

**EFFECT OF ASSET PERFORMANCE MANAGEMENT ON
PROFITABILITY OF DEPOSIT TAKING SACCOS IN NAKURU COUNTY**

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Studies in the College of Human Resource Development in Partial Fulfillment of
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Jomo Kenyatta University of Agriculture and Technology**

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DECLARATION

This research project is my original work and has not been submitted for examination to any other university.

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This research project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

I dedicate this project to my parents, Mr and Mrs Kilisio whose wish was for me to take this course, for moral and inspirational support they provided to me during my studies. Dedication also goes to siblings; Mercy, Veronicah and Wycliffe for their encouragement and making my studies possible.

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ABSTRACT

Sound asset performance management is a prerequisite for a financial institution's stability and continuing profitability, while deteriorating asset performance management is the most frequent cause of poor financial performance and condition. SACCOs must therefore ensure that the management of asset performance is efficient and effective. The study was guided by four variables; loan performance management, fixed assets management, financial investments management, and accounts receivables management. This study was anchored on four theories; Capital Asset Pricing Model, Modern Portfolio Theory, Inventory Development Model, and Operating Cycle. The study used explanatory research design, stratified proportional sampling and random sampling technique. The study used both primary and secondary data. Primary data was collected using structured questionnaires. The target population was branch and operations managers from each of the Saccos in Nakuru and management staff from various departments of the Deposit Taking SACCOs from the main office. Data was analyzed using descriptive statistics including, frequencies, mean and standard deviations and inferential statistics methods including correlation coefficient and with the assistance of SPSS as the tool of analysis. The research findings indicate there exist a significant positive correlation between loan performance management and profitability of deposits taking Saccos in Nakuru County($r=0.866$, $p<0.05$), and a statistically significant positive relationship between loan performance and profitability of deposits taking Saccos in Nakuru County($\beta = 0.316$, $p<0.05$). A significant moderate positive correlation exist between fixed assets management and profitability of deposits taking Saccos in Nakuru County($r=0.645$, $p<0.05$), a statistically significant positive relationship exist between fixed assets management and profitability of deposits taking Saccos in Nakuru County($\beta = 0.206$, $p<0.05$). The results indicate that there is a significant moderate positive correlation between financial investments management and profitability of deposits taking Saccos in Nakuru County($r=0.622$, $p<0.05$). A statistically significant positive relationship between financial investments management and profitability of deposits taking Saccos in Nakuru County was also established ($\beta = 0.336$, $p<0.05$). There exist a significant moderate positive correlation between accounts receivables management and profitability of deposits taking Saccos in Nakuru County($r=0.782$, $p<0.05$). It was established that there exists a statistically significant positive relationship between accounts receivables management and profitability of deposits taking Saccos in Nakuru County($\beta = 0.256$, $p<0.05$). Conclusions can be made that loan performance management, fixed assets management, financial investments management and accounts receivables management have a significant effect on profitability of deposit taking Saccos in Nakuru County. It can be concluded that fixed assets management has a significant effect on profitability of deposit taking Saccos in Nakuru County. It was recommended that Managers should increase the frequency and level of loan performance assessment due to the fact that it was found to be the most significant in enhancing Saccos profitability. The transaction costs involved in accounts receivables should also be kept at a minimum as these also affect the profitability of the Sacco.

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ACRONYMS AND ABBREVIATIONS

CBK	Central Bank of Kenya
CDB	Collins Dictionary of Business
DFID	Department for International Development
DTS	Deposit Taking SACCOs
EOQ	Economic Order Quantity
ESRC	Economic and Social Science Research Council
FSD	Financial Sector Deepening
GDP	Gross Domestic Product
ICA	International Co-operative Alliance
ICMA	International Conference of Multidisciplinary Academic
IMF	International Monetary Fund
KUSCCO	Kenya union of Savings and Credit Cooperatives Ltd
MFI	Microfinance Institution
SACCOs	Savings and Credit Cooperative Societies
SASRA	SACCO Societies Regulatory Authority
WB	World Bank
WOCCU	World Council of Credit Unions

DEFINITION OF TERMS

Accounts Receivables Management Accounts Receivables Management refers to the set of policies, procedures and practices employed by an entity respect to managing goods or services on offered credit. (HTMW Team, 2013). In this study accounts receivables management entails dealing with or controlling loans given to customers whose date of repayment has matured.

Asset Performance Management Asset performance management is a systematic process of deploying, operating, maintaining, upgrading, and disposing of assets cost-effectively. Asset performance refers to a business's ability to take productive resources and manage them within its operations to produce subsequent returns (ICMA, 2017). The study adopted this meaning.

Deposit Taking Saccos (DT Saccos) Saccos licensed and regulated by SASRA while non-Deposit Taking Saccos are supervised by the Commissioner for Co-operatives. SASRA licenses Saccos that have been duly registered under the Cooperative Societies Act CAP 490 (SASRA, 2015). The study adopted this meaning.

Financial Investments Management is dealing with or controlling an asset that you put money into with the hope that it will grow or appreciate into a larger sum of money. A few of the most common types of financial investments are Certificates of deposits, stocks and bonds, which pay interest to the owners (Mukesh & Dinesh 2014). The study adopted this meaning.

Fixed Assets Management is process of dealing with or controlling, that seeks to maintain fixed assets in the acquisition process, efficient utilization and proper disposal of such fixed assets. (Zhang, L., & Zhang, W. X., 2009). The study adopted this meaning

Loan Performance Management Effective management of loan portfolio and the credit function. It's a process of by which risks that are inherent in the credit process are managed and controlled. (Comptroller, 1998). The study adopted this meaning

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The Sacco sector has globally experienced growth and diversification in the range of products and services that the sector provides in the market. Sacco's have been recognized worldwide as important avenue of economic growth. Close to a billion people are affiliated with co-operatives in different parts of the world. Many countries that have achieved economic development have a vibrant and dynamic cooperative sector which contributes substantially to the growth of those economies (Clement, 2012). The World Co-operative Monitor has revealed a global turnover of 2.2 trillion USD for the world's top 300 co-operatives. Co-operatives generate partial or full-time employment for at least 250 million individuals worldwide, either in or within the scope of co-operatives, making up almost 12% of the entire employed population of the G20 countries (ICA, 2015).

