

**EFFECTS OF INVESTMENT DECISIONS ON EFFICIENCY OF DEPOSIT  
TAKING SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN NAIROBI  
COUNTY**

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**DECLARATION**

This research project is my original work and has not been submitted to any other University for award of a Degree.

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This research project was submitted for examination with my authority as the University supervisor.

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Thanks to Almighty God for His unending favours and mercies.

## **DEDICATION**

This research project is dedicated to my family, starting with my wife Lucy Maina, my children Brian, Bakhita and Nick for their sacrifice and inspiring me to further my studies. It is also a dedication to my parents Philomena and Mary Mwangi for the enormous resources and support they have given me. I can't forget to dedicate the same to my sisters, brothers, nephews and nieces who kept on reminding me that I am a role model to many in our extended family and specifically in academics.

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## ACRONYMS AND ABBREVIATIONS

|                   |   |  |
|-------------------|---|--|
| <b>BOD</b>        | - | Board of Directors                                       |
| <b>CCO</b>        | - | County Co-operative Officer                              |
| <b>CEO</b>        | - | Chief Executive Officer                                  |
| <b>DCO</b>        | - | District Co-operative Officer                            |
| <b>DGF</b>        | - | Deposit Guarantee Fund                                   |
| <b>DFID (UK)</b>  | - | Department for International Development                 |
| <b>DTS</b>        | - | Deposit Taking SACCOs                                    |
| <b>FOSA</b>       | - | Front Office Savings Activities                          |
| <b>GOK</b>        | - | Government of Kenya                                      |
| <b>ICA</b>        | - | International Co-operative Alliance                      |
| <b>KUSCCO</b>     | - | Kenya Union of Savings and Credit Co-operatives          |
| <b>MOCD&amp;M</b> | - | Ministry of Co-operative Development and Marketing       |
| <b>MI&amp;ED</b>  | - | Ministry of Industrialization and Enterprise Development |
| <b>OCDC</b>       | - | Ohio Co-operative Development Centre                     |
| <b>PCO</b>        | - | Provincial Co-operative Officer                          |
| <b>SACCOs</b>     | - | Savings and Credit Co-operatives Limited                 |
| <b>SASRA</b>      | - | SACCO Societies Regulatory Authority                     |
| <b>SMES</b>       | - | Small and Medium Enterprises                             |
| <b>WOCCU</b>      | - | World Council of Credit Unions                           |

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

A co-operative society is an autonomous association of persons voluntarily united so as to meet their economic as well as cultural needs and aspirations through a jointly owned and democratically controlled enterprise. The key idea behind a co-operative society is to pool scarce resources and eliminate middlemen so as to achieve a common goal or interest (Ministry of Co-operative Development and Marketing, 2007). Co-operative societies are avenues through which people improve their social-economic situations. They derive their strength and validity from member solidarity co-operation and concern for each other. Co-operatives are anchored on a well-established co-operative philosophy based on seven principles as formulated by International Co-operative Alliance (ICA). They are: voluntary and open membership, democratic control, member economic participation, autonomy and independence, education, training and information, co-operation among co-operatives and concern for the community (Hans, 1976).

##### **1.1.1 Investment Decisions**

Savings and Credit Cooperatives (SACCOs) have found themselves commanding a large percentage of savings in the financial sector. This has driven the citizenry to trust the management of the SACCOs in not only safekeeping of their money but also to provide a good return on it. A statement of financial condition of the SACCO gives a snapshot of the 'health' of the institution at any given time. Once the members deposit their money in the SACCO, the management has a responsibility to ensure the members will get their money back, and should give interest being a reward for using the members' money for their operations.

While the major source of funds for the SACCO is members' savings, the uses of funds are the SACCOs' investments. The investments include loans which take a major share, financial investments, liquid investments, non-financial investments and other investments in regulated financial institutions. While looking where to invest members' funds, SACCO Managers should consider Safety, Liquidity and Yield to be derived. This

should all be integrated into the SACCOs investment policy and a proper appraisal should be done on the investment vehicle being considered for use. SACCOs BODs have the cardinal responsibility to ensure that due diligence is exercised to ensure that SACCO funds are prudently invested. Unfortunately, they are notorious for diverting member's funds into investments which are of little or no value addition to the entity (KUSCCO, 2003). In his study, Muchemi (2005) noted that non profitable investments should be discouraged because, despite the enormous amount of resources committed into such projects, the returns are almost nil, if any. At the end of it all, these reduces the capital base from which interest can be earned. In their study on the contribution of financial stewardship to the growth of SACCOs in Kenya, Olando, Jagongo and Mbewa (2013) were of the opinion that SACCOs did not adequately cover their costs on investments undertaken.

### **1.1.2 Efficiency of Credit Unions**

Efficiency is an indicator of how well an organization uses its resources to produce goods and services. It focuses on inputs, outputs and the rate of productivity i.e. the rate at which inputs are used to produce the output. Efficiency is improved when few units of inputs are used to produce more units of output without compromising the quality. When an economic system produces more units of goods or services economically than another, then it is said to be more efficient than that other one. The bottom line is cost reduction for maximum efficiency but ensuring that quality is maintained. Efficiency, according to Berger et al. (1993), implies improved profitability, greater amount of funds channeled in, better prices and quality services for consumers as well as greater safety in terms of improved capital buffer in absorbing risks.

A business entity can only be said to be efficient if it shows increased profitability with less resources in form of inputs. With the current competition in the business world, no firm can afford not to pay attention to its operations to ensure maximum efficiency. Managers need to adjust their policies and procedures so as to avoid worst practices that are relatively common among institutions that are far from the efficient frontier (Berger & Mester, 1997). To achieve high levels of efficiency, a firm should ensure that it employ the best practices in its operations. There have always been considerable debates about what constitutes input and output more so in the banking industry. According to Berger&

Mester (1997) the intermediation approach is best suited for analyzing bank level efficiency while the production approach is well suited for measuring efficiency at the branch level. Tesfamariam et al. (2013) used the intermediation approach in their study to select input and output. They identified savings and total expenses as inputs and loans and total income as outputs, such that  $\text{Efficiency} = \text{Output} / \text{Input}$ .

### **1.1.3 Investment Decisions and Efficiency**

According to KUSCCO, (2003), Management Committees of various co-operative societies are notorious for diverting members' funds into investments which are of little value addition to the entity if any. The law should therefore be amended to strengthen the Ministry's regulatory hand. It should clearly prohibit investments that are not related to the core objective of the society. Similarly, according to Mwaura (2005), the annual delegates meetings and the ministry of co-operatives are to blame for investment activities undertaken by SACCOS as they have the final approval of these investments.

According to OCDC, (2007), co-operatives have failed without a market-driven approach that allows them to compete. They need a competitive advantage through operational and financial efficiency, professional management, high quality products, and competitive pricing. Donors can respond to the challenge of lack of liquidity among co-operatives by increasing co-operatives' access to finance in a range of ways, such as providing revolving loans funds, bank guarantees, or equity capital to increase the capitalization of financial co-operatives; engaging with commercial banks to increase their willingness to lend to co-operatives on good terms; and in some cases providing low interest loans directly to co-operatives to support expansion of their business (DFID, 2010). However, support to co-operative development should avoid creating dependency, which undermines the mutual self-reliance that is central to co-operation.

In 2006, the world's top 300 co-operatives were estimated to have an annual turnover of US\$963 billion, which is equivalent to the GDP of Canada. In Kenya 303,455 people are directly employed by co-operatives and up to 16.5 per cent of the population indirectly derive their livelihood from the increased demand and associated opportunities to provide goods and services to co-operatives (Pollet, 2009). Donors should be careful not to

compromise co-operatives' true (business) nature through direct financial aid (Birchall, 2008). Many under-estimates the extent of co-operatives in terms of; their membership, the jobs that they have created and the support that the cooperative approach have throughout the world.

Ranging from micro-scale to multi-million dollar global enterprises, co-operatives are estimated to employ more than 100 million people and have more than 800 million individual members globally (ICA, 2009). Co-operatives are complex social organizations with many interests coalescing in one place and with a focus on inclusive decision-making. Unlike just attending annual general meetings as shareholders of private companies would do, members want more than just a financial return from co-operatives and they thus require more involvement. Key factors that ensure that these complex organizations remain successful according to Mayson, (2002) are clarity of purpose, on-going participation by members and competent leadership clearly focused on the agreed upon objectives.

