

**EFFECT OF NON-CORE BUSINESS INVESTMENTS ON FINANCIAL
PERFORMANCE OF DEPOSIT-TAKING SAVING AND CREDIT CO-OPERATIVE
SOCIETIES IN KENYA**

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DECLARATION

This project is my original work and has not been previously published or submitted elsewhere for the award of a degree.

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I do hereby confirm that I supervised this project and I have approved it for examination.

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DEDICATION

I dedicate this work to my family; my wife Beryl Wang'kal Achieng', daughter Mikayla Zuri Asuma who have been very supportive of me in my studies. May God richly bless you for your encouragement and continued support. I truly appreciate it.

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ABSTRACT

The concept of portfolio diversification has taken a global center stage in the process of determining the financial performance of investment companies and continues to be an increasingly important aspect of investment decisions in the world today. The environment in which SACCOs in Kenya operate is ever changing and continually presents opportunities and challenges which has seen a number of making losses. This study sought to establish the effect of non-core business investments on the financial performance of deposit-taking SACCOs in Kenya. The study specifically sought to determine the influence of investment in FOSA products, investment in treasury bills, investment in shares, real estate investment, and fixed deposits investment on financial performance of deposit-taking SACCOs in Kenya. The study was guided by agency theory, resource-based theory, pecking order theory, the neoclassical theory of investment, and the Q theory of investment. This study adopted a descriptive research design. The target population of this study was 174-deposit-taking SACCOs in Kenya. Secondary data collected was analyzed using correlation analysis, descriptive statistics and panel data regression analysis. The study established that investment in FOSA products, treasury bills, shares, real estate and fixed deposits have a significant effect on financial performance of deposit-taking SACCOs in Kenya. The study concluded that investing in stocks provides attractive long-term returns. Investment in real estate allows an organization to benefit from tax advantages and gain cash flow because the monthly income generated by rental properties can offset investors' expenses and return money to the organization. FOSA products improve financial performance by mobilizing savings. They accomplish this through various accounts that can be opened based on the SACCO members' qualifications. The best investment portfolio for maximizing returns is a fixed deposit and when compared to a regular savings account, financial institutions offer competitive interest rates on fixed deposits, which may help compensate for the annual inflation rate. Treasury bills are a safe, short-term investment that provides an organization with returns after a relatively short period of time. The study recommended that investors who decide to invest in stocks should consider the long term, which means a 3-5 year time frame to maximize their investment. Deposit-taking SACCOs can invest in rental properties to generate regular income and capital appreciation while maximizing capital through leverage. Deposit taking SACCOs in Kenya should work on saving mobilization techniques for FOSA products in order to provide more information to current and potential members. They should develop and put in place revenue optimization systems. Deposit taking SACCOs should invest in short-term fixed deposits, and as short- to medium-term interest rates rise, the SACCO may begin to increase the duration of the Fixed Deposit to match. Contrast bank fixed deposits with corporate fixed deposits. The deposit taking SACCOs can buy short-term Treasury bills on TreasuryDirect, the U.S. government's portal for buying U.S. Treasuries. Short-term Treasury bills can also be bought and sold through a bank or broker.

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT.....	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS AND ACRONYMS	xi
DEFINITION OF OPERATIONAL TERMS.....	xii
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background to the Study	1
1.1.1 Non-Core Business Investments	6
1.1.2 Financial Performance	7
1.1.3 Non-Core Business Investments and Financial Performance	8
1.1.4 Deposit Taking SACCOs in Kenya	10
1.2 Statement of the Problem	11
1.3 Objectives of the Study	13
1.3.1 General Objective	13
1.3.2 Specific Objectives	13
1.4 Research Hypotheses.....	13
1.5 Justification of the Study.....	14
1.6 Significance of the Study	14
1.7 Scope of the Study.....	15
CHAPTER TWO	16
LITERATURE REVIEW	16
2.1 Introduction	16
2.2 Theoretical Review	16
2.2.1 Agency Theory.....	16
2.2.2 Resource Based Theory	18

2.2.3	Pecking Order Theory	20
2.2.4	Neoclassical Theory of Investment.....	21
2.2.5	The Q Theory of Investment.....	22
2.3	Empirical Review	23
2.3.1	Investments in FOSA Activities and Financial Performance	23
2.3.2	Investments in Treasury Bills and Financial Performance	25
2.3.3	Investments in Shares and Financial Performance	27
2.3.4	Investments in Real Estate and Financial Performance	29
2.3.5	Investments in Fixed Deposits and Financial Performance	34
2.4	Conceptual Framework	35
2.4.1	Operationalization of Study Variables.....	37
2.5	Summary of Literature Review	38
CHAPTER THREE		39
RESEARCH METHODOLOGY		39
3.1	Introduction	39
3.2	Research Design.....	39
3.3	Target Population	40
3.4	Sampling Technique.....	40
3.5	Data Collection.....	40
3.6	Data Analysis	40
3.7	Diagnostic Tests	41
3.7.1	Multicollinearity Test	41
3.7.2	Normality Test.....	42
3.7.3	Homoscedasticity Test.....	42
3.7.4	Autocorrelation Test	42
3.7.5	Hausman Test	43
CHAPTER FOUR.....		44
DATA ANALYSIS, PRESENTATION AND INTERPRETATION		44
4.1	Introduction	44
4.2	Descriptive Statistics	44
4.3	Results of Diagnostics Statistics	46

4.3.1	Multi-collinearity Test Results	46
4.3.2	Normality Tests.....	47
4.3.3	Homoscedasticity Test Results	48
4.3.4	Autocorrelation Test Results.....	49
4.3.5	Hausman Test.....	50
4.4	Inferential Statistics.....	51
4.4.1	Correlation Analysis	51
4.4.2	Regression Analysis.....	52
CHAPTER FIVE		57
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS		57
5.1	Introduction	57
5.2	Summary of Findings	57
5.2.1	Non-core Business Investments.....	57
5.2.2	Investment in Real Estate.....	57
5.2.3	Investment in FOSA	58
5.2.4	Investment in Fixed Deposits.....	58
5.3	Conclusions of the Study.....	58
5.5	Study Limitations	60
5.6	Suggestion for Further Studies	61
REFERENCES.....		62
APPENDIX I: LIST OF SACCOs IN NAIROBI COUNTY		74
APPENDIX II: DATA COLLECTION FORM.....		82
APPENDIX III: RESEARCH BUDGET		83
APPENDIX IV: WORK PLAN		84
APPENDIX V: INTRODUCTION LETTER		85

LIST OF TABLES

Table 2.1: Operationalization of Study Variables.....	37
Table 4.1: Descriptive Statistics	44
Table 4.2: Multicollinearity Test Results.....	47
Table 4.3: Normality Test	48
Table 4.4: Homoscedasticity Test Results	49
Table 4.5: Autocorrelation Test Results	49
Table 4.6: Correlation Analysis	51
Table 4.7: Regression Analysis.....	52
Table 4.8: Analysis of Variance.....	53
Table 4.9: Coefficients.....	53

LIST OF FIGURES

Figure 2.1: Conceptual Framework Source: Researcher (2021).....	36
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LIST OF ABBREVIATIONS AND ACRONYMS

DTS	Deposit-Taking SACCOs
EPS	Earnings per Share
FOSA	Front Office Service Activity
ERM	Enterprise Risk Management
RBV	Resource Based View
ROA	Return on Asset
ROE	Return on Equity
ROI	Return on Investment
SACCOS	Savings and Credit Cooperatives
SASRA	SACCOs Societies Regulatory Authority
WOCCU	World Council of Credit Unions
SD	Standard Deviation

DEFINITION OF OPERATIONAL TERMS

Deposits

It's the amount of cash paid to a SACCO society by a member on condition that it will be refunded, with or without premium either on request or expiry of a particular term or upon meeting the condition agreed upon between the member and the society (Tromans, 2019).

Diversification

A business strategy to join an industry or fresh market where the company does not currently operate in, as well as developing new product for the market (Cerych & Hendrichová, 2019). Diversification is a technique that reduces risk by allocating investments among various financial instruments, industries and other categories. It aims to maximize return by investing in different areas that should each react differently to changes in market conditions.

Dividend

As per the co-operative society, it's the amount obtained from surplus income of society that is divided among members in the ratio of their deposit contribution and share capital. A dividend is the distribution of corporate profits to eligible shareholders. Dividend payments and amounts are determined by a company's board of directors. Dividends are payments made by publicly listed companies as a reward to investors for putting their money into the venture (Samuel & Inyada, 2020).

Financial performance	It is the ability of a firm management to makes profit by using resources available to it efficiently. Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. The term is also used as a general measure of a firm's overall financial health over a given period (Waddock & Graves, 2017).
Fixed Deposit	Its investment of fixed amount of money at a fixed rate within a fixed period of time. A fixed deposit or an FD is an investment instrument that banks and non-banking financial companies (NBFC) offer their customers. Through an FD, people invest a certain sum of money for a fixed period at a predetermined rate of interest in an FD (Koch, 2015).
FOSA	It's a system that provides banking like facilities for SACCOs. Front Office Service Activity (FOSA) are financial services that enable Sacco members to have affordable and convenient savings avenue for cash transfers, depositing and withdrawing money without having to carry cash. Simply walk in to the Sacco, give instructions and your payment is done (Karanja, 2019).
Investment	It is the amount of money committed to a business by individual or business with an aim of generation returns in future that are more than the outlay amount in addition to profits to cover for risk and inflation. An investment is essentially an asset that is created with the intention of allowing money to grow. ... One, if you invest in a

saleable asset, you may earn income by way of profit. Second, if Investment is made in a return generating plan, then you will earn an income via accumulation of gains (Mortenson, 2018).

Investment Diversification This is a portfolio investment strategy used to hedge against risk by putting together several investments. Diversification is the act of spreading investment across a range of assets to reduce investment risk. It's part of what's called asset allocation, meaning how much of a portfolio is invested in various asset classes, or groups of similar investments (Leković, 2018).

Performance A business concept representing the successful execution of a given agenda weighed against predetermined standards of cost, accuracy, speed and completeness. Financial performance is a complete evaluation of a company's overall standing in categories such as assets, liabilities, equity, expenses, revenue, and overall profitability (Folan, Browne & Jagdev, 2017).

Real Estate Its investment in buildings and land. Real estate is the land along with any permanent improvements attached to the land, whether natural or man-made—including water, trees, minerals, buildings, homes, fences, and bridges. Real estate is a form of real property. It differs from personal property, which are things not permanently attached to the land, such as vehicles, boats, jewelry, furniture, and farm equipment (Perkins, Thorns & Newton, 2018).

SACCO

This is a democratic, one of its kind member-driven organization, whose management and ownership is shared by its members due to their common interest.

Treasury Bills

It's a secure investment plan issued by the government than promises a fixed return (Reichenstein, 2016).

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In the process of determining investment companies' financial performance, the concept of portfolio diversification or non-core business investments has taken a global center stage continues to be a very crucial aspect of investment decisions in today's world (Eukeria & Favourate, 2014). The association between financial performance and portfolio diversification has formed the subject of a number of scholars but previous they have given mixed results on the nature of the association between performance and portfolio diversification (Jabbazadeh, Molavaseel & Mansalehi, 2014).

The theory of portfolio diversification formulated by Markowitz (1952) observed that portfolio diversification is a situation where investors invest in two or more different financial assets with an aim of reducing risk and stabilizing expected portfolio return. Portfolio diversification has been widely adopted as a strategy aiming to mitigate the unpredictable operational environments and markets for both individual and institutional investors. According to Dimitriou (2012), Lowering portfolio losses and volatility is the key importance associated with this and is gainful particularly with increment of uncertainty. Diversification of various investments in diverse financial tool categories with each having its own risk-return magnitude is the primary advantage of any portfolio diversification.

An investment portfolio is "a group of investment assets, the formation of which depends on the attitude towards return and risk association, every investment asset's contribution coming to the portfolio or exiting to the overall risk size and the cumulative portfolio return." A portfolio comprises of either real estate or financial assets like shares and treasury bills (Alimardani,

Ghafari, & Farmani, 2012). Compared to bonds, shares are subject to higher risks and are volatile. In comparison to companies, mid and small-sized companies entail higher risks. Treasury bills are subject to credit risks, price and interest-rate. Prices are mostly affected inversely by variation in rates of interest. Thaler and Williamson (2013) found out that most investment companies invest 60% in equities and 40% in fixed-income securities. They put forward a strong argument for the increment of the investment in equities by noting that most researches have indicated that the probability of stock returns exceeding returns of bonds nears 100% as the investment horizon goes up. Asness (1996) argued that investment companies with the willingness of taking great risk through fully investing in stock may substantially gain solely through investment in proper-diversified equity portfolio.

Since Markowitz (1952) study, a lot of studies have given attention to diversification in the context of equity. Various conclusions regarding the minimum quantity of asset required in achieving a properly diversified portfolio have been reached by various studies. One such study was conducted by McEnally and Boardman (2017) who investigated the number of bonds required in achieving a specific diversification level benefits as regards to reducing overall volatility. They found that, when investment opportunity sets are differentiated by credit rating, volatility is reduced notably by eight to sixteen bonds notably. Markowitz (2017) examined the minimum size of portfolio needed in capturing notable diversification gains that differentiate the opportunity of investment set by time-to-maturity, credit rating and issuer type. It was disclosed that, these bond characteristics and metric utilized in measuring additional diversification's marginal benefits ascertain the minimum size of portfolio. In addition, majority of financial economists and investors have developed an interest in how performance of portfolio and quantity of equity securities held in the portfolio relate.