According to a study by Eurofinas (2016), European consumer credit providers, granted new loans worth €456.6 billion in 2016, an increase of 10.7% compared to 2015. The results of the Eurofinas 2016 Annual Survey shows increases in new business across all lending categories, with particularly strong growth in personal loans and used vehicles.

In Uganda, the Uganda Co-operatives and Savings Credit Union, which seeks to be the country's Sacco umbrella body is still financially weak while Banque Populaire du Rwanda, which started as a credit society, has turned out to be one of the region's success stories although many others, including those being supported by the government are faced with governance and administrative challenges. In Tanzania, by March 2013 of the national total of 9,700 registered cooperatives, 5,559 were SACCOs, with 45% in urban areas – an increase from 5,344 in 2011. They included 1,153,248 members, representing about 25% of clients in the financial sector (both formal and semi-formal organizations) (WB 2013).

In Kenya, SACCOs as a subset of the wider cooperatives have further expanded in the types of savings and credit financial services that they offer to their membership. Key

among these financial services is the venturing into the deposit-taking financial business, similar to the one undertaken by commercial banking institutions except for the fact that, such deposits are taken from members.

This expansion of the financial services to deposit taking led to the emergence of the Deposit Taking Sacco Societies (DT-SACCOs), thereby giving rise to two clusters of SACCOs namely the Deposit-Taking segment (DT-SACCOs) and the non-deposit-taking segment (non- DT-SACCOs). It is important to underscore that this is unlike other jurisdictions where there is no distinction between deposit-taking and a non-deposit taking SACCOs. For instance all Credit Unions in USA, UK & Ireland, Brazil, and Latin America are by law authorized to take deposits from their members; and so it is with the Cooperative Banks in South Africa, India, and continental Europe etc.

In order to remain competitive in the ever changing global market, SACCOs have to be prudent in managing their assets (Sagwa and Kambu, 2016). Asset management is a very important component of corporate finance because it directly affects the liquidity, profitability and growth of a business and is important to the financial health of businesses of all sizes as the amounts invested in working capital are often high in proportion to the total assets employed. The management of short-term assets is as important as the management of long-term financial assets, since it directly contributes to the maximization of a business's profitability, liquidity and total performance. Consequently, businesses can minimize risk and improve the overall performance by understanding the role and drivers of working capital (Nyabwanga, 2011). According to Levine (2008), assets strongly determines the performance of any financial institution because it increases interest income and reduce the cost burden of bad debt management at the same time by law, banks are expected to keep aside cash deductible as an expense so as to cushion the institution against bad debts and other loan defaults (Ombaba, 2013).

SACCOs just like any other financial institution, rely on assets to earn higher returns and thereby increasing their financial soundness hence profitability. Asset performance management can be measured/weighed through loan performance management, fixed assets management, financial instruments management and accounts receivables management. Loans remain the key asset of Deposit Taking

SACCOs because the core business of DT-SACCOs is the mobilization of savings and advancement of credit to members. The fact that loans and credit advances constitute a huge portion of the assets of DT-SACCOs makes a continuous assessment of the quality and performance of loans very critical in determining the financial soundness, safety and wealth maximization of shareholders/members as well as general profitability of DT-SACCOs. Fixed assets management involves managing investments properties (land and buildings), property and equipment (including land and buildings reserved for own usages), prepaid lease rentals and intangible assets. If fixed assets are not earning expected returns, profitability may be unforeseen.

Financial investments management in the DT-SACCO system is composed of overseeing investments in securities, companies and deposits held with other cooperative societies. As a precursor towards the establishment of a central liquidity facility for the DT-SACCO system, participation of the national payment systems, and the operationalization of inter-borrowing among DT-SACCOs, it is imperative that DT-SACCOs are sensitized to increase their investments in government securities which are in almost all cases the acceptable statutory collateral for such initiatives as liquidity support from government or the facilitation of an inter-SACCO borrowing framework. Such investments would earn returns for the SACCO.

Accounts receivables are amounts owed or due to the SACCO excluding member loans. These are for instance; retirement benefit assets, deferred tax assets, tax recoverable, medical fund assets. With such amounts, the SACCOs are able to earn returns through re-investments and for liquidity purposes as well. These are under the Accounts receivables management.

1.1.1 Asset Performance Management

Asset performance refers to a business's ability to take productive resources and manage them within its operations to produce subsequent returns. Asset performance is typically used to compare one company's performance over time or against its competition. Asset performance management is a systematic process of deploying, operating, maintaining, upgrading, and disposing of assets cost-effectively. The term is most commonly used in the financial sector to describe people and companies that manage investments on behalf of others. The objective of Asset Performance Management (APM) is to deliver comprehensive, real-time views of your

organization's infrastructure performance, so that you have the ability to drive forward-looking decisions.

These objectives include; enhancing loan performance management, fixed asset management, financial investments management, accounts receivables management as well cash and cash equivalents management.

The main focus include streamlining the asset planning process; improving the quality of asset management reports, budgeting optimally between capital works, maintenance, and renewals so as to meet the greatest need, aligning the organization for tighter operational execution in relation to strategic goals, keeping stakeholders, analysts, and executives better informed of your organization's operational status, and ensuring the organization's infrastructure investments are being used to their maximum efficiency and effectiveness (ICMA, 2017).

1.1.2 Deposit Taking SACCOs in Nakuru County

Cooperative societies are an autonomous association of persons united voluntarily to meet their common economic and social needs through jointly owned and democratically controlled enterprises, which are organized and operated under the principles of cooperatives (ICA, 2005). They are embodied in the values of self-help, honesty, openness, self-responsibility, social responsibility, democracy, quality, equity, solidarity, mutual caring, efficiency, transparency and accountability (Okello, 2006; ICA, 2005). Generally, cooperatives are community institutions voluntarily and autonomously established and managed by the communities, and also give services for the local communities. SACCOs have the ability and opportunity to reach clients in areas that are unattractive to banks, such as rural or poor areas (Clement, 2012). This has made SACCOs more attractive to customers, thus deeply entrenching themselves in the financial sectors of many countries (Munyiri, 2006).

