

**THE RELATIONSHIP BETWEEN MAGNITUDE OF INVESTMENT
AND PERFORMANCE AMONG DEPOSIT TAKING SAVINGS AND
COOPERATIVE SOCIETIES IN KENYA**

BY

MICHAEL WANJALA MAKOKHA

UNIVERSITY OF NAIROBI
LOWER KABETE
LIBRARY

28

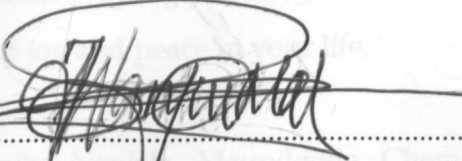
Nov 10, 2011

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF A MASTER DEGREE OF BUSINESS
ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

2011

DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted for a degree in this or any other university for examination.

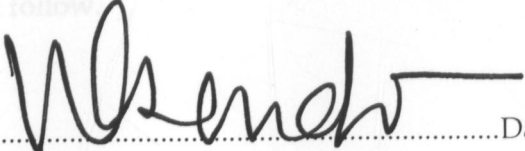
Signed.....

Date.....10th Nov 2011

Michael Wanjala Makokha

D61/7239/2006

This project has been presented for examination with my approval as University Supervisor

Signed.....

Date.....Nov 10, 2011

Ms. Winnie Nyamute

Lecturer,
Department of Finance and Accounting,
School of Business
University of Nairobi

ACKNOWLEDGEMENT

God sends people our way and in time we realize why he did so. I now realize just how much my supervisor Winnie Nyamute has been of help. Mrs Magutu, my immediate "boss" while I worked at UON was on hand to assist whenever she could. My mother, Weyanga; Mum, there will never be a friend like you, may God favour you with joy and peace in your life.

My family, Nanjala, Maundende, Chemuku, Karombora and Tebula, Thank you guys, the legacy of our educationist father lives on.

My wife Shei; No one will ever know the support you give me by being by my side each day of my life. I know it dear.

Our beautiful kids, "Bau" and "Shau" and "Xau". My promise to be with you; my children remains real even if I have to go away sometimes.

My classmates, Omumu, Ileve, Mutswenje; in you guys I found the best of school company

And to you, my reader.... turn the pages, I hope you will find nuggets of wisdom in the pages that follow.

DEDICATION

This project is dedicated to my father, the late Charles Makokha Wambulwa Watima; Daddy.... this world was so much easier when you were around. I miss you, Now that you are gone, I realize each day just how wise you were. You were.... my first teacher.... my counsel, my friend and my Dad. I know angels keep you company and you watch over me each day. RIP Daddy.

ACRONYMS

AIMR	Association of Investment and Management Research
CBK	Central Bank of Kenya
FSS	Financial Self Sufficiency
ICA	International Cooperative Alliance
ICPAK	Institute of Certified Public Accountants of Kenya
IFRS	International Financial Reporting Standards
MFI	Micro- Finance Institutions
MPT	Modern Portfolio Theory
PAR	Portfolio at Risk
OSS	Operational Self Sufficiency
SACCO	Savings and Credit Cooperative Society
SASRA	SACCO Societies Regulatory Authority
SME	Small and Medium Enterprises
WOCCU	World Organization of Credit Cooperative Unions

ABSTRACT

The study sought to establish the relationship between investment and performance among the deposit taking SACCOs. Many studies and theories link investment to better performance since it is through investments that a firm put to use its resources in the most profitable manner. Much of such studies have been confined to typical firms with none focusing on the deposit taking segment of the SACCOs.

The study adopted Financial Self Sufficiency, Operational Self Sufficiency, and Outreach as measures of performance. Investment was standardized by dividing it with the asset outlay to neutralize effects of size. Each of these measures was computed for the 2009 financial year and the results regressed against investment.

A weak negative correlation was noted among the variables and investment. These are interesting findings since investments are expected to improve performance. Against outreach investments returned correlation of -0.1296 , against PAR -0.05627 , -0.2847 against financial self sufficiency and -0.00176 against operational self sufficiency. With low correlations, when tested for goodness the model adopted for the study did not explain a significant change in the dependent variable. The study established that though SACCOs make investments these are largely limited to investment in shares (both quoted and unquoted), operating related businesses such as Micro- Finance Lending, Mortgages, Book stores, Insurance agency and petrol stations for SACCOs in the transport sector.

The results show an insignificant negative correlation between investment and other measures of performance. This study concludes that Deposit taking SACCOs do not generate any substantial returns from their investments large enough to impact on their performance.

TABLE OF CONTENTS

Declaration	i
Acknowledgements.....	ii
Dedication.....	iii
Acronyms	iv
Abstract.....	v
Table of Contents	vi
List of Tables.....	vii
CHAPTER ONE: INTRODUCTION.....	1
1.0 Introduction	1
1.1 Background of the Study.....	1
1.2 Statement of the problem	5
1.3 Objectives of the study	6
1.4 Importance of the study	7
CHAPTER TWO: LITREATURE REVIEW.....	8
2.0 Introduction	8
2.1 Theoretical Litreaure Review	8
2.2 Investment process & theories	9
2.3 Active & Passive Investment Strategies	18
2.4 Asset allocation strategies	22
2.5 Modern Investment Theories.....	23

2.6 Financial Performance Management	24
2.7 Summary of literature.....	27
CHAPTER THREE: RESEARCH METHODOLOGY	28
3.0 Introduction	28
3.1 Research Design	28
3.2 Population of the Study	28
3.3 Data Collection	28
3.4 Data Analysis.....	29
CHAPTER FOUR: DATA ANALYSIS, INTERPRETATION & PRESENTATION.....	31
4.1 Data Analysis.....	31
4.2 Key Attributes of SACCOs Surveyed.....	31
4.3 Descriptive Measures of Study Variables.....	33
4.4 Measures of Performance.....	33
4.5 Measures of Relationships	35
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	37
5.1 Introduction.....	37
5.2 Summary of Findings and Discussions.....	37
5.3 Key Conclusions	38
5.4 Major Recommendations	38
5.5 Limitations of the Study.....	39
5.6 Recommendations for further Study.....	41
REFERENCES	42
Appendices	48

LIST OF TABLES

Table 1.1 Summary of life cycle theory of asset selection.....	11
Table 4.1 Key Features of SACCO Membership.....	32
Table 4.2 Regression against Investment.....	36

1.1 Background of the study

The International Cooperative Movement is a global movement of people who are committed to the Rochdale Cooperative Store. It is a movement that has spread across the world such that today there are over 1 billion people who are members of various forms of cooperatives. Cooperatives exist in every part of the world and in every spectrum of business activities. They range from small-scale local credit organisations to the very large multi-national organisations in various sectors. Globally, in 2009, McKelvey (2011) estimated that there were 1.2 billion members in 98 countries with an estimated total membership of 1.2 billion. This makes cooperative membership an area of great interest to researchers.

CHAPTER 1

INTRODUCTION

1.0 Introduction

The study is about magnitude of investments among deposit taking SACCOs in Kenya and how it affects overall financial performance. Deposits taking SACCOs are cooperative societies formed largely to provide credit to its members and are regulated by SACCO Regulatory Authority. SACCOs are part of Micro- Finance Institutions (MFIs) which operate as non-bank financial intermediaries providing credit, savings and insurance to low income household in many countries around the world. Investments on the other hand refer to assets that generate revenues and benefits to an entity over a given period of time (Sharpe et. al 2006)

1.1 Background of the study

The International Cooperative Alliance (IAC) traces the earliest cooperative to 1844, The Rochdale Cooperative Store in Great Britain, since then cooperatives have spread all over the world such that today there is no modern nation state devoid of one or many forms of cooperatives. Cooperatives exist in various forms and types covering the entire spectrum of business activities from informal village groupings to organised micro-credit organisations to the very large players in agricultural production and banking sectors. Globally, in 2009, McKillop (2011) estimates that there were 49,330 credit unions on 98 countries with an estimated asset base of 1, 354 Billion US Dollars. The huge membership makes cooperative societies a truly global business phenomena and an area of great interest to researchers.

In Kenya, cooperative spirit of joining hands to solve tasks precedes 1844 since many cultures of its inhabitants have age sets that brought people together to undertake activities jointly. Some of these activities include but not limited to as tiling land, harvesting, and construction of houses, hunting and even collectively fighting off aggressive neighbours. The earliest formal cooperative society in Kenya was formed by the white settlers in 1908. A legal framework, The Crop Ordinance Act, to support cooperatives were enacted in 1932 and later reviewed in 1945. (Wanyama 2008)

Ouma (1988) notes absence state enthusiasm for cooperatives formed by Kenyans during colonial times. This was also the case for any other indigenous efforts and enterprises. Growth of Cooperatives in the pre-independence period was deliberately stunted. After independence, the newly formed government appreciating the potential contribution of cooperatives took deliberate steps to encourage formation and growth of cooperative societies. Through the cooperative movement many African states, found an avenue for participation in the economy by Africans. Cooperatives assisted locals in pooling resources and expertise hence providing them with a platform with which to participate in their national economies.