Even though there can be an effective decrease in portfolio risk through the increment of the number below the perfectly correlated assets in the portfolio, unnecessary costs are likely to be increased by over-diversification because of greater transaction costs and staff resource needs incurred from rebalancing portfolio. Thus, investors who are rational try finding the optimal diversification level and avoid unnecessary over-diversification. It might be an inefficient process costly to diversify individual assets' portfolio to a high number. The costs entail brokerage fee related to purchasing relatively small quantities of various stocks and record-keeping related to owning enough names for efficiently eliminating unsystematic risk. The argument to include real estate in the portfolio of mixed-asset is typically on the benefits of diversification compared to the portfolio return (Alimardani, Ghafari & Farmani, 2012).

Previous studies on portfolio composition suggest that real estate is a class of assets with particular risk-return characteristics compared to other asset classes, such as equity securities and bonds. Additionally, based on Heslin and Donaldson (2016) investment companies have continuously added real estate to an equity securities portfolio and bonds with the aim of improving the risk-return profile. Donaldson (2017) undertook one of the first researches on real estate assets' international diversification. Even though the research was very preliminary since they did an estimation of the cumulative value of asset, their study stirred a believe of establishing 5 diversification gains from real estate holdings. Then came Miljkovic (2016) study which explored the benefits of diversification of holding different real estate categories (commercial, retail, etc) whereas an analysis of real estate diverse geographic holdings' effect on risk reduction was done by Lubatkin and Chatterjee (2018).

Globally, in the USA, there has been a paradigm shift from the ancient modes of generating returns among financial institutions. There has been shift in focus from interest

sources of revenue to other sources such as fees and commissions, selling securities, and others. According to Saghi-Zedek (2015), the majority of institutions are generating more returns from other non-lending activities. It is therefore of interest to research how non-core investments affect financial performance, especially in SACCOs.

Regionally, the first cooperative society was founded by the British colonized countries. Tanzania, Ghana, Kenya, Nigeria, and Uganda were among the early participants. In the early 1960s, SACCOs were taken up by the majority of non-English nations with the primary stream in the 1970s (Mwakajumilo, 2011), a collaborative movement leading to the establishment of the African Confederation of Co-operative Credit Savings Societies (ACCOSSCA). This Continental association of SACCOs was formed in 1965, by 28 nations in Africa to encourage SACCO values and social welfare.

In Africa, portfolio diversification through the well-established securities exchange markets which have been in the increase as firms increase their amounts of investments (Athar, Ifran & Majid, 2012). Although, the documented empirical studies on diversification of portfolio are majorly based on US market and other developed countries, few cover discussion and insight on effects of diversification in transitional and emerging economies in the industry. According to Botha, Scott and Snowball (2017), portfolio diversification in South Africa has been emphasized and necessity of companies and businesses to lessen risk by diversifying. Real estate is one of the investment option proposed because of South African economy's increased volatility as a result of the global financial crisis. Locally, the cooperative institutions trace their origin to 1931. This is the time when the first institution was enacted to regulate these institutions. At present, the Sacco society Act and the statutory body, Sacco Society Regulatory Authority (SASRA) regulates SACCOs (SASRA, 2019). Similar to any other financial organization, SACCOs are

involved in various investments with the objective of enhancing their economic performance and generating higher returns for its members (Kiaritha, 2015).

Portfolio diversification is a highly deficient study locally since most investors are risk averse. According to Makau and Ambrose (2017) investing is the principal business activity for various investment institutions in Kenya. Typically, investment portfolio is the biggest asset and the predominate financial returns source. Thus, it is among the highest risk sources to a company's soundness and safety. The investment portfolio's effective management and the credit function is fundamental to the firm's soundness and safety. According to Kibet and Kimani (2017), portfolio diversification involves identification of financial measures, determination of the investment time horizon, understanding the risk nature of the investment, determination of the investment strategy, determination of the future returns on investment, portfolio investment evaluation and revision.

SASRA is ranked as one of the best Sacco regulatory bodies in Africa. Sacco's registered with are currently divided into sectors which are: Agricultural, Automobile and Accessories, Real Estate Investment Trust, Telecommunication and Technology, Manufacturing and Allied, Investment Services, Investments, Insurance, Energy and Petroleum, Construction and Allied, Commercial and Services and Banking (SASRA, 2018). A savings and credit cooperative society (SACCOs) is an association of members with a common bond (Karagu, 2015). Within Kenya, there are two sub-sectors in the SACCO industry. is SACCOs taking deposits (DT-SACCOs) is first sector, and non-deposit-taking SACCOs (Non-DT-SACCOs) is the second sector. The DT-SACCOs are SACCOs that accept member's contributions and offer services comparable to those offered by the banking organization (Karagu, 2015).

The non-DT-SACCO section, on the other side, is the segment that mobilizes savings (deposits) from its participants; and contributions are solely used as security for loan facilities issued to members by the SACCO. These deposits cannot be withdrawn by the member, but are refundable when the member leaves the Sacco (Essendi, 2013). Investment is a process by which resources are mobilized to carry out a specified task with a view of generating returns in the future (Muriuki, 2016). Investment diversification is a portfolio strategy intended to combine different investments to edge risk. In most financial institutions, investments decisions are key drivers of strategic decision making due to their big influence on the performance of these institutions (Wasike, 2015).

1.1.1 Non-Core Business Investments

Morris et. al., (2010) study in Greece noted that although proper investment in non-core business activities can lead to superior financial results, some considerations influence the outcome including the existence of supportive marketplace setting as well as effective evaluation of success determinant of every investment option available. This holds true for SACCOs that have been applauded for effectively dealing with market volatility and to achieve high financial performance through investment in non-core business activities.

Simeyo and Francis (2015) study in Tanzania noted that investment is the amount of money committed to a business by an individual or business with an aim of generation returns in future that are more than the outlay amount in addition to profits to cover for risk and inflation. The champions of activity diversification contend that investment diversification provides a less volatile and stable economies of scale and scope, income and the capacity to leverage management strength across investment products. Through investment diversification in non-core business activities, a SACCO can achieve stable cash flows (Eukeria et. al., 2015).

Locally, Rotich et. al., (2015) noted that, SACCOs invest in core business activities of receiving deposits and lending loans to members, this is the primary investment platform for all SACCOs. Secondly, SACCOs can invest their surplus funds in non-core business activities such as in treasury bonds, treasury bills, Shares, fixed deposits, real estate and Front Office Service Activity (FOSA). FOSA provides important platform for loan accessibility, funds mobilization, as well as efficacy in service delivery resulting in improved financial performance (Gegeh, 2016). According to SASRA (2017), deposit-taking SACCOs are mandated to file once-a-month returns of their principal capital and liquidity ratio that have well-defined limits stated in the SASRA guidelines.

SACCOs have registered different success rates while investing in non-core capital. Deposit-taking SACCOs have faced more challenges in promoting non-core capital investment due to scathing competition from commercial banks. A school of thought seems vehemently opposed to this form of investment in established literature. They propose that the guiding law ought to be revised to improve the supervisory hand of the Ministry so that investment that is not linked to the SACCOs' core business should be explicitly forbidden (KUSCCO, 2015).

1.1.2 Financial Performance

Globally, earlier research on cooperative finance in Ukraine by Selçuk (2015) averred that as SACCOs follow more conservative investment strategies, they continued to do better than investor-owned investments and credit establishments. SACCOs have tightly controlled investment strategies not only due to the enormous public interest but also due to the need to retain public confidence and encourage the public to participate in saving with the SACCOs. According to Warsame (2016), organizations can work effectively, to be successful, to grow, and to remain a going concern.

Kagoyire and Shukla (2016) study in Nigeria defined financial performance as the organizations' capacity to operate resourcefully, be money-making, expand, and remain a going concern. All businesses work toward making maximum use of resources available to it as well as gaining financially. Thus, according to Fujo & Ali (2016), financial performance is various activities' product undertaken by an entity. Locally, Odhiambo (2017) posits that lack of investment opportunities, lack of proper investment decisions, delayed members' contributions and doubtful investments were the main hitches deterring effective financial performance among SACCOs in Kenya.

Mwaura (2016), noted that several scholars have utilized various ratios in quantifying performance including earnings per share (EPS), return on assets (ROA), and return on equity (ROE). The capability of a firm in generating income using its assets is shown by Return on assets (ROA) while ROE indicates the management's efficiency in using resources of shareholders. The amount of entities profit allocated to every outstanding share is measured by Earnings per share (EPS). This research study used returns on assets (ROA) to quantify Kenyan SACCOs' financial performance.

1.1.3 Non-Core Business Investments and Financial Performance

Globally, a study by Bokonyo (2016) in Sweden assessed investment in non-core business among Swedes' commercial banks and found that most commercial banks had diversified their investment to cover; insurance investment, real estate funding, government securities, and purchasing of shares. The study resolved that most of commercial banks have embraced investment diversification over the years, which has cushioned them against the volatile market and enhanced financial performance. Regionally, Karagu and Bichanga (2015) study in Nigeria averred that non-core investment has a major influence on Sacco's monetary

performance; nevertheless, this research did not state the degree of the effect. According to Kiaritha (2015), capital adequacy, internal politics, investment mix policy as well as governance are among others parameters affected Sacco's performance.

Locally, in the context of SACCOs, Makori, Munene, and Muturi (2016) carried out research on major shortcomings of SACCOs in Gusii and concluded that management incompetency and large volumes of capital investment in non-core investments led to poor performance among SACCOs in Gusii. Investment mix is a major influencer of the financial performance of SACCOs. According to Githaka, Gachora and Kamani (2017) study on parameters influencing Sacco's liquidity found a positive relationship between liquidity management and investment in non-core business.

Odhiambo (2017) studied the link between deposit-taking savings portfolio and financial Performance of credit cooperative approved by SASRA in Nairobi City County. The study used the percentage of interest on deposits by members as the dependent variable to quantify financial performance. Working capital management was used as the independent variable measured by current ratio, turnover growth, debt ratio and financial conversion cycle. The research averred that, the diversification of the portfolio results in a higher financial yield of SACCOS; hence, there was a positive connection between the diversification of the portfolio and monetary performance.

According to Mwangi (2015), SACCOs had the maximum yields on investing in loans, buildings, and finally investing in monetary assets in that order. Musau (2016) found that investment in modernization and research had positive influence on the SACCOs' economic performance although investment in growth negatively impacted on SACCOs' economic performance. There are inadequate studies on the impact of other diversification modes of

investment, particularly the numerous investment modes embraced by deposit-taking SACCOs and their influence on financial performance.

1.1.4 Deposit Taking SACCOs in Kenya

Lumbwa Co-operative society was the earliest Kenyan cooperation union established by European farmers in the 1908 to help farmers to achieve economies of scale (CSU Kenya, 2009). The state had acknowledged cooperative societies as an instrument for financial development and empowerment in the country following independence. Since then, the Kenya Government has taken a step in which the SACCO society movement in the country has grown and expanded rapidly (Gardeklint, 2009). The Kenyan Parliament approved the first SACCO regulation in November 2008. The legislation lays down updated SACCO safety and health operating frameworks, enabling them to compete efficiently with commercial banks. The lays the basis for SACCOs to satisfy the suggested regulatory standards through the implementation of fresh accounts charts, installation of updated information systems, standardization of policies and processes, viable investments, appropriate provision, management of issues, correct management of credit and the development of suitable products (Mohammed, 2013).

The SACCO subsector has advanced from smaller prosperity organizations to enormous multiple branch financing systems, according to SASRA's Supervisory Report (2017). This demonstrates the importance of SACCO societies in delivering decent financial services for all Kenyans. FOSA's pseudo-banking facilities were a response to the exceptional difficulty that banks had in the early 1990s to manage a bank account, thereby leading to the enormous shutdown of bank branches in rural areas in Kenya (Gisemba, 2010). SACCO firms have been identified as key players in increasing access to finance and saving for individual development in Kenya's National Development Plan and Vision 2030 (Mohammed, 2013). According to the

SASRA report (2019), Sacco's asset base has grown from 495.25 billion to 556.71 billion between 2018 and 2019 representing a 12% increase. Net loans grew from 374.28 billion to 419.55 billion representing a 12% increase in the sector in the same period.

From 2018 to 2019 total deposits increased by 11% from 341.91 billion to 380.44 billion. The capital funds grew from 74.37 billion to 79.20 billion representing a 6.49% increase. One hundred and seventy-four (174) SACCOs were licensed to operate in Kenya in 2020. However, among the 174 SACCOs, 12 of them are operating under a restricted license. Besides, for a further half-year of non-complying with prescribed laws and regulations to protect the interests of member states, thirteen (13) DTS have received limited licenses (SASRA Report, 2019).