According to a research by the IMF (Hesse & Cihak, 2007) it was found out that co-operative financial institutions tend to be more stable in times of crisis, as their investment patterns use the capital of members in ways that best serve their long term needs and interests. They have a lesser tendency to invest in high risk financial markets when compared to other forms of commercial banks. It is therefore thought that their comparative stability, under both average and extraordinary conditions, can help to mitigate crisis impact for members and clientele, especially in the short-term. A recent research by Pollet, (2009) indicated that approximately seven per cent of the African population is affiliated to co-operatives.

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

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

#### **1.1.4 SACCOs in Kenya**

In Kenya, the co-operative sector plays a significant role contributing to over 31% of the national savings and over 40% of the Gross Domestic Product supporting over 60% of the nation's population either directly or indirectly (MOCD&M, 2011).

In 1931, the colonial government in Kenya enacted the Co-operative Ordinance which forbade Africans to form or join Co-operatives. However, this was repealed in 1945 and the Co-operatives Ordinance Act was passed and Africans were allowed to form and even join Co-operatives. Thereafter in 1966, the Co-operative Societies' Act was enacted allowing the Government of Kenya (GOK) to fully control the Co-operatives. The original legal framework for SACCOS in Kenya was provided for under the Co-operative Societies Act (CAP 490) of 1966. In 1997, the act was amended reducing the powers of the Commissioner of Co-operative societies. This was aimed at withdrawing state control so as to make co-operative societies autonomous, self-reliant self-controlled and commercially viable institutions.

The 1997 act was amended in 2004 through the Co-operative Societies (Amendment) Act of 2004 (MOCD&M, 2004). The act created structures which included PCOs and DCOs. In 2008, the government recognized the potential in the SACCOs and therefore came up with a specific legislation to provide for regulation and standardization of the SACCO business. The SACCO Societies Act, 2008 was enacted and provided the establishment of SACCO Societies Regulatory Authority (SASRA). SASRA was inaugurated in 2009 and

charged with the primary responsibility of licensing and supervising deposit taking SACCOs in Kenya (Republic of Kenya, 2008).

In the SACCO sub sector we have both deposit taking and non-deposit taking SACCOs. Deposit Taking SACCO (D.T SACCO) is that SACCO operating a front office savings activity (FOSA). This refers to the 'banking' like services provided by SACCOs. Through the FOSA, members of the SACCO can easily access services including cash withdrawals over the counter, ATM or mobile phones. It is a quasi-banking activity undertaken by licensed SACCOs (SASRA, 2012). While Deposits taking SACCOs are licensed and regulated by SASRA, non-deposit taking SACCOs are supervised by the Commissioner for Co-operatives. For a SACCO to be licensed by SASRA, it must have been duly registered under the Cooperative Societies Act CAP 490 (SASRA, 2012). A total of 176 SACCOs have been licensed to undertake deposit taking SACCO business for the financial year ending 31<sup>st</sup> December 2015. Five more have been issued with restricted licenses for the same period (SASRA, 2015).

Under the SACCO Societies Act, 2008 a Deposit Guarantee Fund (DGF) was established and shall provide protection to members' deposits up to Ksh.100, 000.00 per member (the same protection accorded depositors with banking institutions licensed under the Banking Act). The priority of SASRA is on the deposit taking SACCO societies (SACCOs operating FOSAs) and which control more than 67% of deposits and total assets in the SACCO industry. Kenya's vision 2030 for financial services is to create a successful and globally competitive financial sector capable of promoting high levels of saving and financing for Kenya's investment needs (Adam, Collier and Ndungu, 2011).

The vision 2030 for financial services in Kenya can be fully achieved if SACCO members can transform their savings into viable investments. For these and other reasons, this study seeks to determine the determinants of efficiency in SACCOs in Kenya. SACCOs in Kenya are gradually responding to the fast changes in the financial environment and adopting new approaches to the SACCO model. A good example is the FOSA concept and the development of products that are not tied to the traditional SACCO model, which relies on the tied shares deposits. However, Co-operative Societies need to keep up with changing demand. With the growing financial needs, members want

quick and easy access to financial services and if their SACCO cannot provide the finances almost instantly when it is needed, then it is not meeting its members' needs. In this regard, SACCOs need to provide efficient services and remain liquid at all times (WOCCU and FSD, 2007).

## **1.2 Research Problem**

In almost all sectors of our economy, you can't fail to find a SACCO. The Ministry of Industrialization and Enterprises estimates that about 80% of the Kenyan population derives their livelihood either directly or indirectly through these SACCOs. It is estimated that a significant 24.6million people (63%) participate either directly or indirectly in SACCO businesses. So as to achieve the millennium development goals and vision 2030 objectives of increasing financial inclusion, the government has made significant initiatives to support co-operative movements through legislation.

A number of scholars such as Hakelius (2006), Kiaritha (2009), Unal, Guclusoy & Franquesa (2009), Bhuyan (2007), Nyoro and Ngugi (2007), Chombo (2009), Pollet(2009), Kivuvo and Olweny (2014) have conducted studies on the factors influencing the efficiency in SACCOs. Kiaritha concluded that internal politics affected the efficiency in SACCOs, while Hakelius concluded that the age of the members did not affect the performance of the SACCO. Nyoro and Ngugi concluded that lack of knowledge and skills in the co-operatives was one of the factors of (un)success.

In Kenya, a number of studies have been carried out on SACCOs; Auka and Mwangi (2013), concluded that members of SACCO societies borrowed from their SACCOs because of the low interest rates but they were not satisfied with the level of services they were receiving. Mauka, Munene and Muturi (2013), found out that compliance to SASRA regulations differed from SACCO to SACCO due to size and diversity. Kiragu (2014), concluded that SASRA regulations affected the efficiency in SACCOs, while Karagu , Bichanga (2014), found out that investment decisions among other factors had an effect on SACCOs performance. Kiaritha (2015) also concluded that investment policy, internal politics and governance among others had an effect on SACCOs' efficiency. From the reviewed empirical literature, it is evident that the researchers

concentrated on various variables which are the key issues contributing to the efficiency and survival of SACCOs namely; financial, educational, competition from commercial banks; economic factors, members' royalty and active participation, organizational, membership and legislative support; members satisfaction and members participation; management committee and staff; voice and effective representation of SACCO's.

The studies have done little on effects of investment decisions on the efficiency in SACCOs and this has motivated me into carrying out this research to try and fill the existing research gap. One sector of the service industry is the financial sector whereby many commercial banks and other financial institutions continue to grow day by day. Some banks have even crossed border to offer services in the neighboring East African states. SACCOs are financial institutions which offers similar products like banks and most of them were formed long time ago but their performance is not something to be proud of compared to commercial banks and other financial institutions (Gathuritu, 2011).

According to Gathuritu, 2011, the performance of SACCO societies has been poor yet commercial banks and other financial institutions operating in the same sector as the SACCOs have continued to grow enormously with some commercial banks opening branches in neighboring countries. These poor performance of SACCOs may be attributed to funds mismanagement, poor dividend and investment decisions, political interference as well as poor utilization of reserves among others reasons. My concern, therefore, is; what are the determinants of efficiency in SACCOs in Kenya?

This study will attempt to answer the following research problem;

Do investment decisions affect the efficiency of Deposit Taking SACCOs in Kenya?

### **1.3 Objective of the Study**

To establish the Factors Affecting Efficiency of Deposit Taking SACCOs in Kenya.

### **1.3.1 Specific Objective**

The study will be guided by the following specific objective; to test the Effects of Investment Decisions on Efficiency of Deposit Taking SACCOs in Nairobi County.

### **1.4 Value of the Study**

The likely beneficiaries of the study are various stakeholders, who among others include the general SACCO membership, the government of Kenya, other financial institutions as well as current and potential investors. The knowledge obtained will enable policy makers in the cooperative movement to improve on their strategies by employing the knowledge in designing appropriate practices that will regulate the stakeholders in the SACCOs' in Kenya. It is also anticipated that the findings of this study will help SACCOs in Kenya in re-engineering so as to exploit other opportunities which will steer the SACCOs to improve their financial performance.