In order to support, guide and provide training for the cooperative movement, the Kenyan government founded Cooperative College of Kenya in 1967, Kenya National Federation of Cooperatives (KNFC) and Cooperative Bank in 1968. Gachara (1990) notes that there were significant increases in the number of savings cooperative societies in the first decade of independence hence the need for an apex body to advocate and lobby on behalf of member societies. In 1973, Kenya Unions of Savings and Cooperative Societies (KUSCO) were formed. KUSSCO is an umbrella union that provides advisory, training and lobbies for favourable regulatory environment for SACCOs.

Considerable debate suffices in the literature reviewed as various scholars attempt to define a cooperative society, Abigail (1997), provides a better way of distinguishing a cooperative society from other business forms by focusing on its basic tenets. A general consensus on cooperative principles as derived from Rochdale. Key of these principles include operations of the society is only for the mutual benefit of members, control of the society is vested in members equally (as opposed to companies in which control is dependent on the level of shareholding) profits are distributed in relation to member contribution to society's operations, membership is open and operations are handled in a democratic manner.

International Cooperative Alliance (IAC) offered an explanation that is mostly used to define a cooperative society. IAC defines a cooperative as an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs through a jointly owned and democratically controlled enterprise. Their explanation underscores values of self-help, self-responsibility, equity, equality, solidarity and democracy as the defining aspects of a cooperative society.

Over time cooperatives have evolved into several distinct forms; producer cooperatives, marketing cooperatives and savings and credit societies (SACCOs). SACCOs are the most dominant form of cooperative societies. They are essentially self help groups founded on democratic principles and operating on community trust with each member acting as trustee for the next. Under the ambit of SACCOs are two subsets one; Deposit Taking and two; Non Deposit Taking SACCOs. Deposit taking SACCOs, operate accounts on which members can make deposits like would be the case for a commercial bank account. The study is limited to deposit taking SACCOs that were forty five at the time of the study. SACCOs represent a popular means of quick access to finance, less demands on collateral, and favourable interest rates that are low and are less varied in tandem with changes in the interest rates in the economies in which these organizations operate, a fact that has contributed to their exponential growth.

Wanyama (2008) observes that cooperatives have succeeded to encourage thrift and provide credit to members at reasonable and stable interest rates with fewer demands on collateral. Such approaches distinguish cooperatives from commercial banks, banks are the largest players in intermediation but their products are pegged to prevailing market costs of finance. These findings run contrary to the neoclassical theories that assert that firms exist to maximise wealth. The conventional maxim is that all organisations exist to achieve a set of goals; the most predominant of which is to maximise the shareholder wealth. Cooperatives seem not to operate wholly in tandem with the objective of shareholder wealth maximisation since some of their operations are limited to members to the exclusion of better dividend earning opportunities that may exist in open financial markets. Mutua (1996), in his paper on the state of MFIs in Kenya supports the findings of Wanyama by asserting that interest charged on loans are determined more philosophically rather than by financial considerations.

In 1997 SACCO operations in Kenya were de-regulated giving management committees more latitude in making investment decisions on behalf of members. Since de-regulation, there has been a marked interest among scholars in their operations of cooperatives. Regulations limited investments by SACCOs both in destination and proportions. Gachara (1990) conducted a study during the regulated period and his findings indicate up to 42% investment in time deposit accounts and a paltry 9% in unquoted stocks of other organisations. Time deposits hardly offer returns sufficient to cover for inflation and as such high liquidity imply missed investment opportunities and when reflect a less than optimal resource allocation. Findings of this study when compared with those of Gachara (1990) will point to any changes in investments by SACCOs in the 90's and presently.

Oyoo (2002) observes a declining overall performance after deregulation on many of prudential financial target ratios as set out by the World Organization of Credit Cooperative Unions (WOCCU). His findings somewhat contradict Gachara (1990) who had attributed excess liquidity wholly to regulation by the government.

1.2 Statement of the Problem

Significant growth in savings, loans, and competition among SACCOs has made SACCOs major players in financial intermediation. It is because of their prominence in national financial systems that SACCOs have attracted attention of researchers, governments, scholars and regulatory agencies. As earlier mentioned, SACCOs found it prudent to establish KUSSCO to advance their agendas collectively.

On the regulatory front, the Kenyan government through the Ministry of Cooperatives and Marketing has been overseeing operations of cooperatives. Cooperatives hold annual general meetings that are supervised by provincial cooperative officers. Cooperatives submit copies of their audited financial statement with the ministry. Indeed to audit a cooperative society one needs to be accredited by the ministry of cooperatives over and above fulfilling the requirements needed by the Institute of Certified Accountants of Kenya (ICPAK). ICPAK is the statutory body with the mandate to regulate and develop the accountancy profession.

Deposit taking SACCOs is special form on cooperatives that participate in financial intermediation and require more regulation akin to the prudential financial regulations extended to all commercial banks and supervised by the Central Bank of Kenya (CBK). Much of this interest in operations of SACCOs is to protect the national financial system and public interest.

Sustained interest in SACCOs has not been the preserve of regulators; researchers have also studied various aspects of their operations. Ouma (1988), Gachara (1990), and Oyoo (2002) are examples such studies. This study is partly a reflection of this growing interest.

Irungu (2005) in his study opens up debate on a potent fear that SACCOs were a threat to Commercial Banks in intermediation. Such would be the case if SACCOs are operating at similar or at least comparable efficiency levels as banks and offering competing products. Mudibo (2005) brings to fore weak governance, weak supervision, limited product range, low marketing and inadequate human resource as the major constraints in the cooperatives sector. Mudibo's description of SACCO constraints depicts them as operating at a lower efficiency than commercial banks lending doubt to assertions by Irungu (2005).

Notwithstanding the appreciable contribution by SACCOs in intermediation, less is known about the effect of investments on their financial performance. Studies of Irungu (2005), Mudibo (2005) and others reviewed dealt with other aspects of SACCOs but no study yet has considered the relationship between SACCOs Investment and its financial performance hence the need for this current study.

This study sought to fill this gap in literature by testing the relationship between investment and financial performance of deposit taking SACCOs in Kenya.

1.3 Objective of the Study

To establish a relationship between investment and financial performance among Deposit Taking SACCOs in Kenya

1.4 Importance of the Study

The study together with its findings will be of useful to the following categories of stakeholders:

Boards of Directors and Managers of SACCOs will find in this study a useful critique of their investment approaches with suggestions for improvement. The study will stimulate debate on the need for investments and the contribution they make to SACCOs overall performance.

Debate for and against regulation in financial markets is an on-going one. Some scholars view regulation as a market distortion, an addition to transaction costs and unnecessary. Other scholars view regulation as the only way to safeguard public good. This study adds to this debate in the context of deposit taking SACCOs. Regulatory agencies such as Ministry of Cooperatives and Marketing, the SACCO Regulatory Authority (SASRA) will benefit from study findings as they discharge their legal mandate to regulate Deposit Taking SACCOs

In this study, scholars will find an addition to the available body of knowledge between investment and financial performance with a special focus on deposit taking SACCOs.

Members of SACCOs exercise their ultimate power in Annual General Meetings to elect a Management Committee to oversee the SACCO on their behalf. The effectiveness and even soundness of their resolutions has been questioned. Mudibo (2005) for instance, noted inadequacy in education and training among members. By showing the relationship between investment and financial performance, the study hopes to illuminate on the need for members to take longer term view of their savings and credit societies.

CHAPTER TWO

LITREATURE REVIEW

2.0 Introduction

This section is organized into four parts. The first part reviews literature on investments, the second covers literature on financial performance reviewing related theories. In the third part, the study considers related studies carried out and their key findings that contribute to knowledge in the area of investments and financial performance. The last part chapter summarizes the literature review covering the key highlights of studies reviewed.

2.1 Theoretical Literature Review

Investment is a term capable of varied definitions depending on the field of study and context. Sharpe et al (2006), provides a working definition of an investment. They view it as a current commitment of money or other resources in the hope of receiving future benefits. In electing to defer immediate consumption one expects to receive more money to compensate them for this sacrifice. Key dimensions on such future expectation include; timing, value and the probability that the returns may not be received as expected. Managers of enterprises are expected to make sound investment decisions on behalf of shareholders. Leveraging on their experience and at times depending only on their guts managers synthesize shareholder expectations and choose appropriate investment vehicles depending on their understanding of risk- return trade-off. Investment decisions are further compounded by a regulatory environment in which all organisation exist (Zvi, Kane and Marcus 2004). Matters such as taxation, economic cycles, foreign exchange trade, and availability of stock markets and their level of development are key considerations when managers when making investment decisions.

Cuthbertson (2010) observes that neoclassical theories of the firm which assume that each firm exist to maximise wealth are in-adequate in understanding the economic behaviour of cooperative societies. Cooperatives embody multiple values and objectives. Membership of a deposit SACCO has both the ordinary members whose main interest is highest dividends possible and yet the loan takers would want the lowest stable interest rates as much as possible.

Additionally, the depositors would prefer a higher interest on their savings. These objectives conflict and management of cooperatives must choose primary and supplementary objectives.