1.2 Statement of the Problem

The financial performance of most SACCOs in Kenya has been on an upward trend over the years and this has helped SACCOs in enhancing access to finance and saving for individual development in Kenya's National Development Plan and Vision 2030 (Mohammed, 2013). According to the SASRA report (2019), Sacco's asset base has grown from 495.25 billion to 556.71 billion between 2018 and 2019 representing a 12% increase. Net loans grew from 374.28 billion to 419.55 billion representing a 12% increase in the sector in the same period. The growth in the Kenyan SACCOs' financial performance is partly attributed to diversified investments in non-core business investments.

Previous studies reveal that investment in non-core activities leads to improved financial performance (Muteke, 2015). Other studies have found that the link between non-core activities and financial performance was lessened by situational variables, such as poor management, inadequate resources and poor technology (Rotich et. al., 2015). Non-core investment and financial performance in SACCO industry has raised unresolvable debate among various

researchers. It is believed that financial performance of SACCOs is determined by both core and non-core investment (Al-Tamimi & Hussein, 2010). According to the various authors, the key internal factors that determine SACCOs financial performance are; lending, FOSA activities, investment in shares, fixed deposits and treasury bills. Moreover, Tarazi and Gallato (2012) pointed out that external factors such as changes in GDP, exchange rates, inflation rates, and interest rates have an effect on SACCOs general financial performance.

Almumani (2014) study on Sacco's performance in Amman found out that SACCOs that had invested more than 10% in non-core investment posted a better financial performance arising from diversification. However, the study focused on performance of SACCOs from the year 2013 to 2017. Olowoniye and Ojenike (2012) researched on effect of investment in SACCOs in Nigeria and found out that SACCOs that had invested all its capital in lending to its members suffered from liquidity problems which negatively affected financial performance. However, the study respondents were purposively selected which could have led to sampling error. Kipkorir et al., (2016) studied the effect of various investments on Sacco's profitability in Baringo County. The research concluded that FOSA investment positively impacted the performance of deposit-taking SACCOs. However, the study context was Baringo County. Odhiambo (2015) conducted research in Kenya on the impact of real estate finance on listed Sacco's financial execution. It was discovered that real estate lending has no meaningful impact on the Sacco's financial performance. However, the study context was real estate companies. Most of the local studies have focused on investment in FOSA activities, real estate and treasury bills omitting fixed deposit and investment in shares. This study filled this gap by incorporating fixed deposits and investment in shares as part of the non-core investments in SACCOs. The study established the joint effect of non-core investments on Kenyan DT SACCOs' financial performance.

1.3 Objectives of the Study

1.3.1 General Objective

To establish the effect of non-core business investments on the financial performance of deposit-taking SACCOs in Kenya

1.3.2 Specific Objectives

- i. To determine the effect of real estate investment on the financial performance of deposit-taking SACCOs in Kenya.
- ii. To determine the effect of investment in shares on the financial performance of deposit-taking SACCOs in Kenya.
- iii. To determine the effect of investment in treasury bills on the financial performance of deposit-taking SACCOs in Kenya.
- iv. To determine the effect of fixed deposits investment on the financial performance of deposit-taking SACCOs in Kenya
- v. To determine the effect of investment in FOSA products on financial performance of deposit-taking SACCOs in Kenya.

1.4 Research Hypotheses

- H0₁:** Investment in real estate has no significant effect on the financial performance of deposit-taking SACCOs in Kenya.
- H0₂:** Investment in shares has no significant effect on the financial performance of deposit-taking SACCOs in Kenya.
- H0₃:** Investment in treasury bills has no significant effect on the financial performance of deposit-taking SACCOs in Kenya.

H0₄: Investment in fixed deposits has no significant effect on the financial performance of deposit-taking SACCOs in Kenya

H0₅: Investment in FOSA products has no significant effect on the financial performance of deposit-taking SACCOs in Kenya.

1.5 Justification of the Study

Many business owners and managers favour acquisitions to grow their company, but often refrain from systematic portfolio reviews that may lead to divestitures. As a result, noncore assets remain in their portfolio. Companies are also far more likely to improve the value of a business if their divestment decisions are aligned with their core business objectives and are not opportunistic in nature. By holding on to non-core assets in a portfolio, the SACCOs are tied up to valuable management time and capital. Therefore, it is crucial for the SACCOs to understand how all of their portfolio businesses contribute to the core, and to regularly assess them for good fit.

1.6 Significance of the Study

This study elaborated on how different modes of investment influence deposit-taking SACCOs financial performance. For SACCO executives the outcomes of the research would be crucial since it would provide them with a greater understanding of the investment practices available to SACCOs and their impact on financial performance. This would increase efficiency and efficiency in the management of DTS. This research would assist policymakers in developing efficient guidelines on investment diversification practices among DTS in Kenya. The research would also assist in developing investment diversification strategies for other associated industries, particularly MFIs and commercial banks. Finally, this study would improve the present knowledge on investment diversification and financial performance of Kenyan DTS. It

would contribute to the knowledge pool on investment diversification practices and financial performance literature to be used by academicians to build their literature review.

1.7 Scope of the Study

The research's focus was on effect of non-core business investments on the Kenyan DTs' financial performance. The non-core business investments to be studied were investments in FOSA, treasury bills, shares, real estate and fixed deposits. Secondary data was collected from the 174-deposit-taking SACCOS and then analyzed using panel data regression analysis.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section examined the existing literature in addition to the theories that informed this study. The section covered the review of theories, empirical review, the conceptual framework and the research gaps. Theoretical review discussed the agency theory, pecking order theory and resource-based theory. Specific objectives guided the empirical review while the conceptual framework was based on the study variables.

2.2 Theoretical Review

2.2.1 Agency Theory

Jensen and Meckling (1973) proposed this theory. The theory explains how owners and managers associate and also attempts to resolve the dispute existing between business owners and managers. Owners depend on managers to accomplish various dealings, mostly financial, leading to a difference in priorities and methodologies. Resolving the differences helps to reduce agency costs. Agency theory explains why the conduct or decision varies when shown by group members. In particular, it defines the connection between the parties known as the agent who works for another person known as the principal. It describes their behavioral or decision-making differences, noting that the two sides often have distinct objectives and may have distinct risk attitudes towards investment regardless of their respective objectives (Murtishaw & Sathaye, 2006).

Berle and Coit's (1932) studied the ideas and applications of agencies for big corporations' growth. They realized that the interests of the executives and directors of a certain company vary from the interests of the firm's proprietor/owners (Murtishaw & Sathaye, 2006). In

the framework of risk-sharing study popular in the 1960 to 1970s, Jensen and Meckling advanced the framework by Berle and Means to build agency theory as a recognized concept.

Jensen and Meckling (1973) created a think-tank proposing that companies are designed to reduce agents' expenses in order to be able to track the leaders' path and proposition. The concept fundamentally recognizes that there are various motivations in various parties engaged in a specified scenario with the same objective and that these motivations may be expressed in a separate basis. The theory says that the conflict between sides is always partly aimed, that efficiency is inseparable from effectiveness and that information between the principal and the officer is always somewhat asymmetrical (Gegeh, 2016).

The theory has been implemented effectively in many fields, including sociology, marketing, finance, policy, economics and accounting. This theory prescribes staff as having to be held responsible for their work and obligations as a framework of good governance. If and when the principal chooses to dive into a fresh company, the explanatory force of agency theory is decreased. In this scenario, SACCO management is responsible on behalf of its members to formulate and implement investment strategies. In order to generate wealth, the manager should be encouraged, monitored and overseen by defining the officer as possibly fraudulent (Marek, 2013). Agent and leading agent are instruments based on financial products that lead to enticement challenges in circumstances of uncertainty coupled by information asymmetry (Ileve, 2008).

According to Gitonga (2016), to ensure that the agents does not put into jeopardy the interests of the principal who are the SACCO members, the Sacco Society Regulatory Authority (SASRA) requires all agents to submit a monthly report on their investment in non-core activities. For instance, management is required to make full disclosure of investment in shares,

treasury bills, FOSA and fixed deposit and also their strategies in consistency with the principles of good corporate governance. These disclosure affects SACCO performance.

Therefore, if the agent is notified in full of the agent's actions, the agent opportunism can be readily curbed. The agent is therefore obliged to behave for the officer's benefit. The Agency model describes the key issues in hierarchical relationships of executives and employees with respect to policy execution and decision making. It also involves issues arising from conflicting opinions between DTS members of the agents and the principal with distinct behaviors, preferences, and yields. This theory leads the research to see if decisions are made in the interests of employees (Gegeh, 2016).

2.2.2 Resource Based Theory

Wernerfelt (1984) propounded it and it is widely referenced because of its practical relevance to management practices. The resource-based view theory (RBV) begins with the presumption that the required outcome of management strategy at an organization is a long term strategic competitive advantage (SCA). The SCA allows SACCOs to gain greater yields than average. This focuses on how SACCOs attain a competitive benefit. This theory claims that resources are scarce and only organization that make good use of these resources will thrive in the market. In contest of SACCOs, if SACCOs deploy these funds efficiently in the market for products, a sustainable competitive advantage may be achieved. The RBV, therefore, stresses the strategic option that needs SACCO management to define and use proper investment strategies to increase members' wealth (Machuki & Aosa, 2011).

Zica et al., (2016) carried out a study on resource-based theory and how it adheres to strategy of superior performance. Descriptive research design was embraced. Data was assembled from 50 small companies in Brazil. Data analysis was carried out through inferential

statistics. The study revealed that small firm's strategy practices have a positive relationship with resource-based view. Kraaijenbrink et al., (2010) carried out a study on resource-based view and its critiques. The research was used descriptive research design. Secondary sources we used for data collection. The targeted population was 25 firms listed in Brazil. Linear regression was used in data evaluation. The study averred that the resource-based view is clung on inappropriate narrow neoclassical rationality, thus limiting the opportunity for progress.

Grant (1991), carried out a study on Resource based view for competitive advantage and its implication on strategy formulation. Descriptive research design was used. The research targeted 30 major financial firms in France. Data was collected from primary sources. Multiple regression model was used in data evaluation. The study revealed that, the major ingredient to resource-based view is understanding the link between capabilities, profitability, resources and competitive advantage. Sacco's management must deploy all the resources available to them efficiently to generate higher returns. In order to develop long term competitive advantage and attain superior performance, SACCOs use the physical resources, human assets and organizational resources. The efficiency in use of these resources determines the success rate of the SACCO. This research explores the effect of investment in non-core activities by SACCOs through accessing available resources to position themselves more than their rivals for enhanced market yields, which results in enhanced financial performance (Gegeh, 2016).

SACCOs must efficiently deploy precious, single and hard to copy tangible and invisible assets in order to reach that possibly favorable atmosphere. In order to develop long term competitive benefits and in turn, to attain superior economic efficiency by SACCOs, SACCOs use the physical resources, human assets and organizational resources of this firm from the resources point of perspective. This theory is important to this research because the SACCO

sector is extremely competitive and operates in environment with limited resources, it is only through differentiation that a SACCO can achieve superior returns. This can only be achieved through investment in non-core activities. The theory will explain how SACCOs with adequate resources to invest in non-core investment influence the SACCOs financial performance.

This research shows the need for SACCOs to handle non-core business investments efficiently through accessible resources to position themselves more than their rivals for enhanced market yields, which resulted in enhanced economic results. This theory is important to this research because the SACCO sector is extremely competitive, it will only be possible to differentiate themselves by the assets that the SACCO has with an efficient non-core investment structure.

2.2.3 Pecking Order Theory

Donald (1961) proposed the pecking order theory and it was updated by Myers and Majluf (1984). This theory is based on firm's preference for internal financing, such as retained incomes over external funding, such as debt and equity (Goyal, Rahman & Kazma, 2013). Often when there is an overwhelming demand for funds due to bulges during acute financial crisis businesses pursue external funding. The strong dependence on internal funds by companies gives credence to this theory. Managers tend to stop external financing as much as possible because they are fearful of capital market discipline. The core principle of the Pecking Order Theory is that if external financing is needed, the safest securities are issued first, accompanied by convertible bonds which are hybrid securities, and finally equity as the final resort (Wahome, Memba & Muturi, 2015).

Dimitrios (2009) carried out a study on testing pecking order theory. The study embraced descriptive research design. Data was collected from primary sources from 50 selected

Greek firms. Data was collected with aid of questionnaires. Analysis of data was carried using regression quantitative technique. The research noted that pecking theory cannot be used in making practical application due to its theoretical nature. Nikolaos (2000) study on the limitation of pecking order theory. The study embraced descriptive research design. The research targeted 30 major financial firms in France. Data was sourced from primary resources. Analysis was done using multiple regression model. The research averred that; new types of funding cannot be included in the theory.

Daskalakis (2014) examined the tradeoff between pecking order theory and trade off theory. The research embraced descriptive research design. Secondary data was collected from the 50 largest firms in France in terms of profitability. Inferential and descriptive statistics were used in data analysis. It was disclosed that pecking order theory is very old and cannot be updated with introduction of newer financial methods such as fundraising. According to this theory, the adverse selection issue drives financial decision-making, meaning that managers have a greater understanding of a company's prospectus than investors due to insider knowledge. Both require a premium for adverse selection, but equity requires more. Zoppa & McMahon (2002) cite that, since equity is riskier than debt in the minds of investors, they would expect a high Return on Equity. This theory will guide this research in determining SACCOs management pecking order during investment in non-core activities. The theory will guide the research in understanding the highly prioritized mode of non-core investment and its effect on financial performance.