SACCOs form a vital part of Kenya's financial system. Kenya has the most vibrant and dynamic Sacco sectors in Africa. They range from agricultural and livestock co-operative societies in the rural areas to the savings and credit co-operatives in the urban centers (ICA Report, 2013). Deposit-taking Sacco Societies (DT-SACCOs) is a segment of the wider SACCO sub-sector in Kenya. The wider Sacco sub-sector comprises the deposit-taking (DT-SACCOs) and the non-deposit taking Sacco Societies.

The non-deposit taking segment is composed of those Sacco Societies whose businesses are limited to the mobilization of non-withdrawable deposits for purposes of lending to their members. These non-withdrawable deposits are not withdrawable during the subsistence of the membership to the Sacco Society, but may be used as collateral for the lending to the member and only refunded upon the cessation of such membership. These Sacco Societies are currently supervised under the legal frameworks of the Cooperative Societies Act which is domiciled at the office of the Commissioner for Cooperative Development.

The deposit-taking (DT-SACCOs) segment of the sub-sector is composed of those Sacco Societies which undertake both withdrawable and non-withdrawable deposits. Whereas the non-withdrawable deposits portion of the business may be used as collateral and are not refundable unless on cessation of membership from the Sacco Society, the withdrawable deposits portion of the business can be accessed by the members at any time, hence are demand deposits.

The Sacco Societies Act and Regulations 2010 made thereunder however apply only to deposit taking Sacco Societies (DT-SACCOs), and the Authority's supervisory and regulatory mandate is thus limited to deposit-taking Sacco Societies (DT-SACCOs) only.

Even though it was envisioned in Section 3(2) of the Sacco Societies Act that certain specified non-deposit taking Sacco Societies would by regulations be brought aboard its supervisory framework, such regulations specifying the non-deposit taking Sacco Societies in respect of which it would apply have not been made.

While as a whole the sector is much smaller in absolute terms than the banks – accounting for an estimated approximately 10% of the assets in deposit-taking intermediaries – the significance is far greater. SACCOs provide services to three million Kenyans and frequently offer services which cannot be found elsewhere. A total of 21 of deposit taking Saccos in Kenya held assets worth more than Ksh2.07 billion (\$24.3 million), which was the total asset base of Jamii Bora Bank, one of the smallest banks in the country. Comparatively, CBK data shows that deposits in the banking sector increased by 14.2 per cent to Ksh1.76 trillion (\$20.48 billion) as at the end of December 2012 from Ksh1.54 trillion (\$18.12 billion) as at the end of

December 2011 supported by aggressive mobilization of deposits by banks, remittances and receipts from exports (CBK, 2013).

In rural areas many farmers depend on their SACCOs for credit and payment services. As user-owned institutions they provide an important alternative institutional form to banks. Global experience from the financial crisis of 2007/08 suggests that this diversity can contribute to resilience. With the expansion of Kenya's financial system over the last two decades the SACCOs sector has also developed significantly. As Jared (2013) asserts, the cooperative form is therefore regarded as having enormous potential for delivering pro-poor growth that is owned and controlled by poor people themselves. Nevertheless it is recognized that, lacking in capital and business management capacity, cooperatives have had a rather disappointing history in developing countries (Birchall, 2004). There is an argument then that it is the broader characteristics of cooperative organization such as social ownership, people-centered objectives and their community base, rather than their precise organizational form should be advocated.

1.2 Statement of the Problem

Kenya's experience with the financial reform process shows a widening growth in the non-performing assets which has been a hindrance to the development of financial sector including Saccos thus negatively contributing towards the growth of the Kenyan economy. The Saccos responsibility of closely monitoring the assets performance has proven to be quite tasking owing to theoretical foundations on the impact that assets performance management has on the profitability of the financial institutions. According to SASRA (2016) Supervision Report, the level of non-performing assets in the form of financial investments and accounts receivables have been surging with financial investments recording ratios from 4.37% in 2014, to 6.00 in 2015 to 3.83% in 2016 while Accounts Receivables recorded ratios from 6.01% in 2014, to 5.55 in 2015 to 4.92% in 2016. This high level of non-performing assets continues to be an issue of major supervisory concern in Kenya. It is accepted that the low quantity or the high ratios of non-performing assets (NPAs) to gross assets is often associated with financial institutions failures and financial crises in both developing and developed countries (Caprio and Klingebiel, 2002). A number of studies have been undertaken both locally and internationally on the topic of assets

performance management and quality. Woodhouse (2007), there is need for effective asset management which represents the sustained best mix asset care (maintenance and risk management) and asset exploitation (use of asset to achieve some corporate objectives or performance benefit). Adnan (2012) investigated the effects of management of assets quality on the value of shareholders and profitability. From this study, it was clear that a bank's assets quality indicates a collective positive impact on profitability and shareholders' value in Jordanian listed banks. Investment decisions made by the management of cooperatives should lead to their increased growth, reduced risks and high survival rate. However, of critical concern to both practitioners and academia is that the investment culture for the cooperative sector in Kenya is very low (Onchangwa, Ongoncho, Onchonga, and Njeri 2013). It is also pointed out by Clement, Martin, & Ambrose (2012), that SACCOs have been faced with the challenge to build enough wealth, through accumulation of institutional capital, which has been attributed to weak financial stewardship, inappropriate capital structure and imprudent funds allocation strategy and inefficiency in asset performance management. The significance of SACCO's to the Kenyan economy is further evidenced by inclusion in the Vision 2030 economic blue print (Kioko, 2014). Given their significance in the financial sector, poverty alleviation and wealth maximization, it is important to investigate the effect of asset performance management in order to provide accurate and consistent assessment of deposit taking SACCOs' financial conditions and operations in earning profits. It is within the researcher's knowledge that no research has been done on the effect of asset performance management on profitability of deposit taking Saccos. Therefore this study seeks to establish the effect of asset performance management on profitability of deposit taking Saccos in Nakuru County, Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study was to determine the effects of asset performance management on profitability of deposit taking SACCOS in Nakuru County.