Accordingly, Pandey (2010) observes other factors that impinge on the investment decision to include; taxation that is graduated on income levels, age of the investor and their risk tolerance. Such differences in the stakeholders in a firm would obviously lead each to view an efficient investment in their own perspective. Managers are left to grapple to design an investment process which delivers appropriate portfolios to answer to the needs of a majority of the investors. It is clear therefore that there is no perfect generic investment process; it is however not in doubt that some approaches provide better prospects than others. Pandey (2010) argues that there is need for management to develop an investment process within the expectations of their shareholders and the environment in which the firm operates; in the following sections we discuss in detail an investment process together with its four distinct stages.

2.2 Investment Process and Theories

Investment process is a step by step logical flow of activities that specify how an investor should go about making an investment decisions. The process provides beacons as regards the type of marketable securities to invest in, how extensive the investment should be and the timing (Sharpe 2006).

AMIR (1999) agrees with Pandey (2010) that investment is a process that comprises four distinct stages. Step involves specifying investment objectives, and then followed by an evaluation of constraints. Thirdly, an investment policy is developed. A last but fairly important stage involves monitoring and evaluation of investments for significant variances between planned and actual portfolio performance to inform choice of a corrective action. The stages of investment process can be seen as a continuous cycle since the objectives themselves may be reviewed occasioning the other stages to replay themselves. Sharpe (2006) on the other hand identifies setting investment policy, performing a security analysis, constructing a portfolio, evaluating performance of the portfolio as the main steps in the investment process. This view is more appropriate in economies with developed security markets where significant investments are made in tradeable securities.

In the Kenyan context with less sophisticated securities markets and the fact that cooperatives have largely not been very active on stock markets (Mwangi 2003), this study uses the investment process as suggested by Pandey (2010) Each of the stages in the investment process are discussed in the subsequent paragraphs.

Investment objectives seek to provide a rationale for the decision to forgo consumption. Objectives must be expressed succinctly because they form a basis on which all the other stages are grounded. In setting up investment objectives many investors consider the risk- return risk trade off. Owing to differences risk uptake by investors some will tend to be more conservative more than others. For those who prefer higher risk they hope to earn sufficiently higher returns, on the other extreme some investors would play safe by sacrificing the additional returns so as to save themselves on absorbing a higher risk in their portfolio. Other investors will lie on points between these two extremes.

Omony (2003) broadly categorizes investment objectives as those inclined on capital preservation, others hinge on capital appreciation, while others seek to maximize current income and total returns. An interesting empirical finding shows that investors actually move along the continuum from high risk high return end to less risk stable return end as they progress in age. Zvi et al (2004) ably argue their works that investor attitudes shifts away from risk tolerance towards risk aversion as one progresses to retirement as illustrated by their choice of safer assets later in life. Table 1 below provides a rough indication of how investor preferences to risk changes in the course of aging.

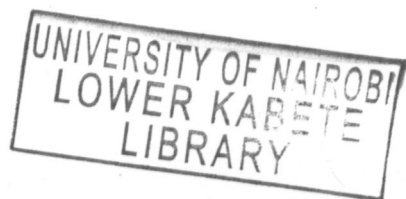
Table 1.1: Summary of Life Cycle Theory of Asset Allocation

Age	% Stocks	% Bonds	% Cash and Equivalents
30s	75	15	10
40s	65	20	15
50s	60	25	15
60s	40	40	20

Source: Zvi et al (2004)

It can be deduced from the table that investor preference for cash and its equivalents increases as one ages. It actually doubles the amount needed in the first decade of working. It can also be seen that one recedes from stock which are considered risky to an extent they roughly even out with bonds in the 6th decade of life. As such one sees a clear attempt to balance out the effects risk on stocks by the more stable returns on bonds.

Ferguson et al (1997, 2000) conducted a study that mirrors the asset life cycle among cooperatives. In their findings they postulate an evolutionary life cycle for a cooperative society portioned into three distinct phases. Nascent (Formative) is the first one, followed by Transition Stage and the last one being the mature stage. Their findings ascribe certain characteristics to various cooperatives depending on their stage in the development cycle.



Cooperatives in the transition stage in which Kenya is grouped are said to have a weak asset base, evolving regulatory environment, less common bond restrictions, low levels of product diversification, development of professional trade associations, reliance on volunteers, development of central services and a greater emphasis on growth and efficiency.

Ilve (2008) identifies five most common constraints as liquidity, horizon, regulatory taxes, tastes and investor preferences. Sharpe (2006) discusses the liquidity preference theory; the theory holds that needs for liquidity would arise earlier than available investments can release it. Under this theory then manager will tend to hold more cash and tend to invest short term to guarantee quick generation of cash. Zvi et al (2000) argue that liquidity can be measured by bid-ask spread in the dealer markets. In the money market instruments such as Certificates of Deposits, Treasury bills and Commercial papers a bid ask spread of less than 1% are considered as the most liquid. In contrast real assets may suffer a discount of up to 50% of their value when converting to cash. They conclude that the larger the bid-ask spread the more illiquid an asset is said to be. While more liquidity is preferred, increasing liquidity can in some cases lead to value destruction especially where free cash flows are more than the optimal requirements.

Barclay and Smith (2005) demonstrate that higher cash flows lead to value destruction through corporate empire building, consuming perks and bonuses, and pursuit of high price acquisitions. Other concerns are the cash handling costs including security and insurance against loss. It is the onus of managers to precisely establish a prudent level of liquid assets as a proportion of their portfolio so as to minimise the opportunity of holding cash. Eljelly (2004) in the study studied the relationship between liquidity and profitability and found a negative positive correlation indicating the destructive nature of a firm having higher liquidity levels.

The second constraint relates to investment horizon. The ideal will be a perfect match of investment horizons such that assets release free cash flows just in time when liabilities fall due. Sharpe (2006) suggests that matching horizons of investments ensures that assets will generate liquidity when needed thereby reduce free cash flows, minimise on bank overdrafts and other financing costs. It is notable that these savings will ultimately contribute to a better bottom line. Challenges abound as to how precisely an organisation can match cash inflows to coincide with cash outflows from the normal operations of the enterprise. Matching can thus be viewed as a good management principle rather than a precise tool.

SACCOs' main cash outflows are dividend payments and loans that tend to be cyclical with known peaks and troughs. Prudent cash management among SACCOs will lead to choice of investments with similar horizons. Implementing a strategy to align cash needs to its generation will reduce the appetite for loans and overdrafts and their associated costs. Pandey (2010) also notes the significance of matching horizons at the time on investment choice and draw a conclusion on a note a relationship between that investor horizon and need for cash. They observe a longer time preference among those investors who are the least in need of cash.

Omony (2003) studied investment practices among pension firms in Kenya and notes that there is need for regulations to ensure that managers execute their fiduciary role to the greatest of benefits to pensioners. They do so by carefully and professionally applying funds under their charge to the optimal asset classes. Where there is danger that this duty could be overlooked leading to moral hazards and hence the need for official intervention to protect shareholder and public interests. Regulations are developed for a given industry and while they seek to achieve a common good they at times in themselves become a hindrance to investment decisions.

Firms especially those involved in financial intermediation tend to be heavily regulated world over. In Kenya commercial Banks are regulated by the Central Bank that outlines prudential guidelines that all have to follow. Firms listed on the stock exchange are regulated by the Capital Markets Authority, The pensions industry is regulated by the Retirement Benefits Authority and the Insurance market has the Insurance Regulatory Authority. In the Cooperatives Sector, the Ministry of Cooperatives has set up a special agency known as SACCO Societies Regulatory Authority.

SASRA has developed prudential guidelines on capital adequacy and filing audited reports annually as a way of enhancing compliance. Arguments for and against regulation continue to be subject of extensive research among scholars. Those in support hinge on public interest and the need to safeguard the national financial system as collapse on one institution could have a domino effect. McKillop (2007) underscore the need for regulation to protect the financial health on a nation especially after the financial crisis of 2007. On the other hand, those opposed view regulators have been seen as part of the market inefficiencies as they introduce and impose transactional costs on enterprises. Regulatory agencies though intended to be facilitators have at times become more of inhibitors. Gachara (1990) studied the investment practices of reserve funds among SACCOs and makes a case for regulation geared to ensure sustainability of SACCOs in Kenya. Constraints either at industry level or as embedded in laws of a country serve to further limit the latitude of manager's ability to freely and economically choose investment portfolios.

Modigliani et al (1958) in their seminal work on the irrelevance of capital structure which was later revised to include effects of tax is the logical entry point for a discussion on the impact of taxation on investments. Largely taxation can be viewed at two levels, one there is taxation on income from investments and personal income tax. Tax on dividend income from investments is applied at different rates depending on the income source.

On the other hand personal income taxes that are normally on a graduated scale impacting more on those with higher incomes. Since differences exist on how individuals are treated by the tax authorities, tax and tax levels impinges on the investment decision. The decision to retire, increase exposure or take on a new asset class is informed partly by the eventual tax burden on dividends and transactional costs. Such additional costs inhibit efficiency in asset allocation.

Sharpe (2006) is however opposed to this view and sees the tax associated costs as too minimal to influence portfolio choice. Zvi et al (2004) sustains a view contrary to Sharpe by noting that for investors who face significant tax rates, tax shielding and deferrals consider them as critical matters in their investment strategy. In general, investment evaluation is done using after tax returns to underscore the fact that taxation is a legal obligation that is unavoidable. SACCOs are treated favourably as regards taxation in consideration that their incomes are largely from member's employment income that is taxed at source.