Through the Ministry of Industrialization and Enterprise Development, the government can use this study to enlighten those SACCOs' that are not performing well so that they can improve. The SACCO members will also benefit because they will know the factors affecting the performance of their SACCOs and they will therefore be more informed about the operation of their respective SACCOs. Finally, the study will identify the knowledge gaps and provide suggestions for further research. This will be of importance to scholars who are interested in conducting research in this area now and in future as they carry out further research to fill any research gaps which will be there.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter summarizes information from other researchers who have carried out research in the same field of study as well as the relevance of the study. Specifically, it covers; theoretical review, empirical review and conclusion.

#### **2.2 Review of Theories**

According to Torraco, (1997, theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge within the limits of the critical bounding assumptions. It is important to benchmark the performance of SACCOs in Kenya with International SACCOs (IFAD, 2012). The (WOCCU, 2102), shows that in Kenya, there are over 5,000 registered SACCO's, with a penetration rate of 19.53%, and prominently leading in key statistics on the sector .Theoretical framework is the structure that can hold or support a theory of a research study. The frame work introduces and describes the theory which explains why the research problem is being undertaken. The theoretical framework must demonstrate an understanding of theories and concepts that are relevant to the topic of the research and that will relate to the broader fields of knowledge in the study being undertaken. It is therefore necessary that the selected theory should be appropriate and easy to apply. The theoretical framework connects the researcher to existing knowledge (Kennedy, 2007).

##### **2.2.1 Efficient Market Hypothesis**

According to Efficient Market Hypothesis (EMH) theory, financial markets are informational efficient. One cannot consistently achieve returns in excess of average market returns on a risk adjusted basis, given the information available at the time the investment is made (Guerrien & Gun, 2011). Also, according to Amihud et al. (1997) EMH predicts that market prices should incorporate all available information at any point in time since the security prices adjust to all new information. Arrival of new information is what determines price movements and so it is very complex to profit by predicting

price movements. Price adjustments is as a result of arrival of new information and therefore firm's will always operate at the best prices which leads to improved firm's performance which ultimately leads to increased efficiency.

### **2.2.2 Theory of Internal Controls**

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

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

A comparative analysis of the introduced concepts of internal control shows that the usage of the concept of internal control is quite broad as it is supposed to involve the performance not only of the state, but also of the private sector. Although the conception of internal control is defined in different ways emphasizing its different aspects, the essential term still remains the same in all authors' definitions: internal control is the inspection, observation, maintenance and regulation of the enterprise's work (Barnabas, 2011).

Control and people, and values produced by people or their performance are tightly connected; consequently, internal control must be also oriented to the enterprise's values, mission and vision; it does not matter how differently authors define the conception assessment limits; significant attention must be paid not to internal control itself, but to the identification of its functions and evaluation (Buck and Breuker, 2008).

Mostly internal control is concerned with authority management tools that help to control processes and achieve enterprise goals (COSO, 1992; INTOSAI, 2004; CobiT, 2007). Buck and Breuker (2008) declare internal control as a mistake detecting and correcting system; although Mackevičius (2001) state that internal control is defined as a summation of certain rules, norms and means, actually such definitions are identical, but internal control must be related to safety, the rational use of property and the reliability of financial accounting. The theory is relevant to the study because it outlines the internal control policies, procedures and rules to be followed in the SACCOs.

### **2.2.3 Economic Efficiency Theory**

The theory states that companies should structure their output to achieve the lowest possible cost per unit produced. Fixed costs are shared out among the number of units produced, while the variable costs are relative. Due to the combination of fixed and variable costs in a business, then, low levels of output are inefficient because fixed costs are shared out across a relatively small number of units. Economies of scale can be enjoyed above optimal production but the apparent benefit is often offset by additional costs because the existing systems will be overworked. The point of maximum operational efficiency is achieved at the level of output at which all available economies of scale are taken advantage of in the short run, but short of the level at which the diseconomies of overstraining existing systems comes into play. However, the optimal level of productive efficiency can be raised by increasing the capacity of existing systems in the long run.

Tripe (2003) avers that increased volumes of output should be produced with less than proportionate increases in quantities of inputs. This will mean that with less input more output is achieved and this improves the firm's efficiency. Because economies of scale

will be exhausted in due course, then, increased output will require a more than proportionate increases in outputs, which will lead to diseconomies of scale. Economies of scope is another type of efficiency where firms should be able to produce multiple outputs from the same group of inputs at lower costs, than if they specialized in producing only one type of output. This is a good example in the context of a financial institution such as SACCOs, which produces both loans and deposit services using the same staff and branch networks, rather than specializing in just one of these functions.

### **2.3 Determinants of Efficiency of Deposit Taking SACCOs**

This section will seek to examine the determinants of the efficiency in SACCOs. According to Kombo and Tromp (2009), a concept is an abstract or general idea derived or inferred from specific instances. A conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. Mugenda and Mugenda (2003), Smyth (2002) and Rrichel and Ramel (1987), define a conceptual framework as a hypothesized model identifying the model under study and the relationship between the dependent and independent variables. Kothari (2004) defines an independent variable as the presumed cause of the changes of the dependent variable, while a dependent variable refers to the variable which the researcher wishes to explain.

The goal of a conceptual framework is to categorize and describe concepts relevant to the study and map relationships among them. Such a framework would help researchers define the concept, map the research terrain or conceptual scope, systematize relations among concepts, and identify gaps in literature (Creswell, 2003). The determinants of the efficiency in SACCOs are: internal politics and government interference, misappropriation of funds, savings culture, and investment policies among others.

#### **2.3.1 Investment Decisions and Efficiency**

The BODs have the cardinal responsibility to ensure that due diligence is exercised to ensure that SACCO funds are prudently invested. Unfortunately, they are notorious for diverting member's funds into investments which are of little or no value addition to the entity

(KUSCCO, 2003). In his study, Muchemi (2005) noted that non profitable investments should be discouraged because, despite the enormous amount of resources committed into such projects, the returns are almost nil, if any. At the end of it all, these reduces the capital base from which interest can be earned. In their study on the contribution of financial stewardship to the growth of SACCOs in Kenya, Olando, Jagongo and Mbewa (2013) were of the opinion that SACCOs did not adequately cover their costs on investments undertaken. 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 to the financial position of the SACCOs.

### **2.3.2 Internal Politics and Efficiency**

The success of any organization depends on management practices employed by the organization. The kind of politics played in an organization will greatly determine the level of governance in the firm as well as the type of leadership. According to Akinwumi (2006) leadership is one of the critical factors affecting the SACCOs performance. Co-operatives can only survive and thrive if leaders put the interests of the SACCO as number one, dedicate their energies to serving the SACCO, and they transparently carry out their mandate as leaders of the SACCO. A true leader does not cut corners, does not inflate contracts so as to receive kickbacks, does not have favorites among members and does not mismanage the resources. Actions of top management will greatly affect the performance of any organization. It is recommended that members, when electing office bearers, including delegates, should ensure that they elect trustworthy persons whose integrity is beyond reproach as the success and hence the performance of SACCOs depends on the calibre of the officials they elect. Members should be made to understand that co-operatives are voluntary organizations and so the people they elect to run such organizations should have the necessary skills as well as requisite academic and professional qualifications. Good corporate governance can only be rooted in the political environment existing in any organization; in this case the specific SACCOs.

The government should also exercise caution in the way it oversees the way the SACCOs are managed. The level of interference should be to such extent that the owners who are the members are given a free hand in the running of their SACCOs but with guided interference.

### **2.3.3 Misappropriation of Funds and Efficiency**

The success of any organization emanates from its financial soundness. SACCOs will only prosper if they have dedicated and visionary leaders who will ensure that the SACCOs funds are prudently employed solely for the mutual benefit of the general membership. Any activity the SACCO engages in should be of value addition to the SACCO. There should be clear separation of the SACCOs activities to ensure that Directors and Managers do not engage in activities which are fraudulent and for personal interests. Value addition should be the driving force to ensure that funds are only employed in activities or projects after due diligence has been carried out to safeguard the SACCO funds from unscrupulous individuals who are out to defraud the SACCO for personal enrichment. Leaders, according to Karagu and Bichanga, should therefore be people of high integrity as well as high moral standards who cannot be compromised.