2.2.4 Neoclassical Theory of Investment

This theory originates from Jorgenson (1963). The theory draws its fundamentals from the maximization of utility and wealth of a firm over time (Warström & Niemelä, 2015). In the

neoclassical theory, investment is seen as a distributed lag function of variations in the required capital. The required or desired capital here acts as a function to the output level, user capital cost and output price (Twine, Kiiza, & Bashaasha, 2015). The theory presupposes that investment is a function of cost of capital and the firms output. Additionally, the theory contends that the capital and labour ratios adapt to the relative changes in prices (Virlics, 2013).

The neoclassical theory of investment is premised on preposition that agents can make numerical probabilities and probability distribution of the expected returns. In the investment models, the firm is seen to be neutral to risks, and capital cost causes the risk (Virlics, 2013). The neoclassical argument assumes that firm managers act in the best interest of firm stakeholders. It also assumes managers and external suppliers of funds have the same information regarding the quantity and quality of investment opportunities available to the firm. These assumptions serve as a point of departure for models that demonstrate the potential importance of internal funds in the investment decision (Ismail *et al.*, 2017). For this study, the neoclassical theory will be employed to explore whether investments maximize the wealth and utility of the owners of the firm.

2.2.5 The Q Theory of Investment

This theory originated from Tobin (1969). The Q-theory is an extension of the neoclassical theory since it incorporates the adjustment costs as an explanation for output losses. According to the theory, firms choose investment levels, which maximize the estimated current firm value (Twine, Kiiza, & Bashaasha, 2015). The theory presupposes that the market estimation of equities is the major element of investment by firms. Thus, investment decisions are stirred when financing sources are highly priced in the market place than it would cost to create it.

This theory relates to investment rate as a Q function where Q refers to market value ratio of new added investment resources to their replacement cost. This investment theory suggests the metric q , which is the ratio between a unit of physical capital's market value and its value of replacement, done to recap the existence/absence of opportunities for investments for a precise firm (Eklund, 2013). Tobin reasons that, when the capital adds marginal units to a firm value more than it costs to obtain it, that is, q is greater than 1, installing new capital will be profitable to the precise firm. Hence $1 < q$ indicates that the firm should accrue more capital (i.e. embark on extra investment) and vice versa (Balfoussia & Gibson, 2016).

According to the theory, investment decisions depend on the marginal Q level, defined as the imminent investment marginal returns over the existing marginal investment cost. The Q theory also argues that if the firm's value of market is more than the cost of replacement of capital firms will choose to invest until the value of capital equals the replacement cost, thus optimizing capital stock (Warström & Niemelä, 2015). In this study, the Q theory of investment will be explored to explain whether the investment levels chosen by a firm maximizes its current value.

2.3 Empirical Review

2.3.1 Investments in FOSA Activities and Financial Performance

FOSA services and products performs a significant duty in the mobilization of deposits, accessibility of loans and reliability in service delivery leading to better performance. SACCOs FOSA products include; salary advances, short term loans, fixed deposits accounts, savings accounts, school fees accounts, FOSA Juniors accounts, bankers' cheques, festive accounts, micro-finance services, standing orders, overdraft wage processing and ATM services (Mathuva, 2016). In order to perform well financially, Mathuva (2016) noted that SACCOs needed to maximize on revenue generation. Institution's revenue earnings trends have a direct impact on

financial performance. Revenue from FOSA products contributes immensely towards revenue optimization. Previous studies have attributed SACCOs poor performance to lack of revenue optimization. However, with FOSA products, they should be in a position to increase their revenue generation and boost their financial performance.

Globally, Grazzi, Jacoby and Treibich (2013) study on investment policies' influence on economic growth in France and Italy. Descriptive research design was used. The research targeted major financial firms in Italy and France. A sample of 50 firms which included banks, SACCOs and pension funds were selected. Secondary sources helped get data which was evaluated using descriptive and inferential statistics. The study concluded that branch expansion had an inverse relationship with financial performance.

Still in the global arena, Richard Gold noted that, through the movement of asset allocation models to the boardroom from the classroom, various practical challenges confront institutional real estate investors. Most of the problems relate directly to data availability and quality and have been given attention in this study. However important, the uncertainty impact on the process of allocation overshadows the concerns. In this research, the introduction of uncertainty is done through bootstrapping expected returns and SD in a traditional Markowitz framework. The findings indicate that efficient frontier is fuzzy and not singular: The research demonstrates that many statistically dissimilar weighted portfolios can also be attractive for a particular combination of expected return and risk and that allocation varies on more realistic and not specific targets.

Regionally, Aiyeye (2015) carried out research on the influence of FOSA activities on Saving and Credit Corporative Society in Nigeria. The study targeted 388 participants and primary data was obtained. Descriptive research design was employed. A sample 150

respondents was obtained through cluster sampling. Data was analyzed using quantitative and qualitative analysis. The research averred that FOSA products had a positive association with SACCOs financial performance.

Locally, Mella (2016) carried out research on the association between FOSA investment and Kenyan pension funds' performance. The target population of the research was all pension funds interested in real estate investment in Kenya and descriptive research design was adopted. Multiple regression model helped in data analysis. The research averred that investment in FOSA contributed positively to financial performance. Kipkorir et al., (2016) studied the effect of various investment on SACCOs profitability in Baringo county. The study embraced descriptive survey design. 316 members were targeted from the 73 registered SACCOs. 177 respondents were chosen with aid of stratified sampling. Data was collected from primary sources and examination was done with aid of descriptive and inferential statistics. The research concluded that FOSA investment, advances to members and lending to government positively impacted on DT- SACCOs' performance.

Matumo, Njoroge and Maina (2013) study was on relationship between the performance of SACCOs and investment in front office service activities in the county of Tharaka Nithi, Kenya. The study targeted 3 SACCOs and employed descriptive research design. Six years secondary data was obtained and analyzed using correlation analysis. The study showed that investment in FOSA products had an important positive impact on the SACCOs economic performance.

2.3.2 Investments in Treasury Bills and Financial Performance

Treasury bills are debt obligating a corporation to pay periodic interest with full repayment at maturity (Chen & Qin, 2017). According to Mobius (2012) "return on bills

investment is source of income for the investment companies who allocate investor funds to corporate bond.” Investment companies consider the bond yield amount as a tool for measuring to know the annually return rate which is an important aspect of bond valuation. The components of bond yield include current yield and yield to maturity. As the market yield change, price of bonds fluctuates over its life. Term to maturity is the remaining time on the life of a bond (Collins and Fabozzi, 2000). The time remaining on a bond’s life is referred to its term to maturity. Globally, in Nepal, Shrestha (2018) studied investors’ interest on government securities. The research embraced descriptive and analytical research design. All government securities investors formed the target population. A sample of 200 investors were sampled using judgmental sampling. The study noted that only the rich invested in government securities. The study concluded that income is a major consideration when investing in government securities.

For the period 2008-2013, Barnes and Burnie (2014) analysed how bond portfolio composition affect Canadian Stock Exchange listed diversified industries’ financial performance. The study adopted the use of yield curves and regression models as the research methodology. The yield curves were utilized in generating returns from which the calculation of ex-ante expectations was done to solve for optimal bond portfolio return over the investment period. The regression model was used to calculate actual portfolio performance for 2008-2013. It was reported that performance improve because of expectations generated using the ex-ante time series returns as a result of the yield curves 13 of bonds since every bond had varying maturity.

Regionally, Alhassan (2015) carried out research on income diversification and Sacco’s performance. The target population of the study was 26 Ghanaian SACCOs and embraced descriptive research design. A regression model was utilized during data analysis. The research found out that SACCOs have considered advancing money to the government through treasury

bills purchase as the most innovative investments. Treasury bill investment is a risk-free investment opportunity. Alhassan (2015) study concluded that investment in treasury bills contributed increasing revenues for SACCOs, since it is cost effective and an enhancement to current product portfolio. The study also noted that investment in treasury bills facilitates transparency with respect to fixed returns, thus contributing to improved financial performance.

Locally, Waithira (2013) studied effect of income source diversification on Kenyan commercial bank performance. Secondary data from the six largest commercial banks in terms of profitability was collected. The research embraced descriptive research design. Data evaluation was by descriptive and inferential statistics. The study concluded that commission on loans, foreign exchange earnings and government securities income contributed positively to monetary performance of Kenyan banks.

Rop, Kibet and Bogonko (2016) study on diversification of investment and monetary performance of Kenyan commercial banks. The research embraced exploratory research design. 40 commercial banks were targeted for data collection. Collection sheets were used to collect secondary data. Data analysis was done via inferential statistics and explanatory aided by SPSS V20. The study found out that the performance of commercial banks was positively influenced by investment in government securities. The study highly endorsed adoption of diversification of portfolio as a way of improving performance of financial institutions.

2.3.3 Investments in Shares and Financial Performance

Investing in shares or stocks means having a ownership share in a public company. By investing in shares, an investor hopes the organization will grow and perform well over time. When the performance of the company improves, its shares become more valuable and they can be bought by other investors at an amount higher than what they were bought. Implying that if

one decides to sell them, he gets a profit (Davis, 2022). Globally, Rose (2003) studied effects of investment diversification on credit unions in United States. The research embraced descriptive research design. Data from primary sources was gathered from selected credit unions in New York. Data analysis was conducted via descriptive statistics. The research noted that credit institutions have embraced 24-7 services through automation, housing financing as well as mortgages with the aim of improving their incomes. The study concluded that, credit unions invest in permissible shares, however with limitation to the list provided by government regulations.

Regionally, a study by Jemba, (2010) on the commercial banks' financial soundness and investment diversification in Tanzania. Secondary data was obtained from the 10 largest commercial banks in terms of asset base. The research embraced descriptive research design. Data was analyzed via inferential and descriptive statistics. It was noted that there was a good association between FOSA investments, insurance investments and government securities and the shares acquisition on commercial bank financial performance. The purchase of shares, FOSA operations, insurance and eventually government securities projects were ranked as the best investment in that order.

Riedel (2014) conducted a study on the rationale for investment in securities exchange. Descriptive research design was deployed. The target population was 36 firms listed in Ghana stock exchange. Data was gathered for Bank of Ghana bulletin and GSE website. Time series was used for analysis of data. It was concluded that shares as mode of investment leads to financial improvement to the investor. Menggen (2007) carried out a study on risk of investing in shares in Chinese market. Descriptive research design was used. Data was sampled from daily, weekly and monthly market returns. Data analysis was performed with aid of GARCH -M

model. The research found out that there was a positive association between risk and returns on shares in Sheng hen stock exchange.

Locally, Islam (2017) researched on the association between investment in shares and commercial bank performance in Kenya. The study followed a descriptive research style. Annual reports accessible from websites of distinct banks, the NSE data from CBK were used for sourcing secondary data. All 40 Kenyan commercial banks were included in the study. Data analysis was done with aid of inferential statistics. The research found out that banks invested in securities/shares of listed companies. Additionally, banks invest in subsidiaries and joint ventures mainly from their income left overs.

Musyoki (2011) carried out a study on Income diversification and SACCO's performance in Nairobi County. The research used descriptive research design. All SACCOs regulated by SASRA in Nairobi County formed the target population of the study. Primary data was evaluated via explanatory and inferential statistics. The study averred that investment in shares and SACCOs financial performance positively connected.

2.3.4 Investments in Real Estate and Financial Performance

Real estate is “property that consists of land and the buildings on it together with its natural resources like water, minerals, crops and so on”. Buying real estate is an investment strategy that can be both satisfying and lucrative (Beattie, 2022). The existence of a market portfolio will all available assets to investment is suggested by modern portfolio theory (Markowitz, 1952). In the United States, real estate assets represent a notable part of investment companies' diversified portfolios. There are two basic categories of real estate; residential and commercial property are the two real estate basic categories.

According to Battagalia, Porzio and Sampaganaro (2010) large-scale institutions such as investment companies mainly hold while commercial real estate investment whereas individual and small investors hold residential property. However, recently there has been an increment in retail investors taking part in commercial property market because of the coming up of new property investment vehicles, this aims at higher portfolio returns owing to population explosions and migrations in different parts of the world, the demand for housing has increased enormously. Nevertheless, it is worth noting the price of owning a house has increase significantly resulting to increased need for financing in the sector. Due to the forgoing above, most financial institutions have embraced financing of houses and investment as a mechanism for diversification in order to increase their efficiency and meet consumer needs as well as keep up with the changing market dynamics and forces. According to Gegeh, (2016), real estate financing indicates providing resources or capital to acquire housing construction, building, housing, or growth-required funds.

Globally, a study conducted by Heather (2015) on real estate finance and the New York stock exchange listed banks' financial performance using five-year data from 11 commercial banks' annual reports. The study followed a descriptive research style. Annual reports accessible from websites of distinct banks, the NYSE were used for sourcing secondary data. The research found that real estate finance affects the listed commercial banks' financial performance, observing that financial performance is notably impacted by mortgage investment.