Personal tastes and preferences of the investor will act to impede or aid the freedom in asset selection. Tastes and preferences are an intangible factor that is based on personal beliefs, ethical standards that invariably cannot be subjected to statistical analysis. They however out rightly exclude certain assets even if later analysis shows would have shown that such assets are worth holding. Tastes find expression in organisational investment philosophy that imposes the moral compass of the owners to curtail manager's freedom in asset choice. Some organisational investment policies may discourage or outlaw investing in alcohol and tobacco related industries. Other exclusions would include companies engaged in environmental pollution, those excluding minorities or engaging in unfair labour practises in their human resource force.

In summary, concerns such as investment objectives, liquidity, taxes, preferences and tastes combine to limit the asset universe from which managers must make a choice, additionally it reduces diversity within portfolios. Whilst it is appreciated that managers exist to maximise shareholder wealth, they only do so in an environment constrained by severally interacting and interrelated factors.

After a careful review of the constraints faced by a firm, one is now able to craft an investment policy. Sharpe et al (2007) describe it as a statement that provides the context in which investment decisions are made in a given organisation. It is a mix of hopes and wishes of an investor tapered with the constraints that exist in the environment. An investment policy is a vital planning tool since it provides the beacons demarcating the latitude in which the entire investment process is executed. It delineates an investors specific goals and how the investor expects the goals to be realized. An investment policy aids to clarify investment objectives, created objective performance standard threshold and guards against personal pursuits and other unethical behaviour in the investment process.

Railley et al (1997) notes a clear investment policy is key for managers when crafting an investment strategy. An investment strategy actualizes the investment policy by indicating the series of activities that a company undertakes in the investment process. A strategy starts by placing an organisation at its preferred position on the risk- return continuum. On one extreme end is high risk weighted heavily in favour of stocks. On the other end are risk adverse investors who tend to have more of bonds and cash equivalents.

Considerable debate on this continuum has led to a conclusion that it would be wrong though to place an organisation on a given spot on the continuum. Zvi et al (2004) stresses that a portfolio must comprise both assets with low risk low return as well as high risk high return so to maximize returns at a given level of risk.

Once the investment strategy is in crafted and assets acquired that fit the purpose have been acquired there is need to continually evaluate their performance and re-align them in context of changes in the market, changes in regulatory environment, or changes in the constraints. Changes in the environment may lead to less than optimal performance either by way of less returns or increased risk. In other instances changes in the environment may lead to an asset class being incongruence with the investment policy like in a situation where a company ventures into activities specifically excluded by the policy.

The thrust of portfolio monitoring is to establish deviations between the expected and actual performance, account for these deviations and provide an objective basis of selecting the remedial action to be taken.

In order to deliver on investment objectives in changing environment portfolios must remain dynamic and change both in composition and proportion in consonance with the changes in business environment. Not all changes will occasion portfolio revision; Sharpe (2006) provides a caveat to just when a revision can be undertaken. A cost benefit analysis is done to weigh the transactional costs vis-a -vee the additional returns to establish viability of revisions. In the event that the costs or revision outweigh the resultant benefits then revision may be deferred.

Ledgerwood (1998) agrees with Sharpe and further proposes that analysis of historical portfolio performance will aid to check the success or otherwise of investment management strategies, managers' skills. Results of such evaluations may suggest a need for portfolio revision, modification of strategies or even a change in the skill set of the portfolio manager.

Traditionally the mean-variance criterion is used to judge managers on their choice of risky asset mix. In the mean-variance approach an optimal portfolio is one that maximises returns for a given level of risk. A major drawback of mean-variance is its use of a single variable criterion to judge fairly composite phenomena with interplay of many interrelated variables.

Other methods that may be used will include Sharpe Ratio, Treynor Ratio and Jensen Alpha. Jensen and Treynor ratios measure systematic risk assuming a perfectly diversified portfolio hence evaluate along the traditional lines of risk-return trade off. Sharpe (2006) begins from a more realistic assumption that markets are not efficient hence the need to go beyond risk and return and look at the diversification of a portfolio. In as much as the three newer methods present an improvement on the mean-variance criterion, Ileva (2008) notes deficiencies in the three methods as they assume a constant portfolio risk over the analysis period. This is hardly the case in view of the dynamism in portfolio composition and proportions in line with market changes. Owing to these factors and noting that markets are not perfectly efficient, it is probable that superior asset selection and timing can result in significant increases in value beyond market return. These lend support to active investment strategies which factors periodic portfolio rebalancing.

2.3 Active & Passive Investment management strategies

Depending on the level of one's persuasion as to whether markets are efficient, semi efficient or not efficient one is likely to implement one of the two broad investment strategies either passive or active investment management strategies.

2.3.1 Passive Investment Strategies

Passive investment strategy is based on the belief that deviations in prevailing security prices from their true values based on fundamentals are never large. It is therefore totally futile to spend resources on analysts in search of mispriced securities. This logic hinges on the fact that even if one was to establish mispriced securities there is too little gain if any as the market is capable of self correction under the perfect efficient market assumptions. Passive Investment Management Strategy is common among investors who create their portfolio profiles, acquire the assets and hold for relatively long periods. Such investments tend to have stable but smaller returns, low transaction costs as well lower management costs.

The cornerstone principle in the passive method is to do as good as the market for assumes it is not possible to outperform the market. Ilev (2008) notes that the implication therefore passive managers never desire to earn higher risk adjusted returns above the market. Passive managers will create portfolios that proxy the market index so as to earn roughly the same returns as the market. Such an approach would at the very minimum be recommended to SACCOs that seek to expand their investment horizon.

In terms of evaluating performance under the passive strategy several methods can be applied. These will include; full sample replication, quadratic optimization, completeness of funds and yield tilting. Full replication involves purchase of all the securities in the index portfolio in the same proportions. Ideally this should ensure same returns as the index portfolio save for transactional and dividend reinvestment costs that may make it sub optimal. Sampling attempts to overcome these twin costs of transactional and dividend reinvestment costs but it also invites other challenges in the form of tracking errors.

Alternatively a quadratic optimizer uses computing power affordable today to analyze historical data on price changes and correlations between securities to output on a portfolio with the least tracking errors. As is to be expected, the method assumes that the past is a good indicator of the future; empirical data shows that this is not always the case and the method could result in a huge tracking error.

Completeness of funds is created from outside the published index by use of securities that active managers underweight and thus complete the market gaps. The benchmark is customized to incorporate characteristics of such stocks. Similarly yield tilting is theorized to orient investment to market inefficiency caused mainly by tax laws. The highly taxed high -yield stocks are unattractive investment vehicles to high income investors. These stocks are attractive to low taxed or tax exempt individuals and hence they should tilt their portfolios towards them.

2.3.2 Active management strategies

This is a market focused approach to make asset allocation decisions and use analysts' recommendations to choose securities within each asset class. Active portfolio managers attempt to profit from asset selection, market timing or both. In capital asset pricing model it is an attempt to active returns that are significantly from those implied by the market line (Cohen et al 1982).

According to Pandey (2010) two considerations are necessary for active portfolio management. First, one must have a good idea of how others view alternative investments. Second, one must disagree with the consensus. The task is not just to predict returns accurately but additionally one must do so better than the market. Moreover, the difference in expectation must be large enough to cover the transactional costs associated with portfolio revision.

Active managers consider holding period for portfolio securities to be temporary, changing, replacing them and rebalancing immediately a difference in expectation occurs. It thus requires one, a concentration of fairly small number of issues with continuous reassessment of alternatives and secondly moving in and out of a well diversified portfolio. Sharpe (2006) observe that actively managed portfolio are overweighed in certain market segments or in certain asset category burdening managers to determine in which segment and with which proportion to overweight their portfolio. Active managers are less concerned with the market index portfolio except for studying on how to make returns more than it proxies. Decision to overweight in certain asset classes implies less than optimal diversification resulting in a higher risk the very reason why managers in an active strategy must earn returns high enough to compensate investors for the higher risk uptake.

Sharpe (2006) provides two ways in which assets may be selected. One is to undertake a technical analysis using historical data to establish trends and patterns that one hopes will recur. It is by use of these patterns that securities are acquired in a manner to ensure higher returns than the market. The second approach is to evaluate the 'true' value of a security by analysing the fundamentals of the firm to establish a divergence between this value and the prevailing market price. Wherever the magnitude of true value exceeds the market value by a significant margin such securities attract more attention during asset selection.

Market timing is premised on the fact that price fluctuations are not as random as they are presented to be. It is possible by use of statistical tools to decompose such random movements into predictable and sometimes regular patterns. Empirical evidence from time series analysis further reinforces this point as the economy goes through motions of ups and downs. Movement of market indices can also follows a somewhat similar pattern hence its limited use as pointer to the level of economic growth.

Thirdly, businesses have their cycles of booms and their values follow this pattern in price movements. Armed with these information an active investment manager embarks on the task of deciding just when to get into a given asset class, secondly at what proportion should s/he overweight in the chosen asset class and thirdly the appropriate time to exit from the selected class so that they gained value in not eroded. In accomplishing this task the investment manager has to simultaneously ensure that the additional returns are sufficiently higher to cover transactional costs and the additional risk (Omony 2003).