### **2.4 Empirical Literature Review**

This section reviews studies previously carried out by other researchers on the factors determining the efficiency in SACCOs in Kenya. Empirical literature review is a directed search of published work which includes books and periodicals. It is a comprehensive survey of previous inquiries related to the research questions (Zikmund et al (2010). According to Miller and Yang (2008) it is through the use of a systematic approach to previous scholarly work that literature review allows a researcher to place his research work into an intellectual and historical context, that is, it enables the researcher to declare the importance of her/his research.

According to a research by Epetimehin (2006), co-operative enterprises are businesses owned and controlled by the people who use their services. They finance and operate the businesses or services for their mutual benefit. Because of their working together, they

can reach an objective that would be unattainable if acting singly. In his study, Akinwunmi (2006) observed that co-operatives depend on the unified efforts of large numbers of small individuals. An analysis of these studies can make one conclude that, co-operatives are economic and socio-political institutions that allow for freedom of membership devoid of cohesion. Their main aim is to promote the interests of their members. Cooperation brings together a number of individuals with the spirit of working together to achieve a common goal(s). It should however be noted that as much as cooperative societies have desired to be actively involved in nation development, they have been faced by a number of problems and constraints that have in one way or the other hindered their effective performance in nation building and the results have been the death of some co-operatives or decline in the number of co-operatives.

According to Akinwunmi (2006) leadership is one of the critical factors affecting the SACCOs performance. Co-operatives can only survive and thrive if leaders put the interests of the SACCO as number one, dedicate their energies to serving the SACCO, and they transparently carry out their mandate as leaders of the SACCO. A true leader does not cut corners, does not inflate contracts so as to receive kickbacks, does not have favorites among members and does not mismanage the resources. According to Mwaura (2005), the actions of top management affect performance. He recommended that members, when electing office bearers, including delegates, should ensure that they elect trustworthy persons whose integrity is beyond reproach as the success and hence the performance of SACCOs depends on the calibre of the officials they elect. Mudibo (2005) raised concerns on the caliber of leaders who run SACCOs. He noted that since co-operatives are voluntary organizations, members can elect anybody they like, who may not necessarily have the skills to run a SACCO. He suggested that before a member is elected, he should have a certain minimum number of shares so that he has something to lose if he mismanages the SACCO.

In his study of co-operatives failures in Limpopo province, Van der Walt (2005) indicated that poor management, lack of training, conflict among members (mainly due to poor service delivery), and lack of funds were some of the factors contributing to failure of co-operatives. According to (Lyne& Collins, 2008; Zulu, 2007), inadequate capital,

deficient support systems such as external monitoring and evaluation, and lack of a supportive policy environment have also contributed to co-operatives failures. Ill-defined property rights, according to agency theory, give rise to a set of problems that undermine the efficiency of traditional co-operatives (TCs) in risky and differentiated markets (Kyriakopoulos, 2000). The legislation could also be amended so as to provide for austerity measures and mechanisms for dealing with institutional and governance problems in co-operatives (Lyne and Collins, 2008).

According to Dunn, et al. (2002) in his study which included co-operative managers and directors, he was concerned that owner-directors too often make political decisions for their own personal gains rather than prudent financial decisions with economic sense. These participants believed that, on occasion, co-operative directors may be motivated to make decisions that benefit the individual at the expense of the co-operative. This is the reason why governance issues are more exaggerated at co-operatives unlike in corporations.

Another main challenge facing many co-operatives is excessive control and regulation by government (DFID, 2010). Autonomy and freedom from government control is positively associated with success. While government support can be helpful, governments should avoid over-regulation. In Ethiopia, US technical assistance has helped overcome this legacy (Assefa, 2007). With minimum institutional support, sometime, co-operatives can flourish. This could depend on many internal and external factors such as when there is a good economic opportunity or a limited economic purpose. However, according to (Theron, 2005) the absence of institutional support can make a co-operative vulnerable and isolated from the broader co-operative movement and networks. Such institutional isolation can hinder the development of a co-operative's full potential.

Despite the colonial focus of co-operatives on particular activities, the strong state control of post-colonial co-operatives and the market appropriation of cooperatives by neoliberal restructuring, co-operatives in Africa have survived. The co-operative sector with primary, secondary, sectorial, apex, and support organizations and social movement links has continued to thrive, albeit unevenly. Co-operatives have often survived the extremes

of state control and market adjustment on their own. Harnecker (2007) found out that, in some co-operatives, the most important decisions, for example involving distribution of surpluses or compensation, were taken by the coordinators or even just by the president or general coordinator who behaved like the main owner of a co-operative.

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

The prosperity of any organization depends on its financial strength. As long as an organization has a dedicated and visionary leadership geared towards prosperity and driven by integrity and high moral standards, then its chances of success are high. Unfortunately, these has been lacking in many of the leaders who have been entrusted with the management of many SACCOs. According to Karagu and Bichanga,(2014) funds misappropriation in SACCOs is rampant and so has a significant effect on their performance. Their study concluded that SACCOs need to improve on their internal audit department and other internal control measures. They carried out their research using descriptive study design. Kioko and Wario, (2014) in their study also concluded that funds misappropriation/embezzlement is one of the factors affecting the performance of deposit taking SACCOs. In another study by Mutunga (2009), she also found out that misappropriation of funds was also another major problem affecting performance of SACCOs in Kenya. Many of the leaders put their personal interests first for personal enrichment.

The first savings club in Eastern Africa was started by a Catholic missionary, Brother F. Waddelove, in 1963. According to Food and Agricultural Organization (FAO) Economic and Social Development Department (2002) in their document, “savings mobilization to microfinance: A historical perspective on Zimbabwe”, what came to be known as the savings movement in Zimbabwe can be traced to this. From the early years of colonial

occupation, Zimbabwe used to have burial societies and this is where the idea of developing a means of savings amongst the poor people in Zimbabwe can be traced. Migrant workers namely the Portuguese developed the burial societies mainly for the purpose of helping one another in funeral arrangements in case of death. To be a member, one had to pay a joining fee and subsequently make monthly subscriptions. Most of these organizations had a formal leadership structure of Chairman, Secretary and treasurer, with some producing formal constitutions even at this early stage. On average, most of these organizations had a membership of 10 to 100. In the event of a death in the immediate family, members were paid a lump-sum amount.

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

With set objectives, investors can go to Savings and Credit schemes and having set the returns they would like to earn, they can then choose on an investment portfolio. Credit Schemes then distributes the investment to the micro lenders that service the chosen area or project. Impoverished entrepreneurs can then borrow this money and use it to start or finance businesses that enable them improve their lifestyles. Apart from earning a return on his investment from the interest paid by the borrowing entrepreneurs, the original investor has at the same time helped to raise someone out of poverty (Guilford, 2007). According to Ortmann and King, (2007a) the divergent interests of members could also manifest in a 'portfolio problem' because members of a co-operative cannot transact equity shares at their market value. This problem leads to sub-optimal investment by members because they are unable to diversify their own portfolios to reflect personal risk preferences. The performance of co-operatives also depends on the level of educating and training members of the co-operative are exposed to, as well as the awareness of their rights and obligations as members. According to Birchall (2004), co-operatives that lack capital and business management capacity have had a rather disappointing history in developing countries.

Impoverished persons have always relied on credit facilities to start businesses or rebuild their businesses after natural disasters like floods and hurricanes, as well as to receive both short and long-term loans to meet their financial needs and improve their overall quality of life (Guilford, 2007). The impact of micro lending is changing the economic landscape of the areas where it is most prevalent. In Africa, it is documented that Nigeria is the only African Country south of the Sahara where microfinance existed at least as early as 500 years ago. This was in the form of rotating savings and credit associations commonly referred to as Esusu among the Yoruba in Nigeria. According to Hans Dieter Seibel, (2005), the Esusu was transported during the slave trade to the Caribbean islands, where both the institution and the term still exist today; they are now being carried to major American cities by a new wave of migrants who are banked on their new environment.

In a study carried out in Kenya in the transport industry by Gicheru, Migwi and Imanyara (2011), they found out that majority of SACCOs were weak in terms of loans granted and capital base. It was further indicated that because of low patronage, some SACCOs had not granted any loans to members as the monthly share contribution was low. This was attributed to the fact that some SACCOs had business plans which were not backed by financial ability and hence could only attract few financiers, thus posing a threat to the survival of SACCOs in the transport industry in Kenya. The resultant effect of these was loss of employment for drivers, conductors and SACCO staff and as well as loss of income to investors. Despite the high demand for loans by SACCO members, Njagi, Kimani and Ngugi (2012) also voiced their concern for low capital base.