1.3.2 Specific Objectives

The study was based on the following objectives:

- i. To establish the effect of loan performance management on profitability of deposit taking SACCOs in Nakuru County.
- ii. To assess the effect of fixed assets management on profitability of deposit taking SACCOs in Nakuru County.
- iii. To establish the effect of financial investments management on profitability of deposit taking SACCOs in Nakuru County.
- iv. To establish the effect of accounts receivables management on profitability of deposit taking SACCOs in Nakuru County.

1.4 Hypotheses

The following hypotheses were formulated and tested:

- Ho₁: loan performance management has no significant effect on performance profitability of deposit taking SACCOs in Nakuru County.
- Ho₂: Fixed assets management has no significant effect on profitability of deposit taking SACCOs in Nakuru County.
- Ho₃: Financial investments management has no significant effect on profitability of deposit taking SACCOs in Nakuru County.
- Ho₄: Accounts receivables management has no significant effect on profitability of deposit taking SACCOs in Nakuru County.

1.5 Significance of the Study

The study is significant to the management of deposit taking SACCOs in Kenya in regard to development of asset performance management strategies and help them remain financially sound in the industry as so achieve their objectives of improving the living standards of their members.

The study is also significant to the government in formulation and implementation of stronger regulatory frameworks with regard to asset performance management by deposit taking SACCOs. This thus, leads to better protection of members'/depositors' funds while enhancing the SACCOs' financial performance and stability.

Finally, the study adds to the body of knowledge on asset performance management and profitability of deposit taking SACCOs in Kenya and other parts of the world.

Thus scholars and other researchers are able to get information on the subject especially in regard to Kenya in the study report.

1.6 Scope of the Study

In carrying out this study which focused on the effects of asset performance management on profitability of deposit taking SACCOs. The target population for the study was branch and operations managers from each of the Saccos in Nakuru and management staff from various departments of the Deposit Taking SACCOs from the main office including but not limited to heads of departments including marketing and customer care, internal audit and compliance, finance and strategy, ICT, procurement, Treasury and investment as well as human resources departments. The study was limited to researching on the effects of asset performance management on profitability of deposit taking Saccos in Nakuru County. It was carried out between the month of December 2017 and April 2018 and the budget utilized was Kenya Shillings 65,200.

1.7 Limitation of the Study

Mugenda & Mugenda (2003) explain that limitations are aspects of a research that may influence the results of the study but over which the researcher has no control. During the research study the researcher encountered several challenges while issuing the questionnaire and collecting the findings.

For one, the respondents were unwilling to fill the questionnaire citing some form of intimidation or being reprimanded by their superiors if they have to provide sensitive information. Some respondents after being convinced of the confidentiality measures that the researcher had employed cited that the filling of the questionnaire was time consuming and yet they had a lot of work to do.

Another challenge encountered by the researcher, was that in some Saccos some respondents were generally unwilling to fill the questionnaire as they had, 'nothing to gain upon filling the questionnaire.' In summary, most of the respondents would be adamant to fill the questionnaire citing confidentiality but after convincing them that they need not to write their names or that of the Sacco (as it were optional), they would go ahead and fill them.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter examines the existing theoretical as well as empirical literature on asset performance management and profitability. It also included a representation of the study variables in form of a conceptual framework. The chapter concludes with a summary and gaps identified in the literature.

2.2 Theoretical Review

2.2.1 Capital Asset Pricing Model Theory

The Capital Asset Pricing Model Theory was developed by Sharpe (1964) and refined by Linter (1965) and Black (1972). This model explains that investors must diversify their portfolios and that they must possess a given fraction of the bank's market portfolio. Investors without special investment knowledge are advised to hold diversified portfolios. This is called efficient markets hypothesis (Black, 1971). All investors need high levels of assurance of expected returns so as to invest in highly risky ventures. However, it should be known that in the presence of informational asymmetries and contract enforcement problems, banks will not always commit their resources to businesses with high returns. Making of corrections on estimation errors can greatly improve investment performance; this statement is supported by empirical evidence based on simulation analysis, mean-variance portfolio selection and sample portfolio performance.

The weaknesses associated with this model include the fact that according to this model, investors always try to avoid risks and only look at the variance and mean on their return on investment during a single period when choosing portfolios (Fofack, 2009). Since portfolios reduce the variance of portfolio return, given expected profits, and increase expected returns, given variance; investors always choose mean variance-efficient portfolios. Another weakness is that the model assumes that the qualities of assets or loans are key items in any given banks portfolio since a bank's portfolio comprises of both assets and liabilities. It therefore is the prerogative of bank management bodies to come up with portfolios that will give the highest returns a reduced risks and costs.

Also, the model assumes that given a certain expected return, active and potential shareholders will prefer lower risk (lower variance) to higher risk and conversely given a certain level of risk will prefer higher returns to lower ones. It does not allow for active and potential shareholders who will accept lower returns for higher risk. This model was relevant to this study because it is used in estimating of cost of capital for SACCOS in earning returns and in evaluation of performance appraisals of asset portfolios. The theory revealed the relationship between yields/returns and risks.

2.2.2 Modern Portfolio Theory

The Modern Portfolio Theory was developed by Harry Markowitz (1952). It states that investors who are risk averse tend to construct portfolios to maximize on returns based on the existing market risks. The theory emphasizes risks are inseparable from high rewards. An investor therefore stands to benefit from this diversification and reduction of the riskiness of the portfolio. The theory further states that only – unsystematic riskiness which are specific to certain types of stock can also be diversified as the number of portfolios increase. Modern Portfolio Theory proposes that an efficient frontier of optimal portfolio can be constructed to give the highest possible returns at lowest risks.

According to Markowitz, a combination of several types of assets may reduce risk, provided that the investor chooses types of assets which move as independently of each other as possible. Once this condition has been met, the best possible ratio between risk and return will be achieved. According to Songor and Curtis (2005), someone who invests in different stocks is more likely to enjoy the benefits of portfolio diversification as a result of reduced risks of the portfolio. The risk of investing in different individual stocks is less than the risk inherent in holding many similar stocks (provided that the risks of the various stocks are not directly related) (Baral, 2008). A portfolio comprising of both assets must always pay off regardless of the season because adding one risky asset to another has the ability to dilute the overall risk of an all-weather portfolio.