2.4 Asset Allocation Strategies

Zvi et al (2004) and Omony (2003) both concur that asset selection is the most important stage in the investment process, they ascribe up to 94% of overall portfolio returns to manner in which the asset mix was done. The choice in asset allocation is a continuum from the less risk low return securities such as Treasury Bills to the high risk high return securities mainly stocks. The key challenge here to create an asset mix that promises superior returns.

Reilly and Keith (1997) provide four strategies that could help in making the asset mix decision. These include strategic, integrated, tactical and insured asset selection approaches. The integrated approach separately examines the capital market conditions on one hand and the investor objectives on the other hand. Strategic is concerned with analysis of forecasted returns, variances and covariance of portfolios after which efficient frontiers are constructed. An investor then chooses the best asset mix using the frontiers given risk preference and constraints. Tactical approach is concerned with short term market analyses to inform asset mix. It postulates that in a falling market where risk premium on stocks would be large then an investor must weigh the portfolio more to this asset class. In a way tactical approach holds constant investor preferences and focuses solely on the risk premium.

2.5 Modern Investment Theories

Modern Investment Theories (MPT) posits that it is possible to maximize return and minimize risk by carefully choosing different assets based on their return and risk behavior. MPT has held sway in finance as filed with its creators winning a Nobel Prize.

It also had enjoyed a lot of application until of recent when its assumptions have been greatly challenged. Its universal usefulness and application has thus been brought to question with increasing emerging evidence that many companies using variants of MPT have gone bankrupt in various financial crises. This is possible, in theory, because different types of assets often change in value in opposite ways. For instance, when the prices in the stock market fall, the prices in the bond market often increase, and vice versa. A collection of both types of assets can therefore have lower overall risk than having either individually.

MPT models an asset's return as a normally distributed random variable, defines risk as the standard deviation of return, and models a portfolio as a weighted combination of assets so that the return of a portfolio is the weighted combination of the assets' returns. By combining different assets whose returns are not correlated, MPT seeks to reduce the total variance of the portfolio. Key of the assumptions of MPT is that investors are rational and markets are efficient.

Through the 1950 up to 1970s MPT represented a key advancement in using known mathematical tools in modelling finance. In the recent times, the MPT model has faced increasing criticism on several fronts key of which are its main assumptions. Empirical evidence contradicts the notion that investors are always rational as well the fact that markets are not yet efficient. Other criticisms include the fact that financial returns do not follow a Gaussian distribution and that correlation between asset classes are not fixed but can vary depending on external events especially in times of financial crises.

The most spectacular example of MPT's failure is in the collapse of Long Term Capital Management in 1998.

The origin of MPT is traced to Markowitz (1952) who showed how to create a frontier of investment portfolios that would promise a higher return for a given level of risk. Sharpe reviewed the work of his teacher and developed first a single index model in 1963 and thereafter Capital Asset Pricing Model in 1964. Another seminal contribution was by Ross (1976) who attempted to respond the deficiencies of CAPM and developed arbitrage-pricing theory (APT). APT holds that the expected return of a financial asset can be modeled as a linear function of various macro-economic factors, where sensitivity to changes in each factor is represented by a factor specific beta coefficient.

The APT is less restrictive in its assumptions: it allows for an explanatory as opposed to statistical model of asset returns, and assumes that each investor will hold a unique portfolio with its own particular array of betas, as opposed to a standard one that is identical market portfolio as postulated by CAPM. In many ways, APT would appear as an improvement but with a major limitation in the sense that the method does not itself reveal the identity of the explanatory factors in the model. The model appreciates the dynamism since these explanatory factors in their aggregate, and their nature changes over time and varies greatly between economies.

2.6 Financial Performance Measurement

Kitaka (2001) refers to the work of Terence (1989), who provided a basis for financial management. Terence posits that the essence of performance management is to provide a scorecard on the managements' stewardship role in ensuring maximum return on the capital employed in the business. Several methods are available to measure financial performance and they can be broadly categorized into two;

- Accounting based methods
- Market based methods

Accounting based methods rely on published financial statements to extract information on profitability, earnings per share, return on capital employed, return to shareholders equity, return on total assets and the growth rate of an enterprise.

These methods largely apply ratio analysis in each of the key areas. Musyoki (2003) indentifies challenges to the use accounting methods. He notes the fact the accounting information (on which they are based) is produced up to three months after the end of the accounting period. It is therefore historical and may thus have less value in making judgments about the present let alone the future of the company. Accounting data is also prepared in accordance with International Financial Reporting Standard (IFRS) as decreed by ICPAK for accountants in Kenya. The use of these standard guides the process of making estimates on matters such as depreciation with further brings in subjectivity. Notwithstanding the advantages, information from financial statements continues to be widely used by shareholders as a basis of evaluating the work of management.

Market based methods are external and are based on the price that an external party would offer for whole or part of the company. These methods are more robust in the sense that in perfect markets, managers have little influence on price per share, which is equilibrium of the forces of demand and supply. The methods are also closer to the desire of shareholder as they reflect more closely to the price they will gain should they choose to dispose their shareholding in open market. Musyoki (2003) concurs with other scholars who note the absence of perfect markets anywhere the world and the main drawback of market based methods. Empirical evidence pointing to Monday effect, January effect on stock markets runs contrary to our expectations that investors are rational and as such, the price on the market carries with it some market distortions.

Kaplan (1992) notes that it is unfair to use share price as a means to evaluate the work of managers since it is affected by interplay of factors beyond their control.

A compromise between the two approaches is the ideal in measuring financial performance. Industry leaders have led the way in developing methods to evaluate firms. In the banking Sector, the CAMEL model as developed by the Federal Reserve Bank suffices, it considers capital adequacy, asset quality, management, Earnings Quality and liquidity to evaluate performance.

Ledgerwood (1998) highlights six major indicators that are apt for micro-finance institutions, these include; portfolio quality, productivity and efficiency, financial viability, profitability, advantage, capital adequacy, scale, outreach and growth. Kitaka (2001) adopted these measures in his study surveying the financial performance indicators by MFIs in Kenya. This study adopts some of these measures with some modifications. In the following sections, we discuss each of these measures.

Operational self-sufficiency (OSS) is measure that provides information on how well the operations are being executed. OSS is established by total financial revenues give it as a proportion of total financial expenses, operating expenses and loan provision expense. Operationally a SACCO will be deemed sound when it exhibits an OSS of 100%. Financial Self Sufficiency (FSS), this measure expresses operating income as a portion of operating expenses, financing costs, provisions for loan losses and cost of capital. A good SACCO shows an increasing trend in its FSS. Portfolio at Risk (PAR) is a cluster of ratios that taste the quality of the loan portfolio, in this study PAR will be given by the total loan balances with arrears divided by the entire loan portfolio of the SACCO. Outreach, on the other hand measures the extent of coverage by the SACCO to its members.

Dimensions in outreach would include number of staff, number of clients served, number of branches and growth in membership numbers. Kitaka (2001) established that the main service provided by MFIs is credit provision 50% of all MFIs surveyed. Following in this pattern, outreach was based on the number of members issued with loans over that total number of members in a given SACCO.

2.7 Summary of the Literature Review

The chapter considered investment and its related theories. It reviewed in the investment process with its related stages. Empirical studies were reviewed to point to knowledge that is already known about the subjects of investments as well as financial performance.

The key findings in the literature reviewed raise the following poignant points. One, it has been pointed out that cooperatives are a special forms of business units that do not wholly operate on maximising wealth due to agency problems between depositor and loan customer both of whom are members. This notwithstanding the literature reviewed point to the critical role that they play in financial systems of various countries which acquired more significance in the post 2007 banking crisis. Studies and controversies on the role of regulation in the sector were considered and the absence of consensus as to whether less regulation leads to better performance was underscored. It is in this context that the study seeks to explore relationship between investment and financial performance among the deposit taking SACCOs in Kenya.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

This part describes the procedures and methods used by the researcher to collect and summarize evidence to answer research objectives. It covers the research design, population, data collection, models and techniques for data analysis. Regard was given to cost and time in choosing the best yet effective conceptual structure in which the study is to be conducted.

3.1 Research Design

The study used a descriptive research design to investigate relationship between an independent variables and dependent variables.

3.2 Population of the Study

The population of the study was all Deposit Taking SACCOs licensed under SACCO Societies Regulatory Act as at July 2011. They were 45 in number and are included at Appendix 1. The Study was a census, it used all the 45 firms, and there was no sampling.

3.3 Data Collection

The study wholly used secondary data. Copies of financial statements of all SACCOs licensed to carry out deposit taking business were sourced from the SACCO Societies Regulatory Authority (SASSRA).

Effort was made to trace secondary copies from the Ministry of Cooperative Development and Marketing for SACCOs whose financials were not found at SASSRA or were incomplete in some regard. As discussed in the literature performance of a SACCO was measured by three key ratios; the financial self-sufficiency, Operational Self Sufficiency and Outreach. Investments were measured by their aggregate amounts expressed as a portion of the total asset value.