According to Mwangi and Wanjau (2012), SACCOs play a critical role in entrepreneurship development as they mobilize significant volumes of personal savings and channel them into small loans for productive purposes at the community level. The importance of SACCOs as vehicles for resource mobilization and gateway to economic prosperity for families was also confirmed by Aura and Mwangi (2013). Olando and Mbewa (2013) also indicated that savings mobilization should be backed by adequate institutional capital which ensures permanency and provide cushion to absorb losses and impairment of members' savings. Karagu and Bichanga, (2014) in their study on

Financial Factors Influencing Performance of Savings and Credit Co-Operative Organization in Kenya, they also concluded that members' withdrawal affects overall SACCO performance almost always.

According to Rosenberg (1999), Micro Finance Institutions (MFIs) are increasingly a central source of credit for the poor in many countries. Weekly collection of repayment installments by bank personnel is one of the key features of micro-finance that is believed to reduce default risk in the absence of collateral and make lending to the poor viable. Some of the factors that lead to loan default include; inadequate or non-monitoring of micro and small enterprises by banks, leading to defaults, delays by banks in processing and disbursement of loans, diversion of funds, over-concentration of decision making, where all loans are required by some banks to be sanctioned by Area/Head Offices.

Karagu and Bichanga,(2014) also carried out a study on Financial Factors Influencing Performance of Savings and Credit Co-Operative Organization in Kenya. They also found out that loan default do affect the efficiency in SACCOs.

## **2.5 Summary**

From the literature review carried out it is obvious that there are several factors which affect the efficiency in SACCOs and more so depending on the environment in which each and every SACCO is operating. Satgar and Williams (2008) assert that "the co - operative movement is one of the most organized social forces on the African continent". They cite the ILO which suggests that at least 7 to 10 percent of citizens in African countries such as Mauritius, Egypt, Ghana, Kenya and Senegal belong to a co-operative society. The role co-operative societies play in uplifting the economic and social lifestyles of these people is enormous and cannot be ignored because it is also one of the driving forces of these countries national economy.

It is evident that factors influencing the performance of SACCOs are diverse and purely dependent on the operating environment of the SACCO. Scholars identified various factors which contribute to the failure of co-operatives; Bhuyan (2007) cited lack of members' participation, Nyoro and Ngugi cited economic factors, education of management committee and the staff, Chandoet al (2009) cited debt burden, wrangles,

hostility, lack of institutional transparency and weak management while the ILO (2009) cited liquidity problems. Makori, Munene and Muturi (2013) cited high dependency on short term borrowing, lack of liquidity monitoring system, political interference, investment in non-earning assets and inadequate managerial competences.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The aim of this chapter is to provide an understanding of the research methodology applied in the study. According to Kombo and Tromp (2009) as well as Zikmund et al (2010) research methodology deals with the description of the methods applied in carrying out the research studies. It contains the research design, the target population, sampling design and sample size, data collection method, data analysis and presentation, and validity and reliability of research instruments.

#### **3.2 Research Design**

I adopted descriptive research design study where data was gathered just once. The data collected was for the period covering year 2010 to 2014 for all Deposit Taking SACCOs in Nairobi County and registered by SASRA. Descriptive study designs are concerned with describing the characteristics of a particular individual, or of a group. It is concerned with specific predictions and narration of facts and characteristics concerned with individuals, group or situations. The advantage of the design is that it allows flexibility in data collection. According to Kothari (2005) descriptive research design includes surveys and fact finding enquiries of different kinds. Descriptive research describes the state of affairs as they exist at present. In descriptive studies the researcher must be able to define clearly, what he/she wants to measure and must find adequate measures of finding it along with a clear cut definition of "population" he wants to study.

#### **3.3 Target Population**

According to Mugenda and Mugenda, (1999), a population is an aggregate of all that conform to a given characteristic. Also, a population is said to be a well-defined set of people, services, elements and events, group of things or households that are being investigated (Ngechu, (2004). As at 23<sup>rd</sup> January 2015, 175 Deposit Taking SACCOs (DTSSs) had been registered by SASRA. An additional 5 had restricted licenses. My target population was all the 43 DTSSs licensed and operating within Nairobi County. The

survey was carried out to establish the effects of investment decisions on efficiency in SACCOs in Nairobi County, Kenya.

### 3.4 Sample Size

As stated above, there are 176 registered DTSSs in the country as at 23<sup>rd</sup> January, 2015. Forty three (43) of these DTSSs operate within Nairobi County (SASRA, 2015). My study covered all the 43 registered DTSSs in Nairobi County. This sample was considered representative of the target population of interest as it satisfies the requirements of efficiency, representativeness, reliability and other factors like nature of units, size of the population, and the time available for completion of the study (Kothari, (2005).

### 3.5 Data Collection.

The study was facilitated by use of secondary data extracted from the published financial reports of the specific SACCOs. All the information was available at SASRA offices.

### 3.6 Data Analysis

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 (Zikmund et al (2010). I used Data Envelopment Analysis (DEA) to measure the technical efficiency of the SACCOs. I then analyzed the data using statistical package for social sciences (SPSS) version 21.0 and used the multiple regression model below to test the relationship between the independent variables on the dependent variable. Efficiency is the dependent variable while the independent variables are investment decisions.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where:

Y = Efficiency,

And, Efficiency = Output/Input

Where : Input = Savings and Total expenses

: Output = Loans and total income

B0 = the Y intercept

$X_1 = \text{Loan Portfolio} / \text{Total Assets}$

$X_2 = \text{Financial Investments} / \text{Total Assets}$

$X_3 = \text{Buildings} / \text{Total Assets}$

$e = \text{the error term}$

$\beta_i (i = 1, 2, 3) = \text{Coefficients of Determinants of Efficiency.}$

I used SPSS version 21.0 to test how well the regression model fits the data. I also tested the significance of each independent variable where I applied the Fischer distribution test i.e. the F-test. This refers to the ratio between the model mean square divided by the error mean square. F-test was used to test the significance of the overall model at a 5 percent confidence level. The p-value for the F-statistic was applied in determining the strength of the model.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter presents data findings so as to determine the effects of investment decisions on efficiency of the DTSs operating in Nairobi County. Data was collected from SASRA Headquarters. Multiple linear regressions were used to determine the effects of investment decisions on efficiency of DTSs in Nairobi County. The study covered a period of five years from year 2010 to 2014.

#### 4.2 Descriptive statistics

The data collected is presented in descriptive statistics as below;

**Regression Correlation Model and Descriptive Covariance statistics are analyzed as follows;**

**Table 4.1: Descriptive Statistics**

|                                | Mean    | Std. Deviation | N  |
|--------------------------------|---------|----------------|----|
| Sacco Efficiency               | 1.17586 | .570376        | 43 |
| Loans to Assets                | .80664  | .474562        | 43 |
| Financial Investment to Assets | .04570  | .103659        | 43 |
| Buildings to Assets            | .03938  | .093910        | 43 |

From the findings there was a mean of 1.1758 on the SACCOs efficiency with a standard deviation of 0.5703. Loan to assets had a mean of 0.8066 with a standard deviation of 0.4745 while financial investments to assets had a mean of 0.0457 and a standard deviation of .1036. Buildings to assets had a mean of 0.0393 and a standard deviation of 0.0939.

### 4.3 Correlation Analysis

This section presents the research findings on the Pearson Product Moment Correlation.

This was conducted to determine the strength of the relationship between the study variables.