Ziobrowski, McAlum and Ziobrowski (1996), Ziobrowski and Ziobrowski (1993, 1995) and Ziobrowski and Boyd (1991) tried to enhance the foreign real estate's "value added" to mixed-asset portfolios through many strategies such as currency swaps, currency options, forward contracts, and foreign leverage. But foreign real estate never improved the already

foreign financial assets diversified portfolio's efficiency. Alternative real estate data sources, longer holding periods and tax differentials' effects were considered by the scholars in their tests. Hence, their conclusions have not been altered substantially by anything. The study's purpose is introducing uncertainty into analysis of mixed-asset portfolio. To incorporate uncertainty, allow individuals to quantify the probability that an uncertain economic outlook may be given to higher foreign real estate amounts. Uncertainty analysis gives confidence interval estimates for notably higher foreign real estate investment levels even if in foreign real estate the point estimate might be 0% over twenty years duration.

In Asia, Pham (2013) did an empirical analysis of real estate investment in terms of financial performance and real estate markets structure for t 2003 to 2012. The study adopted the use of inferential statistics with the diversification potential of real estate compared to financial performance measured by use of correlation coefficient. It was reported that real estate investment financial returns from a risk-adjusted basis were not superior to the ones with bonds but outperformed the ones with shares. It was concluded that, to the investment portfolios, real estate investment offered attractive benefits on the basis of financial performance in international and domestic context.

Yat, Keong, Chai and Kwun (2017) studied the effects of real estate investment on risk diversification and publicly listed companies' financial performance over the period 2007 to 2015. The study utilized the Sharpe, Treynor and Jensen measures in investigating real estate investment's impact on risk diversification while financial ratios were used in ascertaining real estate investment's impact on financial performance. The beta values were less than one, implying that real estate investment was less risky thus did not significantly affect the financial returns. Low r^2 values, however, suggested poor diversification demonstrating the potential for

diversification opportunities. A portfolio with few varying real assets or investments such as commercial property and REITs may result in better performance.

Regionally, in Nigeria, Bello (2015) conducted a comparative assessment of the real estate performance and financial assets as a defense for mortgage advancing in determining if the shift towards monetary assets is warranted. A sample of 46 transactions from Lagos based selected banks was employed in assessing the efficiency of financial assets and real estate used as loan collateral. Although financial assets are still favored by banks, the study found that for secured loans both financial assets and real estate offered security.

Oloke, Durodola and Emeghie (2015) analysed real estate investment' impact on the insurance companies' performance in Nigeria. Fifty-two insurance companies in Lagos State were sampled and structured questionnaires distributed while secondary data was obtained from the Nigerian Stock Exchange. Based on the regression analysis, the study findings indicated that real estate investment significantly affected the insurance companies' financial performance in Nigeria. The study concluded by a suggestion that insurance organization should view real estate as an attractive investment asset and rather than cherry-picking manner investment in real estate, they start investing in the creation of comprehensive real estate submarket

Dabara, Odewande, Ikpeme and Olatunde (2016) evaluated the financial performance of investment in real estate and selected Nigeria based financial assets for 2005 and 2014. Estate Surveying and Valuation Firms records provided secondary data on direct real estate investments' capital/rental values. Further, Nigerian Stock Exchange data bank provided other selected assets' share prices and dividends. In determining the selected investment assets' inflation-hedging potentials and diversification, inferential and descriptive statistics were used. The study showed that investment in real estate gave the highest risk level (8.72%) and the

highest returns (22.48%) in the investment portfolio. It was concluded that the portfolios' risk-return characteristics could be improved by direct real estate inclusion and investment benefits provision from inflation-hedging potentials and diversification

Locally, Odhiambo (2015) conducted research in Kenya on real estate finance impact on listed banks' financial performance. The study followed a descriptive research style. Data was gathered from secondary sources, including annual reports from banks from 2013 to 2019. Descriptive statistics and panel regression analysis evaluated data. The study discovered that real estate lending has no meaningful impact on the publicly traded banks' financial performance.

Ojiambo (2014) conducted research on real estate investment impacts on NSE registered commercial banks' financial performance. A descriptive research style was followed. Secondary data was gathered from eleven publicly traded commercial banks' annual reports. To determine the relationship between the variables, descriptive and inferential statistics were embraced in data evaluation. The study disclosed that listed banks financial performance is positively influenced by financing real estate.

Rotich (2016) explored how real estate investment effects on the Kenyan pension funds' financial performance. The research design adopted was a descriptive survey of the pension funds registered by the RBA in Kenya. The research adopted a census of all the pension funds that have made real estate investments as at December 2015. The data was analysed using a multiple regression model. It was concluded that pension funds' return on investment is strongly and positively affected by real estate investment. pension funds' financial performance was positively and strongly affected by offshore real estate investments, pension funds return increases with an increment in investments in international markets though the investment proportion was minimal.

Mbogo (2016) aimed at determining how Kenyan investment groups (chamas) financial performance is affected by real estate investments. The study targeted 50 Nairobi based registered investment groups emphasizing on real estate property investments with descriptive research design being embraced. survey questionnaires were distributed to Nairobi based investment groups to obtain primary data. The results reported a positive correlation between investment in real estate and financial performance. The study made a conclusion that brainstorming should be done by investment groups in adopting investment strategies yielding higher returns and get advisory services to aid in managing real estate investments.

A research determining how the 49 Kenyan insurance companies' profitability and real estate investments were associated was done by Ratemo (2015) for the duration 2010 to 2014. Secondary data was obtained from the IRA, AKI and insurance company websites. The study adopted the use of descriptive research design. Data was sourced from both income statements and balance sheets to measure asset portfolio weights and profitability ratios of all the insurance companies. The study drew a conclusion that real estate investments ratio positively related to the profitability and total assets as gauged by ROE for Kenyan insurance companies for a duration of 5 years.

2.3.5 Investments in Fixed Deposits and Financial Performance

Globally, In Coimbatore Region, India, Parimalakanthi and Kumar (2015) assessed investment priorities and individual attitudes. gold and silver shares, fixed deposit account, savings account, government securities and corporate bonds were the investigated investment avenues. The study found that bank deposits were preferred by investors, followed closely by gold and silver investments.

Parimalakanthi and Kumar (2015) conducted a study on investment preference in Coimbatore City, India. The study embraced descriptive research design. Friedman test was used for data analyzing primary data. Investment avenues studied were; government securities, corporate bonds, insurance policies, real estate, saving account, and fixed deposit. The study concluded that investors prefer fixed deposits as a form of investment.

Regionally, Mella (2016) researched the financial soundness of pension funds, focusing on real estate and fixed deposits as an investment in Rwanda. The study found that universities invested heavily in investing in real estate, followed by investing in bonds. In the fixed deposit account, low investment levels were observed.

Locally, Kibet and Maina (2018) examined how profitability of deposit-taking SACCOs was influenced by investment in fixed deposit in Kenya. Cross-sectional survey method was deployed. All deposit-taking SACCOs in Kenya were included in the target population. Primary and secondary sources of information were used to compile the data. Descriptive and inferential statistics evaluated data. The study concluded that investment fixed deposit contributed positively to financial performance.

Jepkorir et al. (2019) conducted research on liquidity management and financial hardship in Kenyan savings and credit cooperatives. The survey was designed in a descriptive manner. Primary data was gathered from a target of 170 SACCOs regulated by SASRA. Data evaluation was by quantitative and qualitative analysis. Findings revealed that investment in fixed deposits have a very strong relationship with financial performance of SACCOs.

2.4 Conceptual Framework

According to Kombo and Tromp (2006), conceptual framework is a set of general concepts and principles drawn from relevant fields of inquiry and utilized to structure a presentation. The

dependent variable is Sacco's financial success, the independent variables; investment in real estate, investment in fixed deposits, shares and treasury bills and investment in FOSA activities. in fixed deposits, real estate, treasury bills, shares and FOSA activities.

Independent Variables

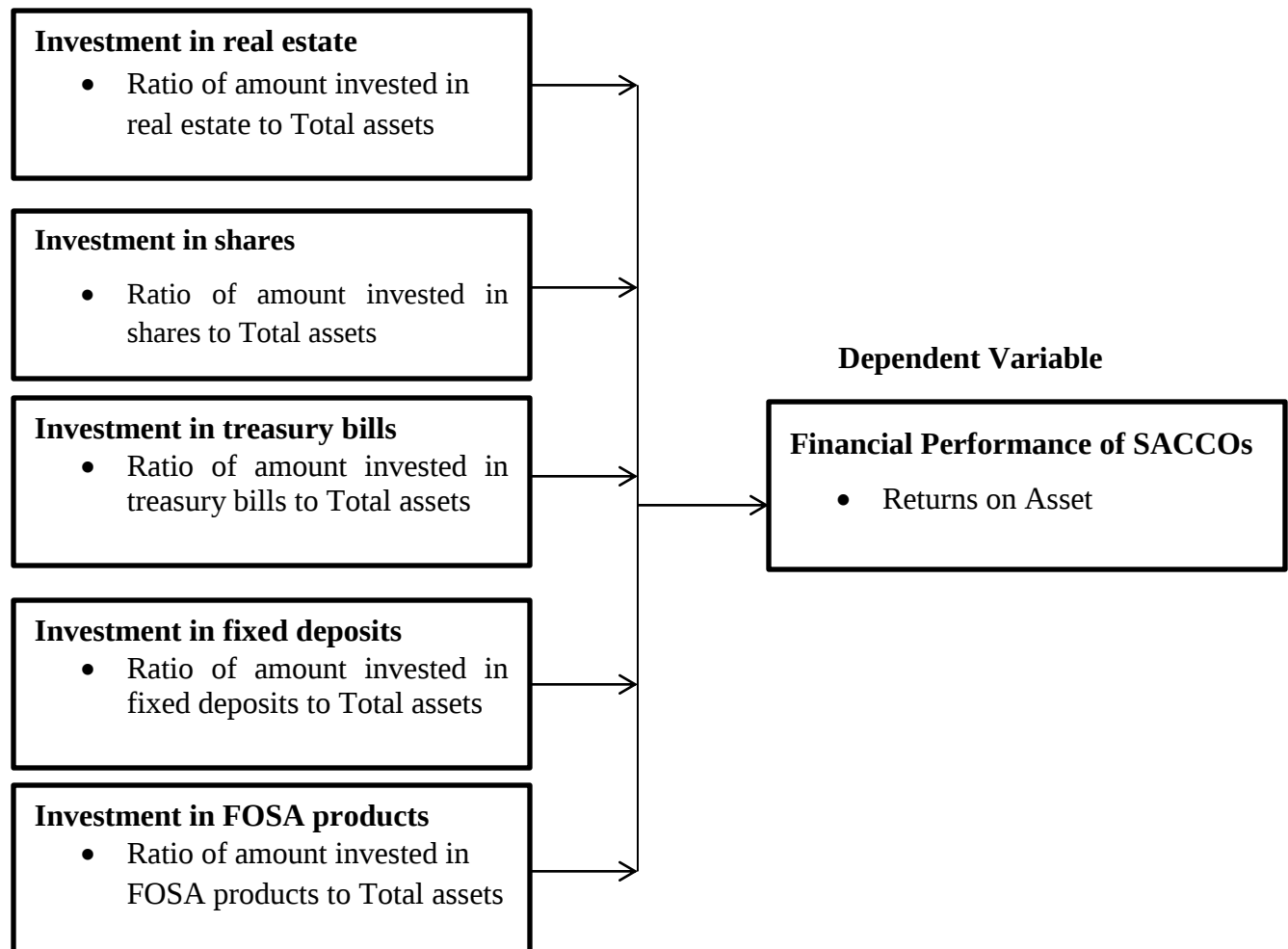


Figure 2.1: Conceptual Framework

Source: Researcher (2021)

2.4.1 Operationalization of Study Variables

Table 2.1: Operationalization of Study Variables

Variable	Nature of Variable	Measurement	Scale
Financial performance of SACCOs	Dependent	Returns on Asset	Ratio
Investment in real estate	Independent	Ratio of amount invested in real estate to Total assets	Ratio
Investment in shares	Independent	Ratio of amount invested in shares to Total assets	Ratio
Investment in treasury bills	Independent	Ratio of amount invested in treasury bills to Total assets	Ratio
Investment in fixed deposits	Independent	Ratio of amount invested in fixed deposits to Total assets	Ratio
Investment in FOSA products	Independent	Ratio of amount invested in FOSA products to Total assets	Ratio

Investment in fixed asset was measured by the ratio of amount invested in fixed asset to total asset. Investment in real estate was be measured by the ratio of amount invested in real estate to total asset. Investment in treasury bills was be measured by the ratio of amount invested in treasury bills to total asset. Investment in FOSA was be measured by the ratio of amount invested in FOSA products to total asset. Financial performance was be measured using ROA which shows the ability of management to make use of various assets available to them. The effect of these variables on financial performance was then be investigated.