3.4 Data Analysis

Data collected was analyzed using descriptive statistics such as mean and median were computed to assist in describing key attributes of the population. Interrelationships between various measures of performance were tested using covariance and correlation.

A regression model provided below applied on the data to describe the nature of relationship between investment and other measures of financial performance. One factor model was used whereby investment were considered the independent variable while the other measure of performance were deemed to be dependent on the level of investment. Musyoki (2000) applies regression to taste relationship between quality improvement and financial performance among commercial Banks in Kenya; He cites the studies of Philips et al (1978) and O'connor (1973) who applied a similar method. SPSS Software was in data analysis.

The model applied to regress the variables is as follows;

$$Y = a + b_1X_1 + U$$

Where;

Y= Are the dependent variables, which include Operational Self Sufficiency, Return on Assets, Financial Self Sufficiency, Portfolio at Risk and Outreach.

X_1 = Independent variable, the investment levels measured by the amount of investments in the financial year ending 31 December 2009.

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

Since the dependent variable takes the form of a ratio, the dependent variable were standardized by dividing the investment amount by total assets.

A, b_1 , are the estimated coefficients in the regression model

U = Cumulative error term, which includes as the residual effects of factors not incorporated in the model and measurement errors in the variables.

Financial statements of 45 Depository Taking SACCOs were sourced from NASSRA. Each set of financial statements were checked for completeness in terms of having a U = Cumulative error term, which includes as the residual effects of factors not incorporated in the model and measurement errors in the variables. Financial information included the number of members and a division between members currently servicing a loan and those who did not. When checked against these attributes only 33 SACCOs had the requisite record to qualify for inclusion in the study. Efforts to source additional information from Ministry of Cooperative Development and Marketing or from individual SACCOs were not useful hence the final sample of 33 SACCOs at the data analysis stage. However, with 33 SACCOs the sample size was enough to allow for generalization of research findings.

4.2 Key Attributes of SACCOs Surveyed.

Membership: The SACCOs under the study had a total of 2,000,000 members with the largest SACCO having 90,000 members and the smallest having 200 members. The average membership per SACCO was 23,000 members. A majority of these members 63.81 % were running loan with their SACCOs. Generally, SACCOs are viewed as a homogeneous group of members mostly under rural or semi-rural areas. The salient characteristics of members are summarized in the following table.

DATA ANALYSIS, INTERPRETATION AND PRESENTATION**4.1 Data Analysis**

Financial statements of 45 Deposit Taking SACCOs were sourced from SASSRA. Each set of financial statements were checked for completeness in terms of having a statement of comprehensive income, statement of financial information, statement of changes in equity, and additional statistical information. Statistical information included the number of members and a division between members currently servicing a loan and those who did not. When checked against these attributes only 33 SACCOs had the requisite record to qualify for inclusion in the study. Efforts to source additional information from Ministry of Cooperative Development and Marketing or from individual SACCOs were not useful hence the elimination of 12 SACCOs at the data analysis stage. However, with 33 SACCOs the respondents were large enough to allow for generalization of research findings.

4.2 Key Attributes of SACCOs Surveyed.

Membership, the SACCOs under the study had a total of 761,697 members with the largest SACCO having 98, 640 members and the smallest having 308 members. The average membership per SACCO was 23,082 members. A majority of these members 63.81 % had a running loan with their SACCOs. Generally, SACCOs surveyed had a homogenous group of members, mostly under common bond. The key groups included lecturers, teachers, farmers; largely in dairy and tea sectors and transport business. The salient features of membership are summarized in the table below;

DATA ANALYSIS, INTERPRETATION AND PRESENTATION**4.1 Data Analysis**

Financial statements of 45 Deposit Taking SACCOs were sourced from SASSRA. Each set of financial statements were checked for completeness in terms of having a statement of comprehensive income, statement of financial information, statement of changes in equity, and additional statistical information. Statistical information included the number of members and a division between members currently servicing a loan and those who did not. When checked against these attributes only 33 SACCOs had the requisite record to qualify for inclusion in the study. Efforts to source additional information from Ministry of Cooperative Development and Marketing or from individual SACCOs were not useful hence the elimination of 12 SACCOs at the data analysis stage. However, with 33 SACCOs the respondents were large enough to allow for generalization of research findings.

4.2 Key Attributes of SACCOs Surveyed.

Membership, the SACCOs under the study had a total of 761,697 members with the largest SACCO having 98, 640 members and the smallest having 308 members. The average membership per SACCO was 23,082 members. A majority of these members 63.81 % had a running loan with their SACCOs. Generally, SACCOs surveyed had a homogenous group of members, mostly under common bond. The key groups included lecturers, teachers, farmers; largely in dairy and tea sectors and transport business. The salient features of membership are summarized in the table below;

Table 4.1 Key Features of Membership

Attribute	Mean	Median	Kurtosis	Skewness
Membership	23, 082	6,055	1.202	1.385

Though key attributes of the membership have been summarized, they in themselves do not mean much since membership to a SACCO is a largely by common bond. There is very little direct competition for membership among SACCOs since the law prohibits membership to more than one SACCO at a time.

Asset Base, the SACCOs surveyed had cumulatively Kshs 61.84 billion as assets from the statements of financial position. The mean asset base was 1.6 billion with 12 SACCOs (out of 33 SACCOs surveyed) had an asset base of over a billion Kenya shillings. These findings indicate a heavy investment by SACCOs in assets that could as well be tying away critical funds that could be availed to members as loans. Absence of liquidity in SACCOs leads them to borrow for on ward lending to members which increases their financing costs.

Loans, collectively the SACCOs had loaned of KSHs loaned to 47, 562, 468 to members, averaging 63,000 per member. Significantly, these had a provision of Kshs 719, 249, 254 representing 15.12 % of the amount outstanding on the loans. In the context of nonperforming loans, the provisions seem somewhat too little to cover for the potential exposure. Included in the figures in some SACCOs are loans made to non-members or persons who have ceased being members or staff of the SACCO. Since chances of recovery of such amounts appear remote, SACCOs ought not to carry the same in their books. A majority of SACCOs had significant variances between the loan registers and the ledger balances. This would indicate poor internal control systems and a possibility of huge losses once these amounts are written off.

The major categories of loans among SACCOs include; school fees loans, emergency loans, and development loans. The latter is normally long term while the former two types are extended for periods not more than one year.

Incomes, collectively in the year of study the SACCOs generated 4.5 billion as SACCO financial revenues against direct and related financial expenses of 1.5 billion. The mean financial revenues were 133, 718, 225, interestingly however is the fact that only 9 SACCOs had financial incomes above the industry average. This reflects only 27% of the societies surveyed.

Investments, the SACCOs studies had placed Kshs 3.4 billion in various investment options. The investment destinations included off shore investments, shares in quoted and unquoted securities. Other funds were placed into special purpose investment vehicles such as housing schemes

4.3 Descriptive Measures and Study Variables

The study had five variables and descriptive measures were computed and are summarized in the table 4.2 below;

Table 4.2: Summary of descriptive statistics for study variables

Attribute	Mean	Median	Kurtosis	Skewness
OSS	0.7885	0.8522	6.606	2.3453
FSS	0.7968	0.5786	6.2961	2.2877
Outreach	0.6807	0.6300	1.8031	1.8662
PAR	0.7795	0.8000	3.8585	-0.0819
Investment	0.0803	0.0527	6.026	2.3406

4.4 Measures of Performance

Arising from the findings about descriptive attributes of each a variable, a discussion is summarized here below;

Operational Self Sufficiency

Industry mean for operational self -sufficiency was at 0.7885 with over 10 SACCOs lying above the average. The ideal ratio for an OSS is 1 and therefore SACCOs with an

OSS of less than 0.5 are considered to be very weak. In this weak category was another batch of 10 SACCOs. Survival for SACCOs is threatened by a high exposure that nearly matches operational revenues to operational costs. This is the reason that accounts for cash flow constraints whenever payments are delayed from the parent organization. In terms of the general pattern of OSS, it was skewed to the right with the median being slightly higher than the mean. The implication here is that more SACCOs tended to have an OSS closer to 1. This is further supported by the statistics that indicates that only 10 of the 33 SACCOs surveyed has an OSS less than 0.5.

Financial Self Sufficiency

This ratio matches financial revenues to financial costs. It helps establish how much of internally generated revenues are available for lending to members as loans. A SACCO that predominantly used borrowed funds for onward lending to its members will exhibit an FSS closer to 1 owing to higher borrowing costs. In the SACCOs surveyed this tended to be the case with the industry OSS at 0.79. Significantly, Harambee, Borabu, Muramati, Kenversity, Magereza, Ardhi and United Nations SACCOs had an FSS of more than 1. In this category is Kenversity that had won an award for proper financial reporting FIRE Awards in 2011. It seems therefore that SACCOs with better reporting frameworks tend to have better financial management structures.

Portfolio at Risk

The industry reported a mean PAR of 0.7795 and a median of 0.8 but with a negative skewness of -0.0819. Generally, the risk management concept and practice is severely lacking as evidenced by under or no provision for loan losses in some SACCOs. Additionally the pressure to report higher profits has led some SACCOs to be reluctant in writing off loan amounts that are evidently uncollectible.