This theory was relevant to this study because it is applied by Saccos in diversifying their loan portfolios so as to optimize unsystematic credit risk. The possibility of sudden decline in credit portfolio in a certain industry or geographical area cannot be ignored because shocks may arise at any time without giving the Saccos enough time

to cushion themselves (Caprio & Klingebiel, 2002). Therefore Saccos work out to ensure that the concentration of a portfolio is not too high across industries, geographically or within specific firms.

2.2.3 Inventory Development Model

The inventory development model was developed by Baumol (1952). The Baumol model is based on the economic order quantity (EOQ). The objective of the model is to determine the optimal target cash balance. The model is based on the following assumptions; The firm is able to forecast its cash requirements with certainty and 'receive a specific amount at regular intervals; The firm's cash payments occur uniformly over a period of time that is; a steady rate of cash outflows; the opportunity cost of holding cash is known and does not change over time; cash holdings incur an opportunity cost in the form of opportunity foregone; the firm incur the same transaction cost whenever it converts securities to cash; cash transaction incurs at a fixed and variable cost.

The limitations of the Baumol model as explained by Van Home (1977) are as follows; assumes a constant disbursement rate; in reality cash outflows occur at different times, different due dates; assumes no cash receipts during the projected period, obviously cash is coming in and out on a frequent basis; no safety stock is allowed for, reason being it only takes a short amount of time to sell marketable securities. Simulation by itself can't guarantee that the modelled system has the optimal performance. The use of simulation allows the decision maker to test the effect of alternative scenarios in order to select the best one. A shortcoming of optimization is simplification. An optimization model can only approach the real system within a certain level of detail, and some factors are usually simplified or left out. Unlike simulation models, optimization cannot handle all uncertainties of the system. These simplifying assumptions should have only a minor effect on the result; otherwise the optimal solution of the simplified model will be useless for the real situation. Therefore, nowadays optimization is used together with simulation. Once the optimization solution is found, the system performance under the optimized value can be tested by means of simulation model (Shoshko, 2010).

This theory was relevant to this study because it is applied by SACCOs as it is able to forecast its cash requirements with certainty and ‘receive a specific amount at regular intervals in converting securities in financial instruments to cash.

2.2.4 Operating Cycle Theory

Incorporating accounts receivable and inventory turnover measures into an operating cycle concept provides a more appropriate view of liquidity management than does reliance on the current and acid-test ratio indicators of solvency. These additional liquidity measures explicitly recognize that the life expectancies of some working capital components depend upon the extent to which three basic activities - production, distribution (sales), and collection - are non-instantaneous and un-synchronized (Weston & Eugene, 1979). Accounts receivable turnover is an indicator of the frequency with which a firm’s average receivables investment is converted into cash. Changes in credit and collection policy have a direct impact on the average outstanding accounts receivable balance maintained relative to a firm’s annual sales. Granting more liberal terms to a firm’s customers creates a larger, and potentially less liquid, current investment in receivables.

Unless sales increase at least 16 proportionately to the increase in receivables, this potential deterioration in liquidity will be reflected in a lower receivables turnover and a more extended receivables collection period. Decisions that commit a firm to maintaining larger average receivables investments over a longer time period will inevitably result in higher current and acid-test ratios (Richards & Laughlin, 1980). Inventory turnovers depict the frequency with which firms convert their cumulative stock of raw material, work-in-process, and finished goods into product sales. Adopting purchasing, production scheduling, and distribution strategies that require more extensive inventory commitments per dollar of anticipated sales produces a lower turnover ratio. This reflects a longer and potentially less liquid inventory holding period.

If firms cannot modify the payment practices established with trade creditors or their access to short-term debt financing provided by non-trade creditors, decisions that create longer or less liquid holding periods will again be accompanied by a higher current ratio indicator of solvency (Weston & Eugene, 1979). The cumulative days per turnover for accounts receivable and inventory investments approximates the

length of a firm's operating cycle. Incorporating these asset turnovers into an operating cycle concept of the current asset conversion period thereby provides a more realistic, although incomplete, indicator of a firm's liquidity position.

The weaknesses of the operating cycle concept as a cash flow measure include the fact that it fails to consider the liquidity requirements imposed on a firm by the time dimension of its current liability commitments. Integrating the time pattern of cash outflow requirements imposed by a firm's current liabilities is as important for liquidity analysis as evaluating the associated time pattern of cash inflows generated by the transformation of its current asset investments (Richards and Laughlin, 1980). If firms cannot modify either the payment practices established with trade creditors; or their access to short-term debt financing provided by non-trade creditors; decisions that create longer or less liquid holding periods will again be accompanied by a higher current ratio indicator of solvency (Weston & Eugene, 1979). The cumulative days per turnover for accounts receivable and inventory investments approximates the length of a firm's operating cycle.

Incorporating these asset turnovers into an operating cycle concept of the current asset conversion period thereby provides a more realistic, although incomplete, indicator of a firm's liquidity position. Integrating the time pattern of cash outflow requirements imposed by a firm's current liabilities is as important for liquidity analysis as evaluating the associated time pattern of cash inflows generated by the transformation of its current asset investments (Bhattacharya, 1987). This theory was relevant to the study as it focuses on how a SACCO can utilize accounts receivables and inventory balances to enhance the SACCOs profitability.

