also established that SACCOs had improved on their investment, which had affected their performance. It is also in line with trade off theory that states that firms trade-off the tax shield which is a benefit associated with debt financing and the cost that come along side with bankruptcy (Kraus & Lichtenberger, 1973). Debt financing has an advantage of tax shield and a disadvantage of cost of financial distress.

The study also checked the effect of investment based ROEs as shown in table 4.8



**Table 4. 8:Results of Regression Coefficients of SACCO Investment on ROE**

<b>ROE</b>	<b>Coef</b>	<b>std. err.</b>	<b>t</b>	<b>P&gt; t  </b>	<b>[95% CI]</b>
<b>INVSTMT</b>	21.30976	2.101615	10.14	0.000	25.42885
<b>_cons</b>	10.16116	5.354433	1.90	0.058	20.65565

The study established that the investment ratio had a significant effect on the ROE, ( $t = 10.14$   $p = 0.00$ ). A unit increase in Investment was determined to increase ROE by 21.30976 units.

The findings were determined to be in line with the findings by Makori, Munene&Muturi (2013). Also by Makena (2014) who determined that investment had significant effect of performance of SACCOs.

An investigation was also carried by Olao (2014) of stability of front office operation SACCOs which concluded that SACCOs investments leads to stability of SACCOs.

#### **4.5 Financial Performance of SACCOs in Narok Town, Narok County**

The performance of SACCOs was measured using ROE using the data collected on total equity and total income after tax by the SACCOs. In regard to total equity, the distribution of the SACCOs in regard to amount generated was presented in Table 4.9.

**Table 4. 9:Total Equity**

Amount (000) Ksh	No. of SACCOs*						Mean
	Year						
	2013	2014	2015	2016	2017	2018	
Below 10,001	15(88.2)	15(88.2)	15(88.2)	15(88.2)	15(88.2)	15(88.2)	15(88.2)
10,001 -20,000	0	0	0	0	0	0	0
20,001-30,000	0	0	0	0	0	0	0
30,001-40,000	0	0	0	0	0	0	0
More Than 40,000	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)	2(11.8)
<b>Total</b>	17(100)	17(100)	17(100)	17(100)	17(100)	17(100)	17(100)

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**\*% in Parenthesis**

The results in Table 4.9 show that the majority of SACCOs, (88.2%) had average equity amounting to Kshs 10,000,000 and below while the rest (11.8%) had a total equity of Kshs more than 40,000,000 as shown. This implies that most SACCOs operating in Narok town have their total assets valued at least Kshs 10,000,000. The data collected representing the total income after taxes were analyzed and the results are presented in Table 4.10.

**Table 4. 10: Total Income after Tax**

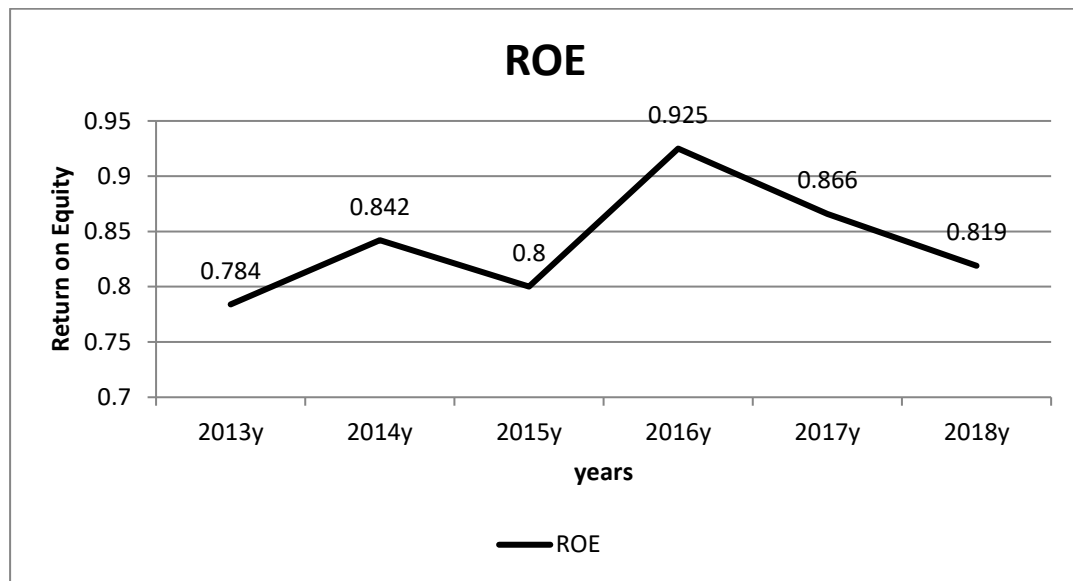
Amount '000'Ksh	No. of SACCOs*						Mean
	Year						
	2013	2014	2015	2016	2017	2018	
Below 500	15(88.2)	13(76.5)	14(82.4)	13(76.5)	11(64.7)	11(64.7)	13(75.5)
501-1,000	0	1(5.9)	0	1(5.9)	2(11.8)	2(11.2)	1(5.9)
1,001-1,500	0	1(5.9)	0	0	1(5.9)	0	0(2.0)
1,501-2,000	0	0	1(5.9)	1(5.9)	0	0	0(2.0)
OVER 2,000	2(11.8)	2(11.8)	2(11.8)	2(11.8)	3(17.6)	4(23.5)	2(14.7)
<b>Total</b>	17(100)	17(100)	17(100)	17(100)	17(100)	17(100)	17(100)