Outreach

Outreach was measured as a comparison of members with loans to those without; the industry averages reflect a near normal distribution with a mean of 0.6807 and a median of 0.6300. Many members view SACCOs as the primary source for stable and cheap finance and more than half have made good and have running loans with their SACCOS.

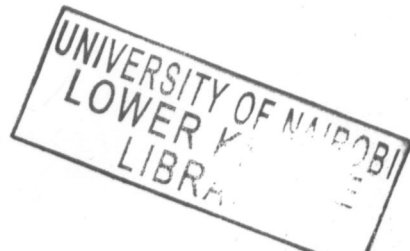
Investment

There is a general apathy towards investment among SACCOs with many preferring limiting themselves to the core business of loaning money to members. The industry average was 0.0803 and a median of 0.0527. Data on investments was generally positively skewed and had kurtosis of 6.026. While this study showed no positive relationship between investments and other measures of performance, it is possible that the investment decisions made by management committees were less than optimal thereby not making significant contribution to performance.

4.5 Measures of Relationships

The study had adopted a single factor model premised on a plausible assumption that investments generate additional returns, take away free cash flows and the associated liquidity handling costs and therefore a significant positive correlation was expected between the level of investment and the various measures of performance.

Investments and Financial Self Sufficiency, when analyzed the relationship revealed a positive intercept, a negative slope and a very insignificant coefficient of determination.



Investments and Operational Self Sufficiency, when analyzed the relationship revealed a positive intercept, a negative slope and a very insignificant coefficient of determination.

Investment and Outreach, when analyzed the relationship revealed a positive intercept, a negative slope and a very insignificant coefficient of determination. The results of regression are as summarized in Table 4.2 below;

Table 4.2: Regression against Investment

Variable	a	b	r	r ²
Outreach	0.692186	-0.1432	-0.12960	0.0168
Portfolio at Risk	0.78036	-0.8311	-0.05627	0.0032
Financial Self Sufficiency	0.945764	-1.8556	-0.28470	0.0811
Operational Self Sufficiency	0.78939	-0.11432	-0.00176	0.0000

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the key findings, the information such findings present and gives an indication of the decisions that managers are likely to taken in light of this study

5.2 Summary of Findings and Discussions

The study established that a majority of SACCOs operate businesses that are closely related to their members or incorporated special purpose vehicles for their investments. Investments were standardized using the total assets resulting in a noticeable pattern. The mean investment was at 0.0805 of the asset value with the lowest reporting 0.2% and the highest reporting 45% of its asset value.

Operational self-sufficiency gives a measure of how stable a SACCO is and it is ideally to be measured across time in a longitudinal study. The rule of the thumb is that an OSS of 1 or an increasing OSS over time is desirable. In the study, the mean OSS was at 0.7884 and up to 6 reported satisfactory approval of over 1. A large number of firms 22 in total reported an OSS of less than 1, hence the need to improve their exposure by reining in on the increase in the operational costs.

Financial self-sufficiency is a critical measure to SACCOs since it measures the efficiency with which they are executing the lending function. A well performing SACCOs will experience more interest income than the interest expense implying an ability to plough back some of its own generated resources into loans to be given to members.

Such efforts improve the operations and deals with a risk more prevalent in SACCOs where they operate with high borrowing and the associated costs. In the study up to eight, SACCOs showed an FSS of more than 1, 22 firms showed an FSS above the mean. These findings mirror those of operationally self-sufficiency an indication that SACCOs may appear to match their current incomes to current expenditures. This short-term approach negates the long-term profitability and sustainability of the society. There is need for manager to better manage their assets and reduce reliance on corporate loans largely from the Cooperative Bank of Kenya

When investment was regressed on various measures of performance and the related coefficient of determinations computed the result showed little correlation between investment and performance of a society. Arising from these findings, it would appear that aggressive investment strategies do not necessarily lead to better overall performance of a SACCO. Manager therefore are better off approaching investments more cautiously especially where the significantly add to their operational costs. On the hand, managers when only select investments that provide only dividend earning possibilities without the attendant operational costs.

5.3 Key Conclusions

With co-efficient of determination of less than 1%, between investment and other measures of performance, this study fails to find any significant linkage between the level of investment and financial performance of a deposit taking SACCO in Kenya for the 2009 financial year. Managers of Deposit taking SACCOs are thus encouraged to pursue investments in a cautious manner since they do not directly and in any significant manner lead to improved overall operations.

5.4 Major recommendations

The findings of the study point to several areas in the operations of SACCOs that need to be improved to ensure their success. These include the following;

On investments, there is need to ensure that managers choose investments that provide marginal returns over and above the interest income that is received on loans given to members. The very reason for low association between investment and performance is a reflection of less than optimal allocation of resources. The trade-off between giving loans and engaging in investment activities needs to be carefully evaluated to assure only courses of action that assure positive NPV are selected.

On financial self-sufficiency, there is heavy reliance on borrowing largely from cooperative bank of Kenya for purposes of lending to members. A noticeable pattern is that of using overdrafts that come at huge costs. Working capital management is an area that deserves attention among the SACCOs. During the study, one society had fixed deposits and an overdraft facility concurrently.

Operational costs were significantly high in relation to operational incomes. There is need for management committees to adopt effective organizational structures that are supported by competent personnel to deal with operational challenges. The challenges noted in the manner in which SACCOs prepared their financial statements are pointers to failure to recruit competent accountants.

5.5 Limitations of the Study

A number of factors have limited the empirical analysis of this study. Each of the major limitations is discussed below;

The study was based on secondary data wholly obtained from financial statements. Many studies point to several reasons to discount the use of such information with the main reasons being they are historical and they apply estimates. In the process of making such estimates, however judicious one may want to be there is always room for bias. Further Accounting data suffers from allocation differences and errors, which limit comparability.

Another challenge particular to the SACCO movement is the manner in which they prepare their financial reports. Huge suspense accounts, absence of provisions, and improper asset classifications were noted. Such differences could not be cured before data analysis.

At the time of study, only 45 SACCOs had been licensed. When compared to over 3500 cooperatives in operation in Kenya, it would appear that this was rather to small a sample size. The choice was informed by the readiness with which the financial statements could be found hence the preference for the regulated SACCOs.

The study used a single factor model and noted very high-unexplained changes in the dependent variable that are not be attributable to changes in the independent variable. Several theoretical reasons may account for this, one there may be no plausible relationship between investment and other measures of performance. The findings seem to negate the notion that SACCOs can improve performance by venturing aggressively into investment. Theoretically, therefore one can postulate that there is another variable or a set of variables not captured in the model that could very well proxy performance. On the other hand, it is possible that a combination of variables is responsible and hence a multiple factor model may be ideal.

Additionally, the study was limited to deposit taking SACCOs, there is reason to believe that regulations cause market distortions an opportunity to compare these findings with a similar sample from the non-deposit taking SACCOs.

5.6 Recommendations for further Study

Several attempts can be made as a way to improving the study and curing some of the challenges noted as detailed among the limitations. In order to cure challenges relating to use of accounting information pre-selection can be done so that only those with good financial statements are incorporated in the study.

It is expected that as SASSRA and ICPAK continue making effort to improve the record keeping among deposit taking SACCOs the overall use-ability of these accounts will improve. A significant reduction in accounting differences will occur once SACCOs adopt the MKOPA SACCO template that has been developed by ICPAK and approved for use by SASRA. It will be useful to conduct another study among SACCOs using a similar template and compare the results.

Progressively more and more SACCOs are being licensed by SASRA and a study in the future will comprise more than 33 SACCOs used in this survey. This will further improve the study since a larger sample size will make it possible to generalize the study findings.

The single factor model failed to link investment to other measures of performance among SACCOs. Possibility exists that the model had less explanatory power since it was a single factor model. Another study structured to incorporate several variables will add to the body of knowledge linking organizational performance to investment.

The study was limited to deposit taking SACCOs, which are more regulated as compared to other forms of cooperative societies. Opportunity exists for a comparative study among a sample of deposit taking and non deposit taking SACCOs

REFERENCES

- Abigail M. H, (1997) *The changing values of cooperatives and its business factors*, American Journal of Agricultural Economics, Vol. 79, Nov. 1997, pp 1077-1082
- Atengi F.B.A (2007) *Challenges of strategy implementation in the ministry of finance Kenya*, Unpublished MBA University of Nairobi
- Barclay M.J and Clifford W.S. (2005) *The Capital Structure Puzzle, Evidence Revisited*, Journal of Applied Corporate Finance, Vol 17. No. 1
- Birchall, J. and Simmons, R. (2010) *The co-operative reform process in Tanzania and Sri Lanka*. Journal of Annals of Public and Cooperative Economics, Vol. 81: pp 467-500.
- Brealy Myers, (2003) *Principles of Corporate Finance*, McGraw Hill, Boston
- Cohen J.B. Zinabarg E.D, and Zeikel (1982), *Investment analysis and portfolio management*; Richard Irwin Inc. Homewood Illinois
- Cuthbertson, K., Nitzsche, D. and O'Sullivan, N. (2010), *Mutual Fund Performance: Measurement and Evidence*. Journal of Financial Markets, Institutions & Instruments, Vol. 19 pp 95-187
- Eljelly A. (2004) *Liquidity – Profitability Tradeoff. An empirical investigation in an emerging market*. International Journal of Commerce and Management. Vol. 14. No. 2
- Ferguson and McKillop (1997), *An examination of borrower orientation and scale effects in UK Credit Unions*; Annals of Public and Cooperative Economics Vol.69. Pp219-42
- Ferguson and McKillop (2000), *The structure, performance and governance of Irish credit unions*, Dublin Gill & McMillan, Institute of Chartered Accountants of Ireland

Gachara J. R. N (1990) *An investigation into the investment practices of reserve funds in savings and credit cooperatives in Nairobi*, Unpublished MBA Project, University of Nairobi

Ileve G.K (2008), *A survey of the investment practices among SACCOs in Nairobi*, Unpublished MBA Project, University of Nairobi

Kagiri P. C (2007) *A survey of the effects of non-remittance of member deductions by employers on SACCOs, A case of Nairobi Province*, Unpublished MBA University of Nairobi.