2.5 Summary of Literature Review

Previous studies reveal that investment in non-core activities leads to improved financial performance (Muteke, 2015). Other studies have found that the link between non-core activities and financial performance was lessened by situational variables, such as poor management, inadequate resources and poor technology (Rotich et. al., 2015). Karagu (2015) revealed that investing in non-core activities has little effect on the financial performance of SACCOs. Other research, such as Alhassan (2015), indicated that, among other things, investing in non-core activities boosted SACCO performance.

Odhiambo (2015) studied how Kenyan NSE registered commercial banks' financial performance is impacted by real estate financing. The study only focused on banks and secondary data unlike the current study which will focus on both primary and secondary data on SACCOs. In his paper on revenue optimization, Mathuva (2016) said that SACCOs required to optimize revenue in order to be financially successful. The trend in revenue earnings created through FOSA operations has a direct impact on financial performance. This study however did not point out the relationship between FOSA activities and other variables such as lending and real estate, which was emphasized in this research.

Literature based on the specific study objectives which were bond investments effects on financial performance; effects of real estate investments on financial performance and impact of equity investment on financial performance were reviewed. The chapter discussed the literature in relation to how investment companies' financial performance is affected by portfolio diversification. The subsequent chapter introduced the research methodology including the research design that the study adopted, the research procedure, data collection methods and the analysis methods.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the approaches used to achieve the defined objective of the research. The research project began with Study design, population description, validity and reliability, data gathering procedures and analysis.

3.2 Research Design

This is a basic plan guiding the steps of collecting and analysing a study research's data collection and analysis. It offers the framework specifying the information type to be obtained, where it will be obtained from and the procedure for collecting it. Churchil and Iabonucci (2005) describes it as the blueprint adopted in completing a study, ensures relevance of the study to the problem, and adopts a procedure that is economical. Research design is the researcher's plan for achieving research objectives. It is a blueprint for conducting the research.

A descriptive research design was adopted. The design is used when the section of interest or population sample or a given population's characteristics and fact description are accurate and factual or the objectives are systematic. This research designs aims at uncovering the nature of factors in a specific circumstance, the level of existence and the association of the research variables (Mugenda & Mugenda, 2003). The design was suitable because the study aimed to analyze the effects of non-core business investment on the Kenyan DT- SACCOs' financial performance.

Kothari, (2008) defined research design as summary of the actual events engaged by an investigator in examining the connection between dependent parameters and independent

parameters. The researcher embraced descriptive research design which is essential given the scholar anticipates to gather information through description an extensive range of data crucial in defining variables. Bryman and Bell (2013) stated that through descriptive research design, a scholar can acquire data that defines prevailing phenomena by looking for information regarding specific perception. The choice of the method was influenced by its ability to produce accurate and precise results when describing events (Orodho, 2015).

3.3 Target Population

A population is an occurrence, persons or an element with unique recognizable attributes (Mugenda and Mugenda, 2003). Gall et. al. (2006) cites that, it entails the elements that have unique features, that the scholar is targeting to investigate and come up with statistical inference. The targeted study population was 174-deposit-taking SACCOs in Kenya (SASRA, 2020).

3.4 Sampling Technique

A census of all the 174-deposit-taking SACCOs in Kenya (SASRA, 2020) was used.

3.5 Data Collection

Secondary data was used. The information on non-core investments (Real estate, fixed deposits, shares, treasury bills, FOSA activities) and return on assets was obtained from SACCOs financial statements as well as SASRA reports. Data was collected for an interval of five years (2016 to 2020). Five years were chosen to ensure the research does not use outdated data. The period is also informed by the SASRA regulation on non-core business disclosure enacted in 2015, thus the research will examine the effect of its implementation from 2016.

3.6 Data Analysis

The obtained data was analyzed using correlation analysis, descriptive statistics and panel data regression analysis. Hausman Test was used to detect predictor variables in the regression model.

Predictor variables, also known as independent or endogenous variables are important because they determine the values of other variables, dependent. Mugenda and Mugenda (2003) averred that, descriptive statistics helps the researcher to achieve a meaningful description of the study's scores and measurements by using a limited number of statistics or indices. Panel data regression model was utilized in this analysis to evaluate the study variables were associated with the help of the SPSS. The panel data model was specified as follows; $Y_{it} = \alpha_i + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \hat{\epsilon}$ where, Y_{it} = Financial performance,

α = constant term, β_i = regression coefficient for X_i ($i = 1, 2, 3, \dots, 5$), X_i = non-core investments (Real estate, investment in fixed deposits, Investment in shares, treasury bills and FOSA activities) and $\hat{\epsilon}$ = error term. The analyzed data was displayed using pie charts and tables.

3.7 Diagnostic Tests

3.7.1 Multicollinearity Test

Multicollinearity occurs in a multivariate regression model when there are substantial intercorrelations between two or more independent variables (Farrar & Glauber, 2017). When it comes to the effect of independent variables in a mode, multicollinearity might result in larger confidence intervals, leading in fewer reliable probabilities. The reason for performing a multicollinearity test is to ensure that no collinearity exists between the predictor variables that have some sort of explanatory power over each other A Variance Inflation Factor (VIF) larger than 10 indicates the presence of multicollinearity, according to Field (2013). Multicollinearity impairs the dependability of multiple regression models by increasing the error of the coefficients as collinearity increases.

3.7.2 Normality Test

A normality test is a method of determining whether or not a sample of data was taken from a normally distributed population (Jarque & Bera, 2013). Testing for normality is used in measures to determine whether a knowledgeable group is likely to be distributed in a given variable and to determine whether the variability of the variance may be distributed based on the data collection (Jarque & Bera, 2013). The square coefficient of integration of the Pearson sample obtained from the points of the rank structure is the Shapiro-Wilk rating scale. The standard rule does not work because test statistics have lower values. The null hypothesis is supported by strong mathematical results. The p value of the test can be calculated using the value of R. Rejection of the null hypothesis was in the case that the p value is less than 0.05.

3.7.3 Homoscedasticity Test

Homoscedasticity defines a condition in which, over all values of the independent variables, the error term. The presumption of equal variances, that is, the assumption of homoscedasticity, implies that different samples, even though they come from different populations, have the same variance (Jensen, 2017). Yang and Chen (2019) reveals that in linear regression, which assumes the data is homoscedastic, the hypothesis of equal variances is also used. Homoscedasticity will be evaluated in this analysis using the Levene test, which is a test to verify that variances for all samples are equal when your data comes from a non-normal distribution. If, however, Levene's test is non-significant ($p > .05$), then the variances are roughly equal and the assumption is tenable.

3.7.4 Autocorrelation Test

Autocorrelation is the level of correlation through multiple observations in the data between the values of the same variables (White, 2015). Based on data in time series where occurrence of

observations at varying points in time, autocorrelation becomes commonly debated. In cross-sectional data, however, autocorrelation can also occur when the findings are related in some other way. According to Lobato, Nankervis and Savin (2018) regressions residuals based on autocorrelation may happen in a regression analysis when the model poorly defined. A popular method of autocorrelation testing is the Durbin-Watson test. The Durbin-Watson tests provide test statistics ranging from 0-4. Digits approaching 2 (mid-range) indicate that autocorrelation is less, while digits approaching to 0 or 4 show great autocorrelation in either positive or negative side.

3.7.5 Hausman Test

The Hausman Test (also called the Hausman specification test) detects endogenous regressors (predictor variables) in a regression model. Endogenous variables have values that are determined by other variables in the system (Torres-Reyna, 2017). Arendt, J. N. (2019) observe that having endogenous regressors in a model will cause ordinary least squares estimators to fail, as one of the assumptions of OLS is that there is no correlation between an predictor variable and the error term. Instrumental variables estimators can be used as an alternative in this case.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

The section highlights the analysis of data, the association between the research variables and analysis of results. To determine this, we will apply Hausman to help choose between FE and RE models. Inferential correlation is done to determine the connection between the variables, lastly there is a discussion of the analysis results. In addition, diagnostics tests were done. Secondary data was collected from the 174-deposit-taking SACCOS and then analyzed using panel data regression analysis.

4.2 Descriptive Statistics

Table 4.1: Descriptive Statistics

Variables		Min	Max	Mean	Variance	Standard Deviation
ROA		-261.29	23.199	2.464	386.78	19.667
Investment in Shares	in	3.31	107.70	44.63	357.95	18.919
Investment in Real Estate		1.740	11.580	8.532	11.831	3.440
Investment in FOSA	in	0.010	76.760	9.531	113.80	10.669
Investment in Fixed deposit		0.045	83.001	10.965	213.124	15.375
Investment in Treasury Bills	in	0.263	96.357	13.645	102.364	9.324

Source: Author (2022)

According to the Table 4.1, Return on assets has a 23.199 maximum and a -261.29 minimum of the degree of deviation of the variable from the main value. The standard deviation of ROA is 19.667. The financial performance of Kenyan DT-SACCOs is average of 2.46. Mwaura (2016), noted that several scholars have utilized various ratios in quantifying performance. These are: earnings per share (EPS), return on assets (ROA) and return on equity (ROE). The capability of an organization in generating income utilizing its assets is shown by

ROA while the management' efficiency in utilizing the resources of the shareholder is indicated by ROE.

Table 4.1 show that investment in shares had an 18.919 standard deviation and 44.63 mean. The standard deviation on investment in shares is high as compared to the investment in real estate (3.44), investment in FOSA (10.669), investment in fixed deposit (15.375) and investment in treasury bills (9.324). Investment in real estate had the lowest standard deviation from its 3.440 main value in comparison with the investment in shares, FOSA, fixed deposit and investment in treasury bills. The investment in real estate had a 11.580 maximum and a 1.740 minimum of extent of deviation from its main value. 3.440 is the degree of deviation of investment in real estate from the 8.532 mean value. Implying that a smaller number of the SACCOs risk of losses because of variations in ratio of amount invested in real estate to total assets and maybe other indicators with set values in such a market.

The above findings concur with Heather (2015) who studied real estate finance and the New York stock exchange listed banks' financial performance using five-year data from 11 commercial banks' annual reports and found that real estate finance affects the listed commercial banks' financial performance, observing that financial performance is notably impacted by mortgage investment. Investment in FOSA had a 76.76 maximum and 0.010 minimum level of deviation from its main value. 10.669 is the degree of deviation of investment in FOSA from the 9.351 mean value. Therefore, investment in FOSA is likely caused by the ratio of amount invested in real estate to total assets.

The above results are supported by Mathuva (2016) who noted that SACCOs needed to maximize on revenue generation. Institution's revenue earnings trends have a direct impact on

financial performance. Revenue from FOSA products contributes immensely towards revenue optimization. Investment in fixed deposit had an 83.001 maximum and 0.045 minimum level of deviation from its main value. 15.375 is the degree of deviation of fixed deposit from the 10.965 mean value. This therefore, means that investment in fixed deposit is likely caused by the ratio of amount invested in fixed deposits to total assets. This finding is in line with Parimalakanthi and Kumar (2015) who conducted a study on investment preference in Coimbatore City, India and the study concluded that investors prefer fixed deposits as an investment form.

The investment in treasury bills had a 96.357 maximum and 0.263 minimum level of deviation from its main value. 9.324 is the degree of deviation of investment in treasury bills from the 13.645 mean value. This therefore, means that investment in treasury bills is likely caused by ratio of amount invested in treasury bills to total assets. This finding concurs with Alhassan (2015) who carried out research on income diversification and Sacco's performance and discovered that SACCOs have considered advancing money to the government through treasury bills purchase as the most innovative investments.

4.3 Results of Diagnostics Statistics

4.3.1 Multi-collinearity Test Results

A multi-collinearity test was undertaken using Tolerance values and Value Inflation Factor (VIF) in determining collinearity level among the regression models' parameters. In a regression model, a more than 0.1 Tolerance and a less than 10 VIF demonstrates lack of multi-collinearity (Field, 2013). Table 4.2. displays the test results.

Table 4.2: Multi-collinearity Test Results

Variables	Collinearity Statistics	
	Tolerance	VIF
Investment in Shares	0.54	1.86
Investment in Real Estate	0.93	1.08
Investment in FOSA	0.60	1.66
Investment in Fixed deposit	0.81	1.56
Investment in Treasury Bills	0.64	1.26

Source: Author (2022)

Tables 4.2 indicates that, the VIFs and Tolerance values of the study variables are less than 10 and more than 0.10 respectively. Implying that the research variables are free of biases which may influence the decision of the scholar due to multi-collinearity.

4.3.2 Normality Tests

Ghasemi & Zahediasl (2012) states that “normality test compares the scores in the sample to a normally distributed set of scores with the same mean and the standard deviation.” Shapiro-Wilk test with values of 0 to 1 was done to test normality. Table 4.3 displays the test results. According to Field (2013), skewed data existence is indicated by values below 0.4 whereas normally distributed data is indicated by values nearer to 1.

Table 4.3: Normality Test

	Shapiro- Wilk test	
	Statistic	Significance
Investment in Shares	0.978	0.441
Investment in Real Estate	0.790	0.095
Investment in FOSA	0.764	0.063
Investment in Fixed deposit	0.678	0.085
Investment in Treasury Bills	0.831	0.082
Financial performance	0.735	0.059

Source: Author (2022)

The normality tests' null hypothesis posited that data was not normally distributed. The results demonstrate that all variables' p values were higher than 0.05. Shares investment had the largest significance of 0.441 and financial performance had the least, 0.059. Hence, at 95% confidence level, the residuals were not significant, resulting to the null hypothesis being rejected and concluded that the study data was distributed normally, hence, in making conclusions regarding the population, the data could be relied on.