**\*% in Parenthesis**

The results in Table 4.10 show that the many SACCOs (75.5%) income after tax was Kshs 500,000 ,next was (14.5%)whose income after tax was Ksh 20,000,000 others

(5.9%) income after tax between Ksh 500,000 to 1000,000 finally the rest were (2%) with income after tax Ksh 1,500,000 and 2,000,000.

This implies that the SACCO financial performance based on ROE showed a declining trend in the last six years of the study. This can be seen in the trend shown in Figure 4.4



**Figure 4. 4: Return on Equity**

The results in Figure 4.4 shows that the ROE also shows a fluctuation trend with the year 2013 recording the lowest value of 0.784 while 2016 recorded the highest value of 0.925. This indicated that within the study period the average ROE for the 17 SACCOs operating in Narok Town, Narok County rose to a value of 0.925 in the year 2016 and declined steadily through 2018.

#### 4.6. The Combined Effect of the Independent Variables on SACCOs Financial Performance

Return on equity is one of the crucial measures of financial performance of various entities. The return on equity vary a lot from one SACCO to another in Narok Town, Narok county a factor that is attributed by the high level of variation in operational status of the SACCOs. To assess if there was a significant relationship between the outlined variables of the SACCOs that were assumed to be affecting the performance and ROE, the study carried out a correlation analysis between ROE and the factors (log (membership size), and dividend pay-out and investment ratio). The results of the correlation analysis are as illustrated in table 4.11;

**Table 4. 11: Correlation coefficients**

Variable	ROE	Ln Membership	Dividend	Investment
<b>ROE</b>	1.0000			
<b>LnMship.</b>	0.3938**	1.0000		
<b>Dividend</b>	0.9957***	0.3790**	1.0000	
<b>Investment</b>	0.1849	0.2254**	0.1849	1.0000

\*\*\* *Significant at 1%*, \*\* *significant at 5%*,

The results in table 4.11, show that at 95% level confidence, all other factors had significant linear relationship with ROE except the investment ratio. The results showed that both dividend pay-out rate strong significant positive relationship with ROE while membership size had weak positive significant relationship with ROE. Despite investment ratio having a weak positive relationship with ROE the relationship was not significant meaning that the relationship did just occur by chance.

#### 4.6.1 Regression Analysis

The correlation analysis showed that some of the variables had positive linear relationship with ROE. To investigate the effect of each of the individual factors on ROE; a multiple linear regression illustrated in model  $Y_2 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \varepsilon_i$  (3.3) was fitted.

The test for the adequacy of the regression model at 95% level of significance showed that there was sufficient evidence to shows that at least one of the model parameters was significantly different from zero  $F(4, 83) = 2536.71, P < 0.001$ . This showed that at least one of the factors affected ROE of the SACCOs.

To ascertain the particular factors that affected the ROE, the individual parameter t-test was carried out to assess the adequacy of the fitted regression coefficients at 95% level of confidence. The results are as illustrated in table 4.12;

**Table 4. 12: Significance test**

Variable	Coefficient	Standard Error	t statistic	P value
Ln Mship $\alpha_1$	0.0861	0.0503	1.71	0.091
Dividend $\alpha_2$	1.5643	0.1486	10.53	<0.001
Investment $\alpha_3$	-0.0059	0.0270	-0.22	0.826

The results in table 4.12 show that among the regression coefficients fitted model, only the coefficient of Dividend was statistically significant at 95% level of confidence.