Kaplan R. & Norton D., (1992) *The balanced Score card- Measures that drive Performance*, Harvard Business Review, Jan-Feb 1992

Keon Athu et al (2008), *Foundations of Finance; the logic and practice of financial management*, Pearson Education, New Jersey

Kitaka P.N. (2001) *A survey on the use of financial performance indicators by micro finance institutions in Kenya*, Unpublished MBA Project, University of Nairobi

Ledgerwood J. (1998) *Micro Finance Handbook, An Institutional & Financial Perspective*, World Bank Library on Congress Cataloguing Publication, Washington DC

Maclaney Eddie (2009) *Business Finance*, 8th Ed. (Prentice Hall, England

Maina David T, (2007) *Cooperative Finance: A financial management handbook for SACCOs* Institute of Development Studies, University of Nairobi.

McKillop, D. and Wilson, J. O. (2011) *Credit Unions: A Theoretical and Empirical Overview*. Journal of Financial Markets, Institutions & Instruments, Vol. 20 pp 79-123.

Musyoki D. (2003) *An Investigation into the relationship between quality improvement and financial performance for commercial banks in Kenya*, Unpublished MBA Project, University of Nairobi

Mutua, K., Nataradol, P., Otero, M. and Chung, B. R. (1996), *The view from the field: Perspectives from managers of microfinance institutions*. Journal of International Development, Vol. 8: pp 179-193.

Mwangi Sarah N (2008) *Responses of SACCOs to the challenge of competition in Kenyan financial sector, the case of Eldoret SACCOs*, Unpublished MBA University of Nairobi

Mwenda K.K, Ed. (2002) *Banking and Micro-Finance Regulation and Supervision; Lessons from Zambia*, Brown Walker

Omony A. B (2003) *A survey of investment practices of pension fund managers in Kenya*, Unpublished MBA Project, University of Nairobi

Ouma P.A. (1988) *The relationship between value chain and competitive advantage in the insurance industry in Kenya*, Unpublished MBA Project, University of Nairobi

Pandey I. M, (2010) *Financial Management* 10th Ed., Vikas New Delhi

Ross S. A. (2002) *Corporate Finance*, 9th Ed, McGraw Hill, Boston

Sharpe William, Gordon J. 7 & Jaffrey V.B., (2006) *Investments* 6th Ed. Prentice Hall of India, New Delhi.

Terence J. (1989) *Evaluation; Relating Training to Business Performance*, Chaucer Press, Bungay

Wanyama, F. O., Develtere, P. and Pollet, I. (2009), *Reinventing the wheel? African cooperatives in a liberalized economic environment*. *Journal of Annals of Public and Cooperative Economics*, Vol. 80 pp 361-392.

Zvi Kane and Marcus (2004) *Investments 7th Ed.* McGraw Hill Boston

2. South Luanti Tea Grower's Sacco Society Ltd

4. Kenya Highlands Sacco Society Ltd

7. Bandari Sacco Society Ltd

8. Gusi Mwalimu Sacco Society Ltd

9. Wakarusa Pamoja Sacco Society Ltd

10. Marakissa South Farmers Sacco Society Ltd

11. South Teachers Sacco Society Ltd

12. Kariakoo Teachers Sacco Society Ltd

13. Ndoye Chai Sacco Society Ltd

14. Arusha Sacco Society Ltd

15. Nyamira Tea Farmers Sacco Society Ltd

16. Mbari Sacco Society Ltd

17. Fakuanya Sacco Society Ltd

18. Kisumu Teachers Sacco Society Ltd

19. Kapenguria Teachers Sacco Society Ltd

20. Meru West Teachers Sacco Society Ltd

21. Meru East Teachers Sacco Society Ltd

22. Meru South Teachers Sacco Society Ltd

23. Meru North Teachers Sacco Society Ltd

24. Meru West Teachers Sacco Society Ltd

25. Meru East Teachers Sacco Society Ltd

26. Meru South Teachers Sacco Society Ltd

Appendix I

List of deposit taking SACCOs

1. Stima Sacco Society Ltd
2. Baringo Teachers Sacco Society Ltd
3. Tai Sacco Society Ltd
4. U.N Sacco Society Ltd
5. South Imenti Tea Grower's Sacco Society Ltd
6. Kenya Highlands Sacco Society Ltd
7. Bandari Sacco Society Ltd
8. Gusii Mwalimu Sacco Society Ltd
9. Wakenya Pamoja Sacco Society Ltd
10. Meru South Farmers Sacco Society Ltd
11. Kilifi Teachers Sacco Society Ltd
12. Kitui Teachers Sacco Society Ltd
13. Ndege Chai Sacco Society Ltd
14. Tenhos Sacco Society Ltd
15. Nyamira Tea Farmers Sacco Society Ltd
16. Nyeri Sacco Society Ltd
17. Kakamega Sacco Society Ltd
18. Kisumu Teachers Sacco Society Ltd
19. Kipsigis Teachers Sacco Society Ltd
20. Mombasa Teachers Sacco Society Ltd
21. Borabu Teachers Sacco Society Ltd
22. Chai Sacco Society Ltd
23. Mombasa Port Sacco Society Ltd
24. Muramati Sacco Society Ltd
25. Bingwa Sacco Society Ltd
26. KMFRI Sacco Society Ltd

APPENDIX 11

Table 2: SACCOs and Key Performance Indicators

	Sacco	OSS	FSS	PAR	Outreach	Investment
1	2NK	0.7974	0.5331	0.8260	0.6300	0.1930
2	Afya Cooperative	2.0497	0.2708	0.8000	0.6300	0.1229
3	Ardhi SACCO	0.5786	1.1733	0.8345	0.6300	0.0121
4	Bandari	0.5594	0.7974	0.8000	0.6300	0.1091
5	Borabu Farmers	0.5592	2.0497	0.7910	0.8889	0.0144
6	Bungoma Teachers	0.5380	0.5786	0.8198	0.6300	0.1149
7	Chuna Cooperative	3.3345	0.5598	0.8570	0.6300	0.0098
8	Egerton University	1.7157	0.5592	0.7130	0.6300	0.0527
9	Githunguri Dairy	0.9848	0.5380	0.8000	0.8267	0.0427
10	Harambee Cooperative	0.1943	3.3345	0.9000	0.6300	0.0565
11	Kenversity	1.6799	1.7157	0.8218	0.6300	0.0087
12	Kenya Police Staff	0.3112	0.9849	0.8150	0.6300	0.0394
13	Kilifi Teachers	0.7094	0.1943	0.7490	0.6331	0.1017
14	Magereza	0.4535	1.6799	0.5460	0.6300	0.0137
15	Meru North Farmers	0.5488	0.3112	0.8000	0.9675	0.1281
16	Moi University	0.5822	0.7094	0.9074	0.6300	0.0105
17	Muramati	0.7104	0.4535	0.7140	0.6300	0.2793
18	Baringo Teachers	1.7277	0.5488	0.4390	0.6300	0.3407
19	Kenya Highlands	0.3933	0.5822	0.8101	0.6300	0.2005
20	Chai	0.6459	0.7104	0.6338	0.6340	0.1039
21	Nacico	0.8090	1.7277	0.8564	0.6540	0.1011
22	Mwalimu	0.2379	0.3933	0.7920	0.6630	0.0024
23	Ndege Chai	0.3921	0.6459	0.8623	0.6560	0.0571
24	Ogembo Teachers	0.7059	0.8090	0.8100	0.8889	0.0248
25	Suba Teachers	0.3356	0.2379	0.5177	0.9631	0.0567
26	Taita Taveta Teachers	0.4765	0.3921	0.8910	0.6312	0.0137
27	Teleposta	10327	0.7059	0.8711	0.6311	0.0539
28	Ufundi	0.3459	0.3356	0.8535	0.6417	0.0185
29	Ukulima	0.1923	0.4765	0.8315	0.6300	0.0069
30	United Nations	0.7166	1.0327	0.2600	0.6300	0.0541
31	Wakenya Pamoja	0.7921	0.3459	0.8516	0.9146	0.0247
32	Wananchi	0.1932	0.1923	0.9970	0.6357	0.4589
33	Wanandegge	0.7166	0.17166	0.9430	0.6317	0.0306