4.3.3 Homoscedasticity Test Results

In testing homoscedasticity, Levene's test for variance homogeneity was used. The test confirms if the variance between the variables is the same. Levene (1960), states that, if the variances in the population are different, the equal variance null hypotheses are not supported. The assumption is tenable and variances are roughly equal if Levene's test is non- significant ($p > .05$).

Table 4.4. has the findings

Table 4.4: Homoscedasticity Test Results

	Levene statistic	Significance
Investment in Shares	.685	0.702
Investment in Real Estate	3.458	0.420
Investment in FOSA	2.152	0.053
Investment in Fixed deposit	2.684	0.072
Investment in Treasury Bills	4.085	0.642
Financial performance	14.140	0.220

Source: Author (2022)

The 6 Variables' significance were higher than 0.05. Shares investment had the greatest significance of 0.702 whereas Investment in FOSA had the least, 0.053. Hence, the variances were notably equal, since the significance levels were higher than 0.05. The null hypothesis is not rejected by the study since for all the variables, Levene's statistic is not significant. Hence, the assumption is tenable and variances are roughly equal.

4.3.4 Autocorrelation Test Results

Autocorrelation implies that the error terms of the empirical models are not independent of each other. To test if the data are correlated across time or suffer from autocorrelation problem, the Durbin-Watson test was used. Table 4.5 below has the results

Table 4.5: Autocorrelation Test Results

	Durbin Watson
Investment in Shares	1.922
Investment in Real Estate	1.828
Investment in FOSA	2.128
Investment in Fixed deposit	1.258
Investment in Treasury Bills	1.634
Financial performance	2.073

Source: Author (2022)

The findings demonstrate that the Durbin watson values were between 1.828 to 2.128. Durbin Watson statistics range between 0 to 4 where values closer to 0 or 4 is an indication of higher positive and negative correlation respectively and values closer to 2 – between 1.5 and 2.5 demonstrate independent observations (Garson, 2012). Hence, based on the recommendations by Garson (2012), there is no autocorrelation in the model’s residual thus inferential statistics can be done on the data

4.3.5 Hausman Test

This being panel data the study performed the hausman test for model specification between fixed and random effect model for return on assets, the Hausman test was used as presented in Table 4.6. The null hypothesis of the Hausman test was that there are no systemic differences between the estimates of the random effect model and the fixed effect model. Interpretation of Hausman test results is straightforward; if the p-value is small (less than 0.05), reject the null hypothesis.

Table 4.6: Hausman Test for Return on Assets

		Fixed (b)	Random (B)	Difference (b-B)	sqrt
Investment in FOSA products		-2.986118	-2.986118	-7.22e-13	0.0410677
Investment in treasury bills		0.60003	0.60003	3.36e-13	0.00266681
Investment in shares		-0.0227047	-0.0227047	-2.13e-12	0.0138897
Real estate investment		-0.0175812	-0.0846521	-3.41e-14	0.0267541
Fixed deposits investment		-0.1507542	-0.1035841	-1.22e-12	0.1005468

b= Consistent under H_0 and H_a ; obtained from xtreg

B= Inconsistent under H_a , efficient under H_0 ; obtained from xtreg

Test H_0 : differences in coefficients not systematic

$\chi^2(5) = (b-B)'[V_b - V_B]^{-1}(b-B) = 9.23$ Prob> $\chi^2 = 0.003$

Source: Author (2022)

In Table 4.6, for return on asset model, the Hausman test had a chi-square of 9.23 with a p value of 0.003 implying that at 5%, the chi-square value was statistically significant. And therefore H_0 was not rejected implying that there was no systematic difference between the estimates of the Random effects model and fixed effects model. Thus the fixed effects model was interpreted as recommended by Green (2008).

4.4 Inferential Statistics

4.4.1 Correlation Analysis

In establishing how the study variables were connected, Pearson correlation analysis was undertaken on the investment in shares, real estate, FOSA, fixed deposit, treasury bills and indicators of financial performance at significance level of 5%.

Table 4.6: Correlation Analysis

	ROA	Investment in Shares	Investment in Real Estate	Investmen t in FOSA	Investmen t in Fixed deposit	Investment in Treasury Bills
ROA	1.00					
Investment in Shares	0.123	1.00				
Investment in Real Estate	0.031	-0.123	1.00			
Investment in FOSA	0.084	.945	-0.112	1.00		
Investment in Fixed deposit	0.321	0.521	0.586	0.257	1.00	
Investment in Treasury Bills	0.378	0.647	-0.214	0.395	0.854	1.00

Source: Author (2022)

Table 4.6 results were to give spearman correlation coefficient ranging from -1 to +1, whereby -1 is total negative correlation, 0 is no correlation, and 1 is total positive correlation. There is a strong correlation if the results are greater than 0.8 and a weak correlation if the results are less than 0.5. Dropping one variable to avoid multi-collinearity problem ensures the variables are correlated. Independent variables are positively correlated with the return on assets

4.4.2 Regression Analysis

Below is the output for the regression analysis, with significant importance on the R^2

Table 4.7: Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.636 ^a	.805	.772	.454

Source: Author (2022)

The correlation coefficient was 0.805, illustrating that the independent variables (investment in shares, real estate, FOSA, fixed deposit and treasury bills) strongly connected with the financial

performance. Further, the R square value at 0.805 provides a goodness of fit measures. Table 4.3 also disclosed that the adjusted R^2 was 0.772. Demonstrating that of all differences in Kenyan DT-SACCOs' financial performance, 77.2% can be described by investment in shares, real estate, FOSA, fixed deposit and treasury bills, with the factors not included in the model describing the remaining 22.8%. Table 4.8. shows analysis of variance results.

Table 4.8: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.014	5	0.203	9.442	.000
	Residual	11.697	543	0.0215		
	Total	10.002	548			

Source: Author (2022)

The value 0.000 indicates a less than 0.05 significance level demonstrating the model's statistical significance on how investment in shares, real estate, FOSA, fixed deposit and treasury bills affected the Kenyan DT-SACCOs' financial performance. The results further display that F calculated value is greater than the F tabulated value was 9.442 which was greater as compared to F tabulated at 0.203. Therefore, it can be deduced that the model is statistically significant.

Table 4.9: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.741	.012		61.75	.000
	Investment in shares	0.703	.061	2.140	11.525	.001
	Investment in real estate	0.861	.142	1.964	6.063	.000
	Investment in FOSA	0.813	.141	3.277	5.765	.001
	Investment in fixed deposit	0.769	.367	1.463	2.095	.002
	Investment in treasury bills	0.796	.196	1.367	4.061	.001

Source: Author (2022)

The model was derived as $Y_{it} = 0.741 + 0.703X_{1it} + 0.861X_{2it} + 0.813X_{3it} + 0.769X_{4it} + 0.796X_{5it}$

Where,

Y = Financial Performance, X_1 = Investment in Shares, X_2 = Investment in real estate, X_3 = Investment in FOSA, X_4 = Investment in fixed deposit and X_5 = Investment in treasury bills. The outcomes illustrated in Table 4.9 is that 0.741 as the value of constant representing the value at which the financial performance of deposit-taking SACCOs in Kenya changes when investment in shares, real estate, FOSA, fixed deposit and treasury bills are kept at constant.

The study found that a 0.703 represented the amount by which the value at which the Kenyan DT-SACCOs' financial performance changes when investment in shares is changed by one unit keeping investment in: real estate, FOSA, fixed deposit and treasury bills constant. The t-value ($t = 11.525$, $p < 0.05$) illustrate that investment in shares have a significant positive effect on the Kenyan DT-SACCOs' financial performance. The hypothesis that investment in shares has no significant effect on the Kenyan DT-SACCOs' financial performance was thus rejected. This

concur with Musyoki (2011) on income diversification and SACCO's performance in Nairobi County who found a positive link between SACCOs financial performance and investment in shares.

The study found that a 0.861 represented the amount by which the value at which the Kenyan DT-SACCOs' financial performance changes when investment in real estate is changed by one unit keeping investment in: shares, FOSA, fixed deposit and treasury bills constant. The t-value ($t = 6.063$, $p < 0.05$) demonstrate a notable positive connection between investment in real estate and the Kenyan DT-SACCOs' financial performance. The hypothesis that investment in real estate has no significant effect on the Kenyan DT-SACCOs' financial performance was thus rejected. This finding is in agreement with a study by Heather (2015) on real estate finance and the New York stock exchange listed banks' financial performance using five-year data from 11 commercial banks' annual reports.

The study found that a 0.813 represented the amount by which the value at which the Kenyan DT-SACCOs' financial performance changes when investment in FOSA is changed by one unit keeping investment in: shares, real estate, fixed deposit and treasury bills constant. The t-value ($t = 5.765$, $p < 0.05$) demonstrate a significant positive connection between investment in FOSA and the Kenyan DT-SACCOs' financial performance. The hypothesis that investment in FOSA has no significant effect on the Kenyan DT-SACCOs' financial performance was thus rejected. The finding is in line with Aiyeye (2015) who carried out research on the influence of FOSA activities on Saving and Credit Corporative Society in Nigeria and revealed that FOSA products positively associated with SACCOs financial performance.

The study found that a 0.769 represented the amount by which the value at the Kenyan DT-SACCOs' financial performance changes when investment in fixed deposit is changed by one

unit keeping investment in: shares, real estate, FOSA and treasury bills constant. The t-value ($t=2.095$, $p<0.05$) illustrates a significant positive connection between investment in fixed deposit and Kenyan DT-SACCOs' financial performance. The hypothesis that investment in fixed deposits has no significant effect on the Kenyan DT-SACCOs' financial performance was thus rejected. The results concur with Kibet and Maina (2018) study that examined how profitability of deposit-taking SACCOs was influenced by investment in fixed deposit in Kenya and the study concluded that investment fixed deposit contributed positively to financial performance.

The study found that a 0.796 represented the amount by which the value at the Kenyan DT-SACCOs' financial performance changes when investment in treasury bills is changed by one unit keeping investment in: shares, real estate, FOSA and fixed deposit constant. The t-value ($t=4.061$ $p<0.05$) illustrate a notable positive relationship between investment in treasury bills and Kenyan DT-SACCOs' financial performance. The hypothesis that investment in treasury bills has no significant effect on the Kenyan DT-SACCOs' financial performance was thus rejected. The finding concurs with Waithira (2013) who studied how commercial bank performance in Kenya was affected by income source diversification and concluded that commission on loans, foreign exchange earnings and government securities income contributed positively to monetary performance of Kenyan banks.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the summary of findings, conclusions, recommendations and suggestions for further studies.

5.2 Summary of Findings

5.2.1 Non-core Business Investments

The study generally sought to ascertain the effect of non-core business investments on the Kenyan DT-SACCOs' financial performance. The study specifically looked at how investment in shares, investment in real estate, investment in FOSA, investment in fixed deposit and investment in treasury bills affects the Kenyan DT-SACCOs' financial performance. Secondary sources provided data and it was extracted from the SACCOs financial records. The findings are presented as follows: The first research objective sought to ascertain how investment in shares affected the Kenyan DT-SACCOs' financial performance. The study established that investment in shares had a significant positive effect on financial performance as indicated by $t\text{-value} = 6.063$ and $p < 0.05$. The study revealed that an increase in Kenyan DT-SACCOs' financial performance by 0.703 would be as a result of a unit change in investment in shares.

5.2.2 Investment in Real Estate

The second research objective tried determining the effect of investment in real estate on Kenyan DT-SACCOs' financial performance. The study found that investment in real estate significantly and positively affected Kenyan DT-SACCOs' financial performance as indicated by $t\text{-value} = 6.063$ and $p < 0.05$. The study revealed that an increase in Kenyan DT-SACCOs' financial performance by 0.703 would be as a result of a unit change in investment in real estate.

5.2.3 Investment in FOSA

The third research objective sought to determine the effect of investment in FOSA on Kenyan DT-SACCOs' financial performance. The study found out that investment in FOSA had a significant positive impact on Kenyan DT-SACCOs' financial performance as indicated by t-value =5.765 and $p<0.05$. The study revealed that an increase in Kenyan DT-SACCOs' financial performance by 0.813 would be as a result of a unit change in investment in FOSA.

5.2.4 Investment in Fixed Deposits

The fourth research objective sought to ascertain how investment in fixed deposits affected on Kenyan DT-SACCOs' financial performance. The study examined that investment in fixed deposit had a significant effect on financial performance as indicated by t-value =2.095 and $p<0.05$. The study revealed that an increase in Kenyan DT-SACCOs' financial performance by 0.813 would be as a result of a unit change in investment in fixed deposit. The fifth research objective tried determining the effect of investment in treasury bills on Kenyan DT-SACCOs' financial performance. The study examined that investment in treasury bills significantly and positively affected Kenyan DT-SACCOs' financial performance as indicated by t-value=4.061 and $p<0.05$. The study revealed that an increase in Kenyan DT-SACCOs' financial performance by 0.796 would be as a result of a unit change in investment in treasury bills.