This showed that only dividend pay-out had a significant effect of ROE of the SACCOs. All the other factors had insignificant coefficient showing that they did not have any significant effect on ROE.

To justify the conclusions made in the regression model, the study carried out a diagnostic test on the fitted regression model. Since the regression model was multiple linear regression models, the study examined the satisfaction of the multi-collinearity assumption by the model using the Variance Inflation Factor diagnostic (VIF). The results of the diagnostic were as illustrated in table 4.13.

**Table 4. 13:Multi-collinearity test**

Variable	VIF
<b>Dividend Pay-out</b>	112.95
<b>Membership Size</b>	1.21
<b>SACCO Investment</b>	1.07

The results in table 4.13 showed that two variables had VIF values, which were higher than the threshold value of 10 (Dividend). As a result one of the two variables needed to be eliminated from the model before a new model was fitted.

In the new fitted model, the test for adequacy of the regression model showed that there was sufficient evidence at 95% level of confidence to show that at least one of the independent variables affected the ROE  $F(3, 84) = 3371.09, p < 0.001$ .

To confirm the individual factors that affected the ROE, the individual parameters t-test was carried out at 95% level of confidence to test the adequacy of the fitted regression coefficients. The results of the test were as illustrated in table 4.14.

**Table 4. 14: Regression coefficients**

<b>Variable</b>	<b>Coefficient</b>	<b>t statistic</b>	<b>P value</b>
<b>Dividend</b>	1.3978	91.83	<0.001
<b>Ln Membership</b>	0.0906	1.80	0.075
<b>Investment</b>	-0.0061	- 0.23	0.822
<b>Constant</b>	-0.4351	-1.71	0.090

The results in table 4.14 showed that only the coefficient of dividend pay-out was significantly different from zero at 95% level of confidence. This shows that only dividend pay-out had a significant effect on the ROE. Having satisfied the assumption of multi-collinearity by eliminating the collinear variables the study carried out the other assumption diagnostics on the newly fitted regression model.

First the study carried out the test for equality of variance of the residuals on the regression model using the Breusch-Pagan test at 95% level of confidence. The test showed that there was no sufficient evidence to refute the claim that the residuals of the regression model had constant variance,  $\text{Chisq}(1) = 0.43$ ,  $p = 0.511$ . This shows that the assumption of homoscedasticity of the residuals was satisfied.

Having satisfied the assumption of multi-collinearity and homoscedasticity, next the study carried out the model diagnostic on proper model fitting to assess if there was any other omitted variable in the model. This was done using the Ramsey Regression Equation Specification Error Test (RESET) test at 95% level of confidence. The results showed that there was sufficient evidence to concluded that there were other omitted variables in the model that affected ROE,  $F(2, 82) = 67.50$ ,  $p < 0.001$ . This shows that



there was under fitting carried out in the study. However, despite the model being under fitted, this did not affect the regression estimates, as a result, the conclusions given by the model did hold.

The fitted regression model that link ROE and the three independent variables was as illustrated in equation 4.1:

$$\hat{ROE} = -0.435 - 0.006Investment + 0.091\ln(membership) + 1.398Dividend \quad (4.1)$$

#### **4.6.2 Effect size**

Measuring the effect size of the independent variables based on the Eta-squared effect size of regression model showed that investment ratio, membership size and dividend pay-out had a 99.18% effect on ROE. Individually, dividend pay-out had a 99.01% effect on ROE. Membership size had an effect of 3.7% while investment ratio had an effect of 0.06% on ROE. This shows that as a measure of performance, ROE is majorly affected by dividend pay-out among the SACCOs.