2.3 Conceptual Framework

A conceptual framework is a hypothesized model that graphically portrays the relationships (Mugenda & Mugenda, 2003). The conceptual framework for this study is illustrated in Figure 2.1. According to this framework a hypothesized relationship between variables under study is shown. Assets performance management variables are the independent variables while profitability is the dependent variable. SACCO Societies Regulatory Authority regulations is the intervening variable

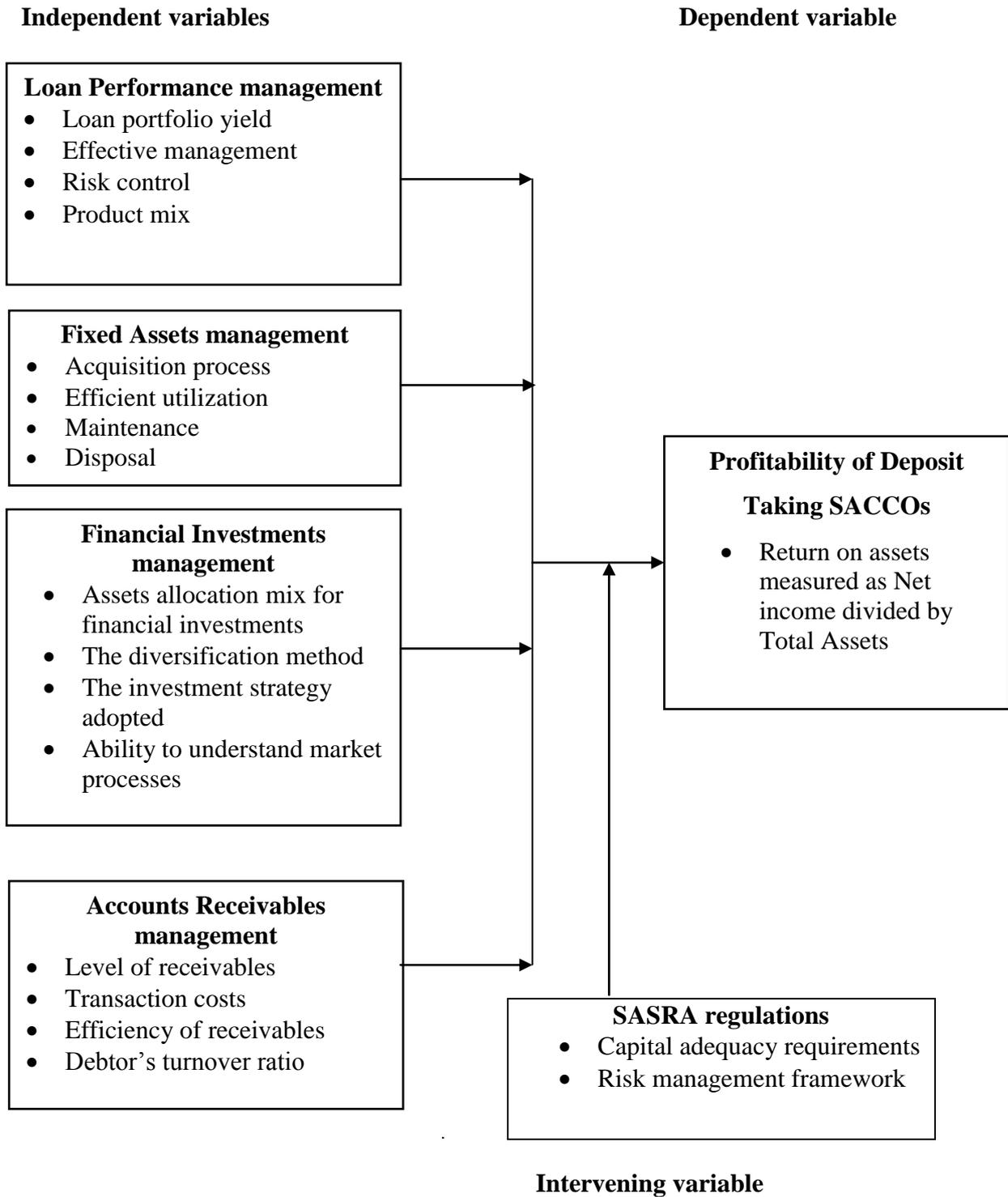


Figure 2.1: Conceptual Framework

Loan performance management was measured in terms of loan portfolio, loan portfolio, effective management, risk control mechanisms. Fixed assets management variable measurements includes; acquisition process for non-current assets, efficient utilization of non-current assets, maintenance approach on non-current assets and disposal method for non-current assets. Financial investments management was

measured in terms of; assets allocation mix for financial investments, diversification method, and the investment strategy adopted; passive or active investment strategy and the ability to understand market processes and financial information. Accounts receivables management variable was measured in terms of improved effectiveness of collection efforts over time on collection of receivables, transaction costs involved in accounts receivables, efficiency of receivables and debtor's turnover ratio.

2.4 Empirical Review

Several empirical studies exist on the relationship between assets performance management and profitability

2.4.1 Loan Performance Management and Profitability

A loan is an agreement between a creditor and a debtor where the creditor agrees to give a sum of money known as the principal amount to the debtor who promises to pay the principal usually with interest to the creditor either in one lump sum or in installments over a specified period of time (Dell, et. al., 2006). Lending entails a lending institution giving a loan for promise of interest and principal to be paid in return in the future. A loan is said to be performing if the principal and interest are paid at the date agreed by both the creditor and the debtor. Performing loans add up to the valuable asset portfolio for banks because of the generation of interest income (Boahene, 2012).

According to Lawrence (2013) lending is the principal business activity for most commercial banks. The loan portfolio is typically the largest asset and the predominate source of revenue. As such, it is one of the greatest sources of risk to a bank's safety and soundness. Effective management of the loan portfolio's credit risk requires that the board and management understand and control the bank's risk profile and its credit culture. To accomplish this, they must have a thorough knowledge of the portfolio's composition and its inherent risks. They must understand the portfolio's product mix, industry and geographic concentrations, average risk ratings, and other aggregate characteristics. They must be sure that the policies, processes, and practices implemented to control the risks of individual loans and portfolio segments are sound and that lending personnel adhere to them.

2.4.2 Fixed Assets Management and Profitability

Capital budgeting decisions are critical to the success of any firm. It is argued that capital budgeting decision is vital to a firm's financial among the most important decisions that owners or managers of a firm must make. Their rationale for that belief is that capital budgeting decision often involves significant capital outlay to acquire fixed assets. Additionally, the acquisition of these assets often comes with long lasting and recurring financial obligation. Furthermore, efficient utilization and control and management of acquired fixed assets are also equally important. Appropriate acquisition process, proper record keeping, periodically evaluating the efficiency of the fixed asset, regular repair and maintenance and proper disposal of fixed assets will enhance the performance of firms (Mawih, 2014).