**Table 4.2 Correlations**

|                     |                                | Sacco Efficiency | Loans to Assets | Financial Investment to Assets | Buildings to Assets |
|---------------------|--------------------------------|------------------|-----------------|--------------------------------|---------------------|
| Pearson Correlation | Sacco Efficiency               | 1.000            | .896            | .043                           | -.138               |
|                     | Loans to Assets                | .896             | 1.000           | -.065                          | -.210               |
|                     | Financial Investment to Assets | .043             | -.065           | 1.000                          | -.081               |
|                     | Buildings to Assets            | -.138            | -.210           | -.081                          | 1.000               |
|                     |                                |                  |                 |                                |                     |
| Sig. (1-tailed)     | Sacco Efficiency               | .                | .000            | .392                           | .190                |
|                     | Loans to Assets                | .000             | .               | .340                           | .088                |
|                     | Financial Investment to Assets | .392             | .340            | .                              | .302                |
|                     | Buildings to Assets            | .190             | .088            | .302                           | .                   |
|                     |                                |                  |                 |                                |                     |
| N                   | Sacco Efficiency               | 43               | 43              | 43                             | 43                  |
|                     | Loans to Assets                | 43               | 43              | 43                             | 43                  |
|                     | Financial Investment to Assets | 43               | 43              | 43                             | 43                  |
|                     | Buildings to Assets            | 43               | 43              | 43                             | 43                  |
|                     |                                |                  |                 |                                |                     |

From the research, it is evident that there is a positive correlation between SACCOs' efficiency and loan portfolio to assets and financial investment to assets ratio. However, the correlation is negative in respect to buildings to assets ratio. Also, there is negative correlation between financial investment to assets and loan to assets ratio.

#### 4.4 Regression Analysis

Multiple regression analysis was conducted to test the influence of Investment Decisions on the Efficiency of SACCOs.

**Table 4.3 Regression Model Summary**

| Model Summary |                   |          |                   |                            |                   |          |     |     |               |               |
|---------------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
| Model         | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin Watson |
|               |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1             | .904 <sup>a</sup> | .817     | .803              | .253329                    | .817              | 57.971   | 3   | 39  | .000          | 2.134         |

Adjusted R Square is a coefficient of determination which gives the variation in the dependent variables due to change in the independent variables. From my findings in the above table, the value of adjusted R square is 0.801 which is an indication that there was a variation of 80.1% on efficiency due to changes in amount invested in the various investment decisions, i.e. loans, buildings and financial securities.

**Table 4.5: Variance Analysis**

| ANOVA <sup>a</sup> |            |                |    |             |        |                   |
|--------------------|------------|----------------|----|-------------|--------|-------------------|
| Model              |            | Sum of Squares | df | Mean Square | F      | Sig.              |
| 1                  | Regression | 11.161         | 3  | 3.720       | 57.971 | .000 <sup>b</sup> |
|                    | Residual   | 2.503          | 39 | .064        |        |                   |
|                    | Total      | 13.664         | 42 |             |        |                   |

ANOVA statistics above indicate that the regression model had a significance level of 0.00 which is an indication that the data was ideal for making a conclusion on the population parameters since the significance value (p- value) was less than 5%. The calculated value was greater than the critical ( $57.9 > 1.697$ ) which indicates that the loan portfolio, buildings and other investments influence the efficiency of SACCOs in Nairobi County.

a. Dependent Variable: Sacco Efficiency

b. Predictors: (Constant), Buildings to Assets, Financial Investment to Assets, Loans to Assets

**Table 4.6: Regression Model Coefficients**

| Model                          | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. | 95.0% Confidence Interval for B |             |
|--------------------------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|
|                                | B                           | Std. Error | Beta                      |        |      | Lower Bound                     | Upper Bound |
| 1 (Constant)                   | .245                        | .086       |                           | 2.837  | .007 | .070                            | .420        |
| Loans to Assets                | 1.101                       | .085       | .916                      | 13.026 | .000 | .930                            | 1.272       |
| Financial Investment to Assets | .592                        | .380       | .108                      | 1.560  | .127 | -.176                           | 1.360       |
| Buildings to Assets            | .385                        | .428       | .063                      | .900   | .373 | -.480                           | 1.250       |

The established regression equation is:

$$Y = 0.245 + 1.101(x_1) + 0.592(x_2) + 0.385(x_3)$$

The above regression equation established that by holding loan portfolio, other investments and buildings to a constant zero, efficiency of SACCOs would stand at

0.245. A unit increase in each of the independent variables i.e. loan portfolio, financial investments and buildings will lead to efficiency increasing by a factor of 1.101, 0.592 and 0.385 respectively.

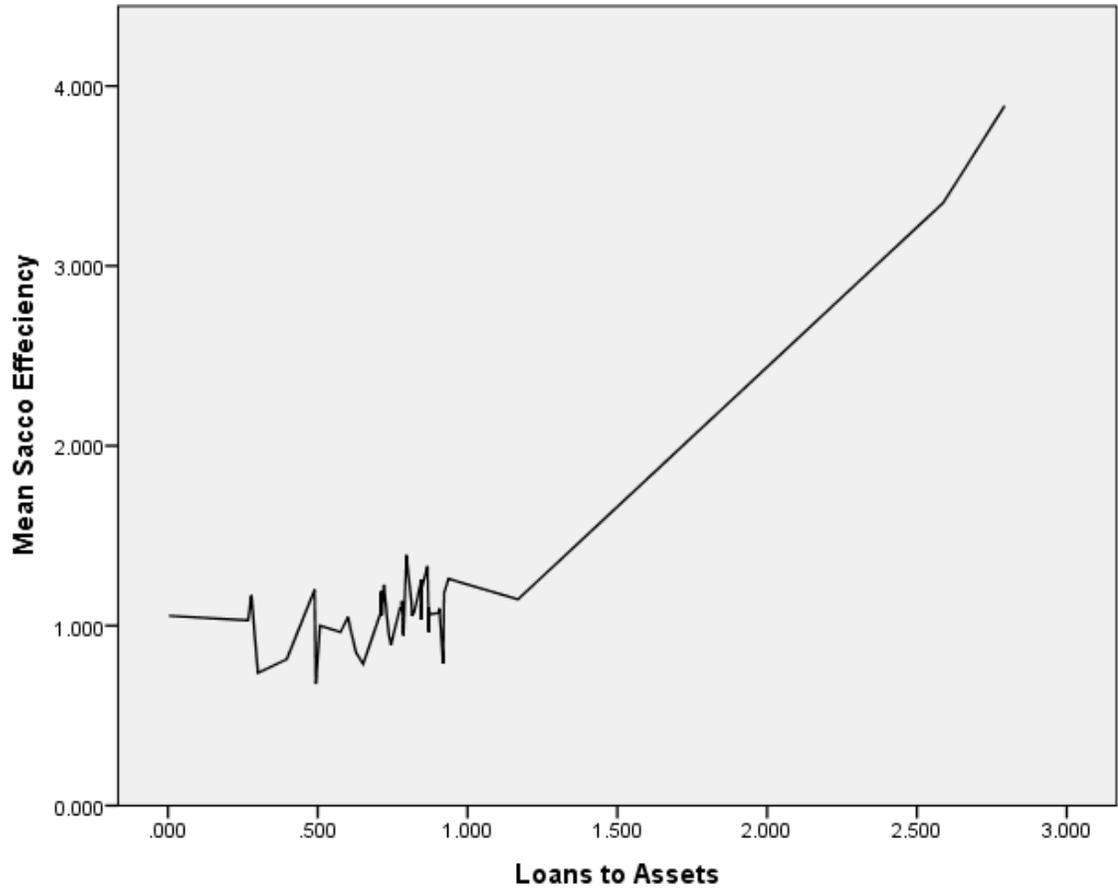
At a 5% level of significance and 95% level of confidence, Loan Portfolio displayed a 0.00 level of significance; Financial Investments had a 0.127 level of significance while Buildings had a 0.373 level of significance. This shows that the most significant investment is the Loan Portfolio ( $p < 0.05$ ) while Financial Investments and Buildings were insignificant ( $P > 0.05$ ).

#### **4.5 Discussion and Interpretation of Findings**

From the above regression model, the study found out that investment decisions do affect efficiency of DTSS in Nairobi County. Investment in loan portfolio had the highest effect with a mean of 0.8066 and a standard deviation of 0.4745. It also had the correlation of 0.896. From the comparisons, there is a clear indication that Loans to Assets coefficient is a better predictor of efficiency in DTSS in Nairobi County. In a study by Bichanga and Karagu, 2014, they found out that the investment decisions SACCOs make have a great impact on their financial performance. They therefore concluded that SACCOs should engage in prudent investment decisions so as to derive maximum returns from such investments.