#### **4.6.3 Overall Results**

The study checked at the effect of membership size on the two measures of financial performance. Using ROE the study confirm the research hypothesis that membership size had no significant effect on SACCOs financial performance in that ROE is  $t(87) = 1.71, p=0.090$ . This Confirm the research hypothesis that membership size has no significant effect on financial performance of SACCOs in Narok Town, Narok County. This negates the organization theory forwarded by Kimberly (1976) which states that organizational performance can be measured based on its size. Kivuvu and Olweny (2014) also noted that capacity to generate revenue influences the performance of a

SACCO. This capacity is largely determined by the number of members that belongs to a SACCO when other factors are constant, leading to a higher amount of revenue. This study also has shown that membership size has no significant effect on the financial performance of the SACCOs in Narok Town, Narok County goes against the findings that were made by Motompa (2016) who looked at factors influencing growth of saving and credit cooperative societies in Kenya: a case study of Kajiado east sub county where members participation was found to have a positive and significant impact on SACCO growth and recommends SACCOs to educate their members as well informed members are more versatile in understanding the advantages of SACCOs and could easily be convinced to take part actively in governance and doing business in their SACCOs.

Checking at the effect of dividend pay-out on financial performance based on the measures of financial performance. Measuring performance of SACCOs using ROE negates the research hypothesis due to the fact that dividend pay-out had a significant positive effect on ROE,  $t(87) = 91.87, p < 0.001$ . A unit increase in dividend pay-out rate was determined to increase ROE by 1.3978 with an effect size of 99.01%. This shows that dividend has a significant effect on the financial performance of the SACCOs in Narok Town, Narok County which is in line with the findings that were made by Matendechere (2015) who also established that when SACCOs pay dividends they are likely to motivate their members and hence this improves their performance. The study confirms the bird in hand theory put forward by (Gordon 1959) and (Lintner, 1962) that states that stakeholders of firms prefer of dividends as opposed to having the retained earnings, which generate capital gains.

The study checked at the effect of investment on the two measures of financial performance. The study determined that SACCOs investment had no significant effect on the ROE,  $t(87) = -0.23$ ,  $p=0.822$ . This confirmed the research hypothesis that investment has no significant effect on financial performance of SACCOs in Narok Town, Narok County. Investment has no significant effect on the financial performance of the SACCOs in Narok Town, Narok County which is against the findings that were made by Makori, Munene&Muturi (2013) which indicated that the performance of SACCOs was influenced by the rate of investments. The findings also negate the study by Makena (2014) which established that SACCOs had improved on their investment which had affected their performance. It is in line with trade off theory that states that firms trade-off the tax shield which is a benefit associated with debt financing and the cost that come along side with bankruptcy (Kraus &Lichtenberger, 1973). Debt financing has an advantage of tax shield and a disadvantage of cost of financial distress.

## **CHAPTER FIVE**

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

#### **5.1 Introduction**

This chapter presents the summary of results of the study, conclusions and recommendations. The conclusion, recommendations and suggested areas of further studies are also covered.

#### **5.2 Summary of Findings**

The study aimed at establishing the determinants of financial performance of Savings and Credit Cooperatives in Narok Town, Narok County. The study adopted cross sectional research design. The 17 registered SACCOs were the population targeted. Linear regression technique was applied to analyse data where the dependent variable Return on Equity (ROE) was regressed against the independent variables (Membership size, Dividends pay-out and SACCOs investments). The summary of the findings of effect of loan default on Financial Performance of SACCOs, effect of Membership Size on Financial Performance of SACCOs, effects of dividend pay-out on Financial Performance of SACCOs, and effects of investments on financial performance of SACCOs in Kenya Case of Narok County are clearly outlined. The cross sectional research design was used and data was analysed using descriptive and inferential statistics.

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

### **5.2.1: Membership size and the Financial Performance**

The first objective was “to examine the effect of membership size on financial performance of SACCOs in Narok Town”. The effect was examined using ROE. The study found that membership size is not a significant indicator for the performance of SACCO in Narok County. This supports the null hypothesis that there is no significant relationship between membership size and performance. The fact show there are SACCOs with a large membership but with little or no SACCO deposits. In addition some members contribute SACCO deposits without taking loans making the earnings of their deposits in terms of profits very low. However others SACCOs have few members who are willing to contribute more and take loans frequently making it more vibrant and financially stable than those with more members.

The study concludes that SACCOs should introduce competitive services to members, in order to compete with Micro finance Institutions and mainstream Banks. The SACCOs should advance loans with long repayment period, reduce loan processing period, introduce competitive interest rates and increase the amount of loans given to members in order to be equal with other competitors. This will leverage SACCOs earnings and enhance financial performance.