Okwo et al. (2012) studied the investment in fixed assets and firm profitability, evidence from the Nigerian Brewery Industry. A cross sectional data was gathered for the analysis from the annual reports of the sampled brewery firms for a period of 1995 to 2009. The four brewery firms that constitute the sample were those quoted on the Nigerian Stock Exchange and their inclusion in the analysis is based on the availability of data for the sample period. The brewery firms that constitute the sample are: Nigerian Breweries Plc, Guinness Nigeria Plc and International Breweries Plc, Champion Breweries Plc. The result of the tested hypothesis showed that the level of investment in fixed assets does not strongly and significantly impact on the level of reported profit of breweries in Nigeria.

Fixed assets management has the major role in the profit ratio determination and the evaluation of risk involved (Smith, 1980). Effective organization of fixed assets is the most important part of the entire corporation and in creating the value of shareholders. The earnings per share is not increased by the minimum weighted average capital cost as the value of the stock of the firm increases due to it. The liability increases the EPS but it also increased the risk. So we can say that the EPS is not maximized by the increased price of stock. The structure of the capital does not involve the complete debt as it include 100 percent debt rate (Barrons, 2003) the non-current assets cannot be converted into cash during a year of running a business. It includes the land, equipment of manufacturing and other assets which last for longer periods of time if we analyze the non-current assets are more revenue generators than the current assets

but the risk involvement is more than the current assets as it is difficult to convert them into cash and the value also differ in different point of times than the current assets (Scott, 2003). Modigliani and Miller (1958) claimed that the maximum capital structure can be obtained when the savings of tax on debt is settled by the risk of getting bankruptcy.

Mawih (2014) did a study on Effects of Assets Structure on the Financial Performance: Evidence from Sultanate of Oman. The main objective of this study was to examine the effects of assets structure (fixed assets and current assets) on the financial performance of some manufacturing companies listed on Muscat Securities Market (MSM). The methodology of the study was content analysis of annual reports of a sample of 28 out of 70 (40%) companies for the period 2008-2012. The assets structure was measured by fixed assets turnover and current assets turnover while the financial performance is measured by return on assets (ROA) and return on equity (ROE). The study examined two main hypotheses. The first one examined the effects of total assets turnover on ROA whereas the second one examined the effects of total assets turnover on ROE. The overall result for the study was that the structure of assets does not have a strong impact on profitability in terms of ROE. This result means that if the structure of assets is changing then the ROA will not change. Another result of the study indicated that only the fixed assets have impact on ROE unlike ROA. Another result of the study suggests that the effect of asset structure has an impact on ROE only in petro-chemical sector.

2.4.3 Financial Investments Management and Profitability

According to Simeyo, Bernard, Patrick and Francis (2013) that an investment is the outlay of a sum of money in an anticipation of a future return which more than compensates for the original amount plus a premium to cover inflation, interest foregone and risk. According to Pandey (2008) investment decisions entail a firm's decisions to invest its current assets most efficiently in the long-term assets in anticipation of an expected flow of benefits over a series of years; these investment decisions require very special attention as they influence a firm's growth, risk, they are difficult, and they are irreversible and involve commitment of large volume of funds. Investment decisions are composed of expansion decision, replacement decision, renewal decision and research and replacement decisions.

A study by Makokha, Namusonge, and Sakwa (2016) examined the effect of portfolio diversification on Commercial Banks financial performance. Mixed method of research design was used and data was collected using questionnaires and interview schedules. Target population was 43 licensed Commercial Banks in Kenya from which one hundred and thirty three (133) managers were randomly selected to form sample size. Validity of the research instruments was ensured through content, face and construct validity testing. Data was analyzed using descriptive statistics and inferential statistics which included correlation analysis and bivariate regression analysis. The study established a positive statistically significant relationship between portfolio diversification and financial performance. The portfolio diversification explained 68% of the changes in the financial performance of commercial banks in Kenya and that most banks diversify their investments which has enabled them to increase profits and performance in the past years. The study recommended that financial institutions should invest in a combination of assets which are negatively correlated because this maximizes revenue (returns) and minimizes losses (risks). The study recommended that a further study should be undertaken to establish the best combination of assets that can yield an efficient portfolio.

According to Roger (2010) in his study “The Importance of Asset Allocation”, he states that Asset Allocation Policy explains the 40, 90 and 100 percentage of fund performance. As a result, the manner on which a firm allocates funds among investment channels matters most on total performance of each channel of investment. A study conducted by Richard, Jonathan, and Sharon (2014), examined how Business Climate influences International Franchise Expansion. Adopting a panel regression model they conducted a study on firms undertaking international franchise business using different specifications. Their study concluded that, a country’s business climate is an important predictor of foreign firm’s expansion into that country.

2.4.4 Accounts Receivable Management and Profitability

Receivables management is a significant component of any organization’s working capital management. Credit sales are a norm in most industries and imperative for survival in the industry. Van Horne and Dhamija (2016) are of the view that credit sales are a tool for both customer acquisition and retention. According to Bhattacharya (2014) the decision to grant trade credit may be a part of marketing

strategy or finance strategy. Accounts receivables are one of the most important parts of working capital. Receivables often represent large investment in asset and involve significant volume of transactions and decisions. However, there are considerable differences in the level of receivables in firms around the world.

A study by Demirgüç-Kunt and Maksimovic (2001) found that in countries such as France, Germany, and Italy accounts receivable exceeds a quarter of firms' total assets, while Rajan and Zingales (1995) find that 18% of the total assets of US firms consists of receivables. In different theories, the existence of receivables is explained by commercial reasons, transaction-cost motivations, and financial incentives (Bastos & Pindado, 2007; Deloof & Jegers, 1999; Marotta, 2005; Petersen & Rajan, 1997). Accounts receivable management is a crucial field of corporate finance because of its effects on a firm's profitability and risk, and consequently on the firm's value. Yet, the main body of the literature of accounts receivables focuses on studying the relation with firm's profitability at the developed capital markets and during the non-crisis period.

A study by Divya, Simran and Vartika (2015) examined the effect of efficiency of receivables management, measured by debtor's turnover ratio, in the commercial vehicle industry in India on the firm's profitability. Profitability was measured using Return on Capital Employed. The research was conducted for the period 2009 to 2016. The findings indicated a significant positive relationship between debtor's turnover ratio and profitability of the firm. This implied that receivables management should be a key focus point for improving profitability in this industry.