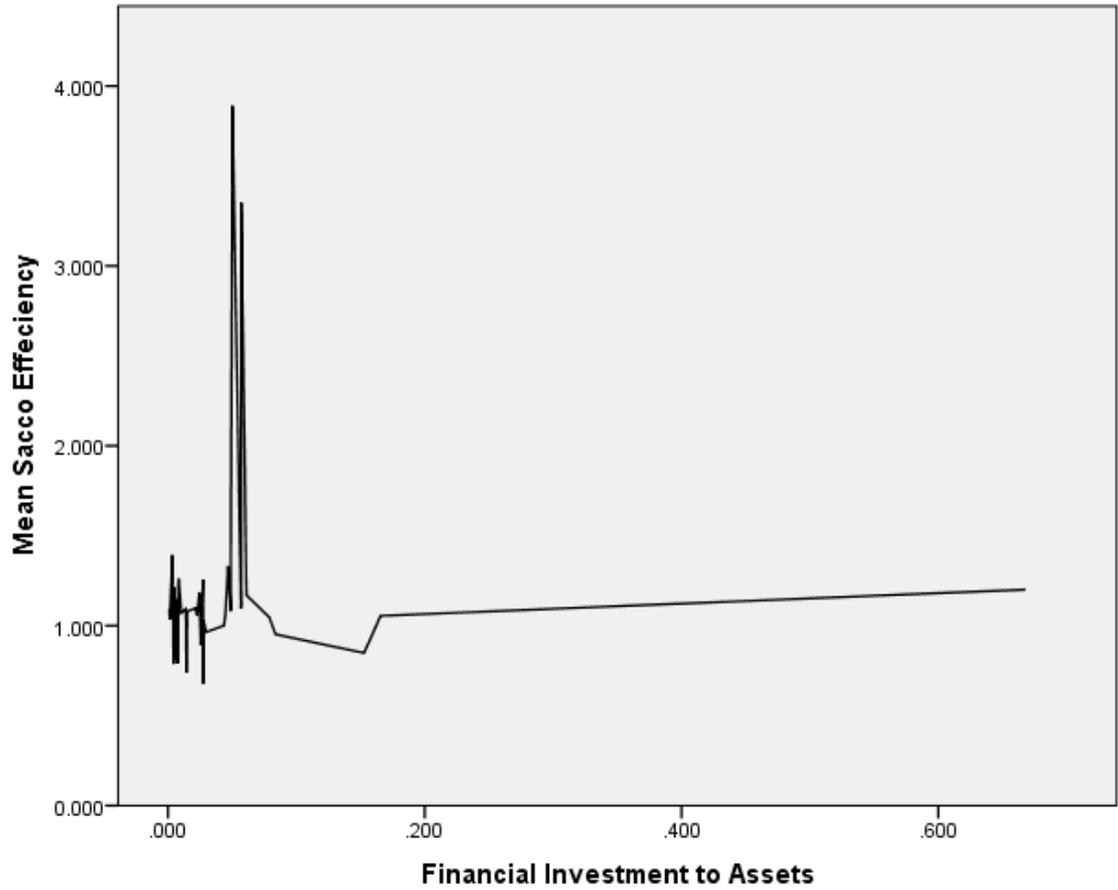
In her study on Determinants of Financial Performance of SACCOs in the Banking Sector in Kenya, Kiaritha, 2015, concluded that investment policies had a great influence on the financial performance of SACCOs. She also concluded that SACCOs have effective investment policies. Surplus from the investments are ploughed back to boost the loan portfolio.

This can also be supported by the scatter graph below which shows that there is a positive relationship between efficiency and loan portfolio.



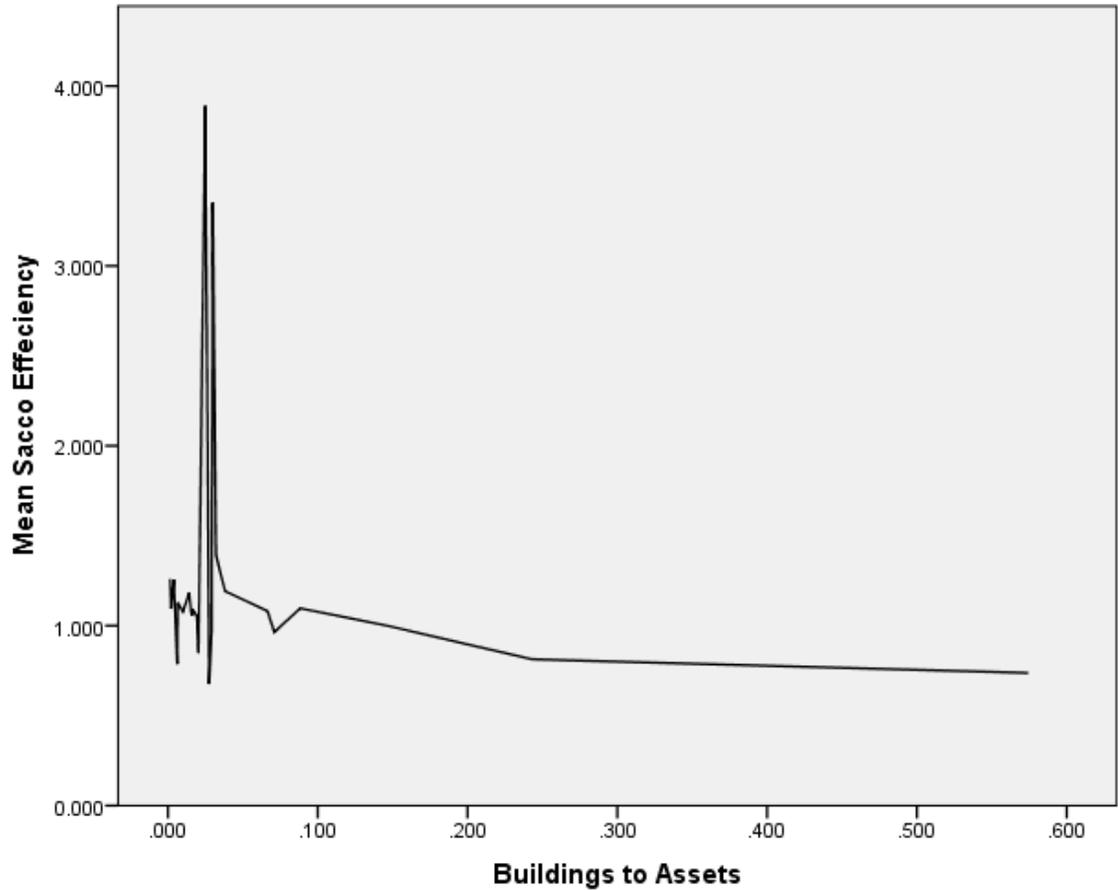
**Figure 4.1 Efficiency and Loan Portfolio to Assets ratio**

Financial investments came in second as far as effect on efficiency is concerned with a mean of 0.0457 and a standard deviation of 0.1036 and a correlation of 0.043. The scatter graph below shows the relationship between efficiency and financial investments.



**Figure 4.2 Efficiency and Financial Investments to Assets ratio**

However, buildings, though with a mean of 0.0393 and a standard deviation of 0.0939 had a negative correlation of -0.138. This was depicted in the scatter diagram below.



**Figure 4.3 Efficiency and Buildings to Assets ratio**

The adjusted R Square is a coefficient of determination which gives the variation in the dependent variables due to change in the independent variables. From my findings in table 4.3, the value of adjusted R square is 0.801 which is an indication that there was a variation of 80.1% on efficiency due to changes in amount invested in the various investment decisions, i.e. loans, buildings and financial securities. The positive relationship between efficiency and investments in loan portfolio, financial investments and buildings by SACCOs as reflected by the regression equation also affirms the fact that there is a strong relationship between efficiency and investment decisions SACCOs make.

## **CHAPTER FIVE**

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

#### **5.1 Introduction**

This chapter presents the summary of major findings of the study, relevant discussions, conclusions and the necessary recommendations. The study sought to establish the effect of investment decisions on efficiency of DTSs in Nairobi County, Kenya.

#### **5.2 Summary**

The investment decisions studied were: Investment in loans, investment in financial assets and investment in buildings. The study adopted descriptive research design whereby data was gathered just once over the period 2010 to 2014 for 43 SACCOs in Nairobi County which are registered by SASRA. The study was facilitated by use of secondary data. Multiple regression analysis was applied to the data to examine the effects of Investment decisions on Efficiency of SACCO's in Nairobi County. The findings from the study revealed that the investment decisions SACCOs made had a great impact on efficiency. Investment in loan portfolio had the highest effect on efficiency and also the highest correlation coefficient.