### **5.2.2 Dividend Pay-Out and the Financial Performance of SACCOs in Narok Town**

The second objective of the study was “to assess the effect of dividend payout on financial performance of SACCOs in Narok County. The effect was examined using ROE and the study found that dividend payout is the only variable that is statistically significant for assessing the variable ROE. It is statistically evidence dividend payout

has effect size of 0.9914 on ROE. Meaning it can explain a proportion of the total variation of 99.14% of the Return on Equity. Therefore, the relationship in measuring performance with ROE. This an indication that SACCO members in Narok County invest in SACCOs that pay more dividend. The study concludes that SACCOs should endeavor to give more loans than dividends in order leverage the working capital levels which will enhance financial performance of SACCOs. Further members education should be embarked to sensitize members on the broader picture of ploughing back profits to the SACCOs in order to enhance performance.

### **5.2.3 Investment and the Financial Performance of SACCOs in Narok Town**

The last objective of the study was “to determine the effect of investment on financial performance of SACCOs in Narok Town. The effect was examined using ROE where it was found that investment is not a significant indicator for investigating the performance.

### **5.3 Conclusion**

Based on the results, the combine effect of the independent variables; membership size and investment were significant contributors to the financial performance of SACCOs in Narok Town. This study determined that of the three significant factors for examining ROE, SACCOs investment has the highest influence, followed by membership size.

On the other side, checking on the influence of these three factors on the performance of the SACCOs using ROE as the response variable, the study concludes that dividend pay-out ratio is the only statistically significant variable for studying Return on Equity (ROE), the other three variables are concluded in significant by the study.

#### **5.4 Recommendations**

SACCOs contribution in the economy of Kenya cannot be ignored. Though the contribution is significant in the recent past, it has been affected by various factors.

The study recommends that SACCOs should ensure that they build their numbers to boost their saving and hence improve on the financial performance. The membership size is influenced by other factors such as dividend payout hence the SACCOs need to focus on enhancing those factors that have an influence on the membership to eventually influence financial performance. The relevance of SACCOs in the current state of economy depend on policies put in place to increase members and new competitive strategies that includes the number of times from current three time to six times. Interest rates needs to be very competitive compared to micro finance institutions and other banks. SACCO's should look for more member increase and retention strategies rather than the dividend aspect. Digital lending and marketing should be enhanced to make SACCOs more competitive.

In regard to dividend pay-out the study notes that is only affecting ROE on SACCO's financial performance. It is therefore recommended that SACCOs should improve on their levels of dividend payout in order to enhance the financial performance of the SACCOs. This study has established that SACCO members in Narok County investments in SACCOs that pay more dividend. However besides giving dividends SACCOs should endeavor to give more loans in order to increase the working capital levels which will enhance performance.

Furthermore SACCOs should increase the level of investments so that more income can be generated. Increased investment by the SACCOs will go a long way to improve on the SACCOs performance and make SACCOs more sustainable in tough economic times.

Lastly, it is recommended that the SACCOs should put strategies in place to help them understand how these three factors are useful in monitoring the SACCOs financial performance. The measures or strategies should be used to transform these variables so that they all give significant effect on ROE and variables.

### **5.5 Suggested Areas for Further Research**

Finally there is a need for a replica study to be done to fill gaps. This will provide more coverage of SACCOs not only in other regions but in all other aspects. This will put into test the conclusions drawn from this study.

Studies need to be conducted to assess the effect of these predictor variables on non-financial indicators of performance. This will help to add knowledge and fill the gap that the current study has noted.

There is a need for future studies to apply other research instruments like questionnaire and interviews, for deeper understanding of the behavior of the various selected determinants in relationship to the financial performance of the SACCOs.



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## APPENDICES

### APPENDIX 1: DATA COLLECTION SHEET

1. Name of SACCO:

\_\_\_\_\_

2. Year started: [\_\_\_\_\_]

3. Total membership (No.) as at December 2019: [\_\_\_\_\_]

	2013	2014	2015	2016	2017	2018	2019
Total Assets							
Total Equity							
Total profits after tax							
Total loan advanced							
Loan defaulted							
Number of Sacco Members as per the given period							
Total Income after tax							
Total dividend paid							
Total investments							
Total income							