5.3 Conclusions of the Study

The study concluded that investing in stocks provides attractive long-term returns. Issuing shares on a stock exchange can provide new capital, an exit for founding investors who want to realize their investment, a mechanism for investors to trade shares, a market valuation for the company, an incentive for employees to use shares or share options, an acquisition currency in the form of shares, and a way to increase the organization's profits. Investment in real estate allows an

organization to benefit from tax advantages and gain cash flow because the monthly income generated by rental properties can offset investors' expenses and return money to the organization. Rentals and home values rise in tandem with inflation, allowing the organization to hedge against it. Real estate is widely regarded as a great investment opportunity due to its ability to appreciate in value over time.

The study concluded that FOSA products improve financial performance by mobilizing savings. They accomplish this through various accounts that can be opened based on the SACCO members' qualifications. This is a strategy for growing Sacco membership and savings. If SACCOs use their savings prudently, they can increase their earnings and thus improve their financial performance. FOSA products include a variety of loan products to accommodate members with varying income levels. Investing in fixed deposits boosts the return of deposit-taking SACCOs in Kenya. Having a fixed deposit helps you develop a good saving habit by avoiding the temptation to withdraw your funds before the agreed-upon period.

Finally, the study concluded that treasury bills are a safe, short-term investment that provides an organization with returns after a relatively short period of time. Treasury bill rates in Kenya are appealing, providing an excellent investment opportunity that is readily available due to weekly auctions. Treasury bills are sold at a lower price. This means that investors select the amount they will receive when the bill matures, or its face value, and pay less than that amount when purchasing it.

5.4 Study Recommendations

The study recommended that investors who decide to invest in stocks should consider the long term, which means a 3-5-year time frame to maximize their investment. Investments in different companies should be considered for risk diversification. The study recommends that SACCOs

can invest in rental properties to generate regular income and capital appreciation while maximizing capital through leverage. SACCOs could invest in Real Estate Investment Groups (REIGs) to gain more hands-off income and appreciation than owning rentals.

SACCOs in Kenya should work on saving mobilization techniques for FOSA products in order to provide more information to current and potential members. They should develop and put in place revenue optimization systems. According to the study, SACCOs should focus more on their operational processes in order to improve their efficiency. To increase accessibility, SACCOs should expand their financial advisory services on the use of various FOSA loans by members.

The study recommended that the SACCOs should invest in short-term fixed deposits, and as short- to medium-term interest rates rise, the SACCO may begin to increase the duration of the Fixed Deposit to match. Contrast bank fixed deposits with corporate fixed deposits. Compare each one based on desired risk, interest rate, and tenure, and choose a fixed deposit only after weighing the benefits and drawbacks of various fixed deposits on the market. Choose multiple fixed deposits by dividing a large fixed deposit into smaller fixed deposits and booking them for different tenures.

Finally, the study recommended that SACCOs can buy short-term Treasury bills directly or through a bank or broker. If investors want to sell bonds before the maturity date, they must transfer them from Treasury Direct to brokerages or banks. The secondary market, money market accounts and ETFs are among some of the other ways to buy treasuries.

5.5 Study Limitations

Secondary data was relied on which could limit the research as officially produced statistics might illustrate biasness as a result of influential individuals limiting what is being sought and

the obtained documents might not reflect the population's true representation as a whole. The scholar curbed this through ascertaining the purpose of data collection and tried confirming the credibility where the data is being sought.

5.6 Suggestion for Further Studies

The regression model indicated that the factors not included in the model described the remaining 22.8%. Therefore, this study suggests that other studies should be done to address this gap. The study context was Kenyan deposit taking SACCOs and therefore the study suggests that another study can be done that focusing on other financial institutions in Kenya.

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APPENDIX I: LIST OF SACCOs IN NAIROBI COUNTY

NO. NAME OF SOCIETY

- 1 2NK SACCO
- 2 AFYA SACCO
- 3 AGRO-CHEM SACCO
- 4 AINABKOI SACCO
- 5 ALL CHURCHES SACCO
- 6 AIRPORTS SACCO
- 7 AMICA SACCO
- 8 ARDHI SACCO
- 9 ASILI SACCO
- 10 AZIMA SACCO
- 11 BANDARI SACCO
- 12 BARAKA SACCO
- 13 BARATON UNIVERSITY SACCO
- 14 BIASHARA SACCO
- 15 BIASHARA TOSHA SACCO
- 16 BI-HIGH SACCO
- 17 BINGWA SACCO
- 18 BORESHA SACCO
- 19 CAPITAL SACCO
- 20 CENTENARY SACCO
- 21 CHAI SACCO

- 22 CHUNA SACCO
- 23 COMOCO SACCO
- 24 COSMOPOLITAN SACCO
- 25 COUNTY SACCO
- 26 DAIMA SACCO
- 27 DHABITI SACCO
- 28 DIMKES SACCO
- 29 DUMISHA SACCO
- 30 ECO-PILLAR SACCO
- 31 EGERTON SACCO
- 32 ELGON TEACHERS SACCO
- 33 ELIMU SACCO
- 34 ENEA SACCO
- 35 FARIDI SACCO
- 36 FARIJI SACCO
- 37 FORTUNE SACCO
- 38 FUNDILIMA SACCO
- 39 GITHUNGURI DAIRY & COMMUNITY SACCO
- 40 GOOD HOPE SACCO
- 41 GOODWAY SACCO
- 42 GUSII MWALIMU SACCO
- 43 HARAMBEE SACCO
- 44 HAZINA SACCO

- 45 IG SACCO
- 46 ILKISONKO SACCO
- 47 IMARIKA SACCO
- 48 IMARISHA SACCO
- 49 IMENTI SACCO
- 50 JACARANDA SACCO
- 51 JAMII SACCO
- 52 JOINAS SACCO
- 53 KAIMOSI SACCO
- 54 KATHERA RURAL SACCO
- 55 KENPIPE SACCO
- 56 KENVERSITY SACCO
- 57 KENYA ACHIEVAS SACCO
- 58 KENYA BANKERS SACCO
- 59 KENYA HIGHLANDS SACCO
- 60 KENYA POLICE SACCO
- 61 KIMBILIO DAIMA SACCO
- 62 KINGDOM SACCO
- 63 KIPSIGIS EDIS SACCO
- 64 KITE SACCO
- 65 KITUI TEACHERS SACCO
- 66 KMFRI SACCO
- 67 KOLENGE TEA SACCO

- 68 KORU SACCO
- 69 K – PILLAR SACCO
- 70 K – UNITY SACCO
- 71 KWETU SACCO
- 72 LAINISHA SACCO
- 73 LENGU SACCO
- 74 MAFANIKIO SACCO
- 75 MAGADI SACCO
- 76 MAGEREZA SACCO
- 77 MAISHA BORA SACCO
- 78 MENTOR SACCO
- 79 METROPOLITAN NATIONAL SACCO
- 80 MMH SACCO
- 81 MOMBASA PORT SACCO
- 82 MUDETE TEA GROWERS SACCO
- 83 MUKI SACCO
- 84 MWALIMU NATIONAL SACCO
- 85 MWIETHERI SACCO
- 86 MWINGI MWALIMU SACCO
- 87 MWITO SACCO
- 88 NACICO SACCO
- 89 NAFKA SACCO
- 90 NANDI FARMERS SACCO

- 91 NATION SACCO
- 92 NAWIRI SACCO
- 93 NDEGE CHAI SACCO
- 94 NDOSHA SACCO
- 95 NG'ARISHA SACCO
- 96 NOBLE SACCO
- 97 NRS SACCO
- 98 NSSF SACCO
- 99 NUFAIKA SACCO
- 100 NYALA VISION SACCO
- 101 NYAMBENE ARIMI SACCO
- 102 NYAMIRA TEA FARMERS SACCO
- 103 NYATI SACCO
- 104 NEW FORTIS SACCO
- 105 OLLIN SACCO
- 106 PATNAS SACCO
- 107 PRIME TIME SACCO
- 108 PUAN SACCO
- 109 QWETU SACCO
- 110 RACHUONYO TEACHERS SACCO
- 111 SAFARICOM SACCO
- 112 SHERIA SACCO
- 113 SHIRIKA SACCO

- 114 SIMBA CHAI SACCO
- 115 SIRAJI SACCO
- 116 SKYLINE SACCO
- 117 SMART CHAMPIONS SACCO
- 118 SMART LIFE SACCO
- 119 SOLUTION SACCO
- 120 SOTICO SACCO
- 121 SOUTHERN STAR SACCO
- 122 SHOPPERS SACCO
- 123 STAKE KENYA SACCO
- 124 STIMA SACCO
- 125 SUBA TEACHERS SACCO
- 126 SUKARI SACCO
- 127 SUPA SACCO
- 128 TABASAMU SACCO
- 129 TAI SACCO
- 130 TAIFA SACCO
- 131 TAQWA SACCO
- 132 TEMBO SACCO
- 133 TENHOS SACCO
- 134 THAMANI SACCO
- 135 TRANSCOUNTIES SACCO
- 136 TRANS NATION SACCO

- 137 TIMES U SACCO
- 138 TOWER SACCO
- 139 TRANS – ELITE COUNTY SACCO
- 140 TRANSNATIONAL TIMES SACCO
- 141 UFANISI SACCO
- 142 UKRISTO NA UFANISI WA ANGLICANA SACCO
- 143 UKULIMA SACO
- 144 UNAITAS SACCO
- 145 UNI–COUNTY SACCO
- 146 UNITED NATIONS SACCO
- 147 UNISON SACCO
- 148 UNIVERSAL TRADERS SACCO
- 149 VIHIGA COUNTY FARMERS SACCO
- 150 VIKTAS SACCO
- 151 VISION POINT SACCO
- 152 VISION AFRICA SACCO
- 153 WAKENYA PAMOJA SACCO
- 154 WAKULIMA COMMERCIAL SACCO
- 155 WANA – ANGA SACCO
- 156 WANANCHI SACCO
- 157 WANANDEGE SACCO
- 158 WASHA SACCO
- 159 WAUMINI SACCO

- 160 WEVARSITY SACCO
- 161 WINAS SACCO
- 162 YETU SACCO
- 163 JITEGEMEE SACCO
- 164 NANDI HEKIMA SACCO.
- 165 NANYUKI EQUATOR SACCO
- 166 RACHUONYO TEACHERS SACCO
- 167 KOSELE SACCO
- 168 NYAMIRA TEA FARMERS SACCO
- 169 NYAMIRA SACCCO
- 170 STAKE KENYA SACCO SOCIETY LTD
- 171 KEHANCHA SACCO
- 172 WEVARSITY SACCO SOCIETY LTD
- 173 UCHONGAJI SACCO
- 174 JUMUIKA SACCO SOCIETY LTD

(SOURCE: SACCO SOCIETY REGULATORY AUTHORITY, 2020)

APPENDIX II: DATA COLLECTION FORM

SACCO NAME	YEAR	TOTAL ASSET	AMOUNT INVESTED IN REAL ESTATE	AMOUNT INVESTED IN SHARES	AMOUNT INVESTED IN TREASURY BILLS	AMOUNT INVESTED IN FIXED DEPOSITS	AMOUNT INVESTED IN FOSA	ROA (RETURN ON ASSET)
1	2016							
	2017							
	2018							
	2019							
	2020							

APPENDIX III: RESEARCH BUDGET

	Description	Quantity	Cost Per Unit	Amount (KES)
1	Project development	Reading materials	N/A	NA
2	Labour cost for research Assistant	5 days	2,000@ day	10,000/=
4	Printing and Binding	5*2 copies	1,000/=	10,000/=
5	Miscellaneous	1	10%	5,000
	TOTAL			25,000/=

APPENDIX IV: WORK PLAN

	Research Activities	Month in 2020/2021						
		Oct 20–Mar 21		April – Sept 21		Oct - Nov 21		
1.	Develop a project							
2.	Fine tune project							
3.	Data collection							
4.	Data analysis							
5.	Prepare the initial draft report							
6.	Submit initial report							
7.	Research correction							
8.	Defense							
9.	Revision and Submission							
10.	Consulting the Supervisor							

APPENDIX V: INTRODUCTION LETTER

BRIAN AMOS ASUMA

P.O BOX 7105 - 40100

KISUMU

Date.....

SACCO NAME.....

P.O BOX....

Nairobi.

Dear Sir/Madam,

RE: ACADEMIC RESEARCH DATA COLLECTION

This is to seek permission to carry out my academic research project in your SACCO within Kenya.

I am a bona fide student from KCA University undertaking a Master's of Science degree (Finance) who is pursuing a research project entitled; "EFFECTS OF NON-CORE BUSINESS INVESTMENTS ON FINANCIAL PERFORMANCE OF DEPOSIT-TAKING SAVING AND CREDIT CO-OPERATIVE SOCIETIES IN KENYA." A structured questionnaire has been formulated to assist in the collection of data from respondents (Management). The data collected will be treated with the utmost confidentiality and none will be shared or used for any other purpose other than for academic research without your permission.

Attached herewith is a copy of the questionnaire to be used for data collection. I am waiting for your positive feedback on the same.

Yours sincerely,

BRIAN ASUMA