The study also showed that that there was a strong relationship between investment decisions made and efficiency. The strong correlation coefficient of 81% also affirms the fact that the investment decisions made has a great effect on efficiency. It can also be observed from the scatter graphs that there is a positive relationship between efficiency and the investment decisions made.

#### **5.3 Conclusion**

An analysis of the data collected leads to the conclusion that investment in loans had the highest effect in the efficiency of SACCOs in Nairobi County, followed by investment in buildings and lastly investment in financial assets. However, it should be noted that SACCOs also did invest a large proportion of their assets in the loan portfolio. It is also wise for SACCOs to engage in other investments only after they have satisfied their

members borrowing needs. As a common practice, SACCOs pool the meagre resources from the many members and the aggregate resources are then used in loaning out to those who qualify and are in need of borrowing. It is evident that investment in loans portfolio gives the best and highest returns. The study also concludes that there are in place effective loan management policies which are adhered to and has eventually contributed to the positive performance of the SACCOs. The strong positive relationship between efficiency and investment in loan portfolio clearly supports this conclusion. It is also important to note that efficiency can only be achieved if the SACCOs do engage competent and qualified employees to manage their operations. No SACCO can afford to downplay the role employees' play in its endeavour to meet its strategic goals. It is also notable that SACCOs do play a very important role in the economy of our country by alleviating the poverty levels and also raising the living standards of so many people.

#### **5.4 Recommendations/Policy and Practice**

The study recommends that SACCOs should be very keen while deciding the investment decisions to go for and weigh all available options to make sure that they go for the options with the highest returns while paying keen attention to the risks involved. It is also recommended that SACCOs need to aggressively market their services so as to compete with the commercial banks which have posed a great risk by literally “hawking” their products even on the streets. They should also ensure that there is prudent financial management of their resources so as to reap maximum benefits. This can only be possible if they engage qualified personnel whose integrity is beyond reproach.

As a common practice, SACCOs need to make sure that they have robust and well defined loan policies so as to make sure that their “cash cow” i.e. investment in loan portfolio is prudently managed so as to affirm sustainability and efficient management of the same. SACCOs should also ensure that all employees are well trained about the policies governing the SACCOs to enlighten the employees on their knowledge about SACCO and their profitability. The study recommends that SACCOs should emphasize on setting reasonable minimum monthly contribution targets as this is the only way members will help improve the financial performance of SACCOs. The government

should make it easier for organizations that want to open up micro finance institutions because this will make service delivery easy and bring financial assistance closer to public. The management should also ensure that all SACCOs have strategic objectives and also come up with common objectives for all members and make sure that all members are treated equally when accessing services or products from the SACCOs.

## **5.5 Limitations of the Study**

In order to attain its objective, the study was limited to DTSSs in Nairobi County. Secondary data was collected from all the 43 DTSSs registered by SASRA in Nairobi County. The data was verifiable since it was extracted from the SACCOs registered books of accounts, but it could still be prone to other shortcomings.

The first limitation was that the study was limited to examination of only three investment decisions though some of the DTSSs have invested heavily in land. Data on investment in land and buildings was not readily available and so it was not possible to determine the exact amount of rental income apart from what was in the financial statements. Other SACCOs have subsidiary companies through which they have invested in land and buildings.

The second limitation was that the study was only done on DTSSs in Nairobi County. I believe if the study had been carried out on a sample of all the DTSSs in the country, it would have given a broader outlook of efficiency of DTSSs in the whole country.

The third limitation was that some of the DTSSs had not filed their accounts with the regulator for some years. This posed a challenge because the missing data could have had an effect on the overall outcome. There was also no clear explanation as to why they had not filed their books of accounts as required by the regulator.

The final limitation was that there was fear that information so obtained could be used for ulterior motives. Thus, to access the data and information, I had to go through the formal process of filing a request which had to be approved before the data was availed. Getting additional data or information from a number of SACCOs was not that easy as they feared that the same may be availed to their competitors.

## **5.6 Suggestions for Further Research**

Arising from the findings and the gaps in the study, more studies should be carried out involving all SACCOs and not only DTSSs so as to test whether the conclusions of this study will hold true. Another study could be carried out using other factors that may influence the efficiency of SACCOs.

Future studies should also be carried out using different research instruments like primary data and focus group discussions which should involve only the key persons so as to find out how efficiency can better be improved.

Secondly, research should be carried out on Co-operatives in other sectors such as agriculture or transport sectors so as to have comparative information which can be used to determine the level of efficiency.

I also suggest that research be carried out on the Factors that Influence the Financial Performance of SACCOs so as to determine what the critical factors are. This will give a wakeup call to SACCOs so that they can know how to handle their main competitors.

Studies should also be carried out on the competitors such as banks and micro finance institutions so that the SACCOs can also know what their competitors are doing and so borrow from them what they are lacking so as to improve on their efficiency.

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Appendix I



**UNIVERSITY OF NAIROBI**  
**SCHOOL OF BUSINESS**  
**MBA PROGRAMME**

Telephone: 020-2059162  
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P.O. Box 30197  
Nairobi, Kenya

DATE... 07/09/2015

**TO WHOM IT MAY CONCERN**

The bearer of this letter ... MR DANIEL W. MWANGI

Registration No. D.G.1.67827/2013

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.



**PATRICK NYABUTO**  
**MBA ADMINISTRATOR**  
**SCHOOL OF BUSINESS**

**Appendix II:**  
Data Collection Sheet

| <b>Name of SACCO</b> | <b>Indicator</b>                | <b>2010</b> | <b>2011</b> | <b>2012</b> | <b>2013</b> | <b>2014</b> |
|----------------------|---------------------------------|-------------|-------------|-------------|-------------|-------------|
|                      | Membership                      |             |             |             |             |             |
|                      |                                 | Kshs.       | K.shs       | K.shs       | K.shs       | K.shs       |
|                      | Savings                         |             |             |             |             |             |
|                      | Loan portfolio                  |             |             |             |             |             |
|                      | Financial investments           |             |             |             |             |             |
|                      | Buildings                       |             |             |             |             |             |
|                      | Interest from loans             |             |             |             |             |             |
|                      | Int' from Financial investments |             |             |             |             |             |
|                      | Rent income                     |             |             |             |             |             |
|                      | Total assets                    |             |             |             |             |             |
|                      | Profit before tax               |             |             |             |             |             |
|                      | Dividends/int. on deposits      |             |             |             |             |             |
|                      | Expenses                        |             |             |             |             |             |

### Appendix III

| LIST OF DTSs in NAIROBI COUNTY |                  |
|--------------------------------|------------------|
| 1                              | AFYA             |
| 2                              | AIRPORTS         |
| 3                              | ARDHI            |
| 4                              | ASILI            |
| 5                              | CHAI             |
| 6                              | CHUNA            |
| 7                              | COMOCO           |
| 8                              | ELIMU            |
| 9                              | FUNDILIMA        |
| 10                             | HARAMBEE         |
| 11                             | HAZINA           |
| 12                             | JAMII            |
| 13                             | KENPIPE          |
| 14                             | KENVERSTY        |
| 15                             | KENYA BANKERS    |
| 16                             | KENYA POLICE     |
| 17                             | KINGDOM          |
| 18                             | MAGEREZA         |
| 19                             | MAISHA BORA      |
| 20                             | MWALIMU NATIONAL |
| 21                             | MWITO            |

|    |                                    |
|----|------------------------------------|
| 22 | NACICO                             |
| 23 | NAFAKA                             |
| 24 | NAKU                               |
| 25 | NASEFU                             |
| 26 | NATION                             |
| 27 | NEST                               |
| 28 | SAFARICOM                          |
| 29 | SHERIA                             |
| 30 | SHIRIKA                            |
| 31 | STIMA                              |
| 32 | TELEPOST                           |
| 33 | TEMBO                              |
| 34 | TRANSCOM                           |
| 35 | UFANISI                            |
| 36 | UFUNDI                             |
| 37 | UKRISTO NA UFANISI WA<br>ANGLICANA |
| 38 | UKULIMA                            |
| 39 | UNITED NATIONS                     |
| 40 | UNISON                             |
| 41 | WANAANGA                           |
| 42 | WANANDEGE                          |
| 43 | WAUMINI                            |