**APPENDIX 2: THE "PEARLS" MONITORING SYSTEM GOALS BY WOCCU**

AREA	PEARL	DESCRIPTION	GOALS (EXCELLENCE)
P = PROTECTION	P1	Allowance for Loan Losses / Delinquency >12 months	100%
	P2	Net Allowance for Loan Losses / Delinquency 1-12 months (WOCCU Standard)	35%
	P2X	Net Allowance for Loan Losses / Delinquency 1-12 months (User Defined)	100%
	P3	Complete Charge-Off of Delinquent Loans >12 mos	Yes
	P4	Annual Loan Charge-offs / Average Loan Portfolio	Minimized
	P5	Accumulated Loan Recoveries/Accumulated Loan Charge-offs	>75%
	P6	Solvency	Min 111%
E = EFFECTIVE FINANCIAL STRUCTURE	E1	Net Loans/Total Assets	70-80%
	E2	Liquid Investments / Total Assets	Max 16%
	E3	Financial Investments / Total Assets	Max 2%
	E4	Non-Financial Investments / Total Assets	0%
	E5	Savings Deposits / Total Assets	70-80%
	E6	External Credit / Total Assets	Max 5%
	E7	Member Share Capital / Total Assets	Max 20%
	E8	Institutional Capital / Total Assets	Min 10%
	E9	Net Institutional Capital/ Total Assets	Min 10%
A = ASSET QUALITY	A1	Total Loan Delinquency / Gross Loan Portfolio	<=5%
	A2	Non-Earning Assets / Total Assets	<=5%
	A3	Net Institutional & Transitory Capital + Non-Interest-Bearing Liabilities / Non-earning Assets	>200%
R = RATES OF RETURN & COSTS	R1	Net Loan Income / Average Net Loan Portfolio	Entrepreneurial Rate
	R2	Total Liquid Investment Income / Average Liquid Investments	Market Rates
	R3	Total Financial Investment Income / Average Financial Investments	Market Rates
	R4	Total Non-Financial Investment Income / Average Non-Financial Investments	>= R1
	R5	Total Interest Cost on Savings Deposits / Average Savings Deposits	Market Rates >Inflation



	R6	Total Interest Cost on External Credit / Average External Credit	Market Rates
	R7	Total Interest (Dividend) Cost on Shares / Average Member Shares	Market Rates $\geq$ R5
	R8	Total Gross Income Margin / Average Total Assets	Amount Needed to Cover R10, R12
	R9	Total Operating Expenses / Avg. Total Assets	$\leq 5\%$
	R10	Total Loan Loss Provision Expense / Average Total Assets	Dependent on Delinquent Loans
	R11	Non-Recurring Income or Expense / Average Total Assets	Minimum
	R12	Net Income / Average Total Assets (ROA)	Dependent on E8
	R13	Net Income / Avg. Institutional + Avg. Trans Capital (ROC)	$>$ Inflation Rate
L=LIQUIDITY	L1	S.T Investments + Liquid Assets - S.T. Payables / Savings Deposits	Min 15%
	L2	Liquidity Reserves / Savings Deposits	10%
	L3	Non-Earning Liquid Assets / Total Assets	$< 1\%$
S = SIGNS OF GROWTH	S1	Growth in Loans to Members	Dependent on E1
	S2	Growth in Liquid Investments	Dependent on E2
	S3	Growth in Financial Investments	Dependent on E3
	S4	Growth in Non-Financial Investments	Dependent on E4
	S5	Growth in Savings Deposits	Dependent on E5
	S6	Growth in External Credit	Dependent on E6
	S7	Growth in Share Capital	Dependent on E7
	S8	Growth in Institutional Capital	Dependent on E8
	S9	Growth in Net Institutional Capital	Dependent on E9
	S10	Growth in Membership	Minimum 15%
	S11	Growth in Total Assets	$>$ Inflation + 10%

SOURCE: WOCCU, 2007

### ***APPENDIX 3: LIST OF SACCOS IN NAROK TOWN***

MINISTRY OF INDUSTRY, TRADE AND CO-OPERATIVE DEVELOPMENT

Telegrams "COOPS"

Telephone: 050-22238

Fax :050-22238



COUNTY COOPERATIVE OFFICE,

P.O BOX 195-20500

NAROK

#### **List of SACCOS in Narok Town**

1. Good Hope SACCO
2. Narok Luxury Coach SACCO
3. Puan SACCO.
4. Nasaruni SACCO.
5. Neema NIDP
6. Esirit
7. Narok Entrepreneuers
8. Exodus.
9. Maasai Mara University.
10. Gospel Power.
11. NAFUGO.
12. Eor – Enkitok
13. Narok Safaris.
14. Omnibus CS
15. Maasai Mara Travellers CS.
16. Narok Quarry Operators.
17. The Door of Hope.
18. Narok North Bodaa.
19. Narok Valley View.
20. Narok Golden



*Handwritten signature:*  
Nafug  
Barka

## APPENDIX 4:RESEARCH PERMIT


**THIS IS TO CERTIFY THAT:**

**MR. ELVIS SALATON OLOLKIPAI**  
**of MAASAI MARA UNIVERSITY,**  
**110-20500 Narok, has been permitted to**  
**conduct research in Narok County**

**on the topic: DETERMINANTS OF**  
**FINANCIAL PERFORMANCE OF SACCOS**  
**IN NAROK, KENYA.**

**for the period ending:**  
**23rd July,2020**

**Permit No : NACOSTI/P/19/62233/31562**  
**Date Of Issue : 25th July,2019**  
**Fee Received :Ksh 1000**



**Applicant's**  
**Signature**

**Director General**  
**National Commission for Science,**  
**Technology & Innovation**

**THE SCIENCE, TECHNOLOGY AND**  
**INNOVATION ACT, 2013**


The Grant of Research Licenses is guided by the Science,  
 Technology and Innovation (Research Licensing) Regulations, 2014.

**CONDITIONS**

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

**National Commission for Science, Technology and innovation**  
 P.O. Box 30623 - 00100, Nairobi, Kenya  
 TEL: 020 400 7000, 0713 788787, 0735 404245  
 Email: dg@nacosti.go.ke, registry@nacosti.go.ke  
 Website: www.nacosti.go.ke

**REPUBLIC OF KENYA**



**National Commission for Science,**  
**Technology and Innovation**

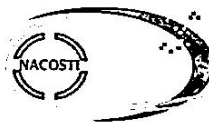
**RESEARCH LICENSE**

**Serial No.A 26037**

**CONDITIONS: see back page**

## APPENDIX 5:RESEARCH AUTHORIZATION LETTER

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### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,  
2241349,3310571,2219420  
Fax:+254-20-318245,318249  
Email: dg@nacosti.go.ke  
Website : www.nacosti.go.ke  
When replying please quote

NACOSTI, Upper Kabete  
Off Waiyaki Way  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref. No. **NACOSTI/P/19/62233/31562**

Date: **25<sup>th</sup> July, 2019**

Elvis Salaton Olokipai  
Maasai Mara University  
P.O. Box 861  
**NAROK.**

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "*Determinants of financial performance of SACCOs in Narok, Kenya.*" I am pleased to inform you that you have been authorized to undertake research in Narok County for the period ending **23<sup>rd</sup> July, 2020.**

You are advised to report to the **County Commissioner, and the County Director of Education, Narok County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

**GODFREY P. KALERWA., MSc, MBA, MKIM  
FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner  
Narok County.

The County Director of Education  
Narok County.

APPENDIX 6: LETTER FROM THE UNIVERSITY



**MAASAI MARA UNIVERSITY**  
**SCHOOL OF BUSINESS AND ECONOMICS**

P.O. Box 861- 20500, Narok, Kenya  
Website: [www.mmarau.ac.ke](http://www.mmarau.ac.ke)

Tel: +254-729-470-525  
Email: [dean-be@mmarau.ac.ke](mailto:dean-be@mmarau.ac.ke)

Ref: MMU/AA0310/022/2015/Vol. 4(196)

Date: 11<sup>th</sup> June 2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

**RE: INTRODUCTION LETTER FOR REG. NO.: MBM/1007/2013 - NAME: ELVIS SALATON KIPAI**

The above-named is a bonafide student of Maasai Mara University in the School of Business and Economics pursuing a Master in Business Management (Finance option). His topic of research is "*Determinants of Financial Performance of SACCOs in Narok Town, Kenya*".

He is currently piloting his research instruments. Any assistance accorded to him will be highly appreciated.

Yours faithfully,

Dr. Patrick Gudda

**DEAN, SCHOOL OF BUSINESS AND ECONOMICS**

MAASAI MARA UNIVERSITY  
P. O. BOX 861 - 20500

11 JUN 2019

DEAN, SCHOOL OF BUSINESS  
AND ECONOMICS



ISO 9001:2008