Mathuva (2009) examined the influence of working capital management components on corporate profitability by using a sample of 30 listed firms on the Nairobi Stock Exchange for the period 1993-2008. The findings of the study were that there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers and a highly significant positive relationship between the period taken to convert inventories into sales. Mbula, Memba and Njeru (2016) analyzed the effect that accounts receivables had on the financial performance of Kenyan firms with venture capital funding from the government. They observed a positive effect of accounts receivables on the financial performance of these firms.

They concluded that managers of these firms should improve efficiency of management of accounts receivable.

Raheman and Nasr (2007) researched how management of working capital affects profitability of Pakistani firms that were listed on Karachi Stock Exchange. The period considered in the study was 1999-2004 and the working capital management variables taken into consideration included cash conversion cycle, debtors' collection period, inventory turnover, creditor's payment period and current ratio. Their research findings showed that cash conversion cycle and the firms' profitability have a significant negative relationship. This indicates that profitability will decrease when the cash conversion cycle increases, so to create value for the shareholders, the firm should attempt to decrease this cycle. They also observed that both liquidity and the use of debt are significantly, negatively related to profitability. The size of the firm, however, was found to be positively related to the firm's profitability.

Although extension of Credit as stated by Gill, et al (2010) should only be on the basis of customers creditworthiness in order to minimize the level of default and bad debts, firms that use a lenient credit policy tend to give credit to customers on very liberal terms and standards that credit is granted for longer periods even to those customers whose credit worthiness is not well known (Krueger, 2005). Gitau et al. (2014), state that the purpose of credit control is to ensure that trade debts are recovered early enough before they become uncollectible and a loss to the business. In an attempt to pursue customers who do not pay on due dates, a firm may follow different procedures.

2.5 SASRA ACT

Sacco Society regulatory authority SASRA is a semi-autonomous government agency operating under the Ministry of cooperative development and marketing. It was created by section 40f the SACCO Society Act 2008. It has the duty to license and supervise all deposit taking Sacco Societies in Kenya. Its operation are guided by the cooperative societies Act, Sacco society Act and Sacco society regulations 2009. The regulation came into force in June 2009. The setting up of SASRA was in response to 'the rapid growth of the Sacco without a corresponding legal framework to guide its growth and development. With this in mind the SACCO Societies Act in 2008 was enacted to provide licensing, regulation and supervision of deposit taking Sacco

Societies through the adoption of prudential and non-prudential regulations. Therefore the establishment of SASRA was in line with the Government's financial sector reform initiative.

Llewellyn (1998) highlights three core objectives of regulation as; to sustain systemic stability; to maintain the safety and soundness of financial institutions and to protect the consumer. His argument is that the objectives depend on various market imperfections (especially externalities and asymmetric information which in the absence of regulations, produce sub-optimal results and reduce consumer welfare.

A study by Kamau (2013) on the effect of licensing requirements on the performance of cooperative societies in Kenya: A survey of deposit taking Sacco societies in Nakuru County found that most SACCOs reported improvement in their performance both in membership, portfolio and efficiency. He attributed this to the SACCO licensing requirements. He found that most SACCOs were compliant with the regulator requirement so as not to be locked out of the business by the operator. It was also clear from the study that all the SACCOs were conversant with the new licensing law.

A study by Kilonzi (2012) sought to determine the effect of SASRA regulation on Sacco's financial performance. The study found that higher capital requirements, and increase in management efficiency impacted positively to SACCO's profitability in the post- capital regulation period. The study revealed that capital regulation affects financial performance in SACCOs.

2.6 Critique of the Existing Literature Relevant to the Study

Co-operatives where SACCOs fall under are mainly constituted to promote and enhance members' wealth. However, there are three parameters of measuring the business success in the Co-operatives; financial management, financial profitability and financial stability. Much has been written on the financial performance of SACCOs in Kenya. The financial performance has been said to have stemmed from financial stewardship, capital structure and funds allocation strategy. The growth of SACCOs has also been attributed to this, (Clement et al., 2012).

Asset quality has also been attributed to great financial performance and growth of SACCOs. However not much has been done on the performance management of the

assets and how they affect the growth, financial performance or the profitability of the SACCOs. Assets has been for a long time earning returns for firms as well but not much attention has been set out on the performance management of these assets. Focus should thereby be shifted towards the performance management of assets in the wake of earning returns.

2.7 Research Gap

Clement et al., (2012) in their study on financial practice as a determinant of growth of SACCOs wealth content that growth of SACCO wealth depended on financial stewardship, capital structure and funds allocation strategy. Both studies did not address the issue of asset performance management on profitability which the current study tries to address. In Kenya, SACCOs do not have access to the lender of last resort, the Central Bank of Kenya. So in times of market difficulties and constraints they have nowhere to get the asset of cash. This makes them prone to the liquidity shortage, and no matter how small, can cause great damage to a savings institution (Monnie, 2009). Mathuva (2009) examined the influence of working capital management components on corporate profitability on a sample of 30 listed firms on the Nairobi Stock Exchange for the period 1993-2008. The findings of the study were that there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers and a highly significant positive relationship between the period taken to convert inventories into sales. This study It is against this background that a study should be carried out on effects of asset performance management on profitability of deposit taking SACCOs in Nakuru County.

2.8 Summary of Reviewed Literature

The review of literature covered the objective and economic rationale of focusing on financial instruments of SACCOs. Linked to this, the existing economic theories and research work done on the field of financial performance and growth of SACCOs reveals the stringent need of focus on asset performance management of SACCOs with emphasis on the effect of asset performance management on profitability which vary from one deposit taking SACCO to another. As expected, asset performance management is required to embrace members' welfare, financial performance, financial reinvestment and earning expected high returns. This study thereby did seek

to determine the effect of asset performance management on profitability of deposit taking SACCOs. The study concentrated on; loan performance management, fixed assets management, financial investments management and accounts receivables management in deposit taking SACCOs.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter addresses the methodology that was adopted for the study. This included the research design, population, sample size, data collection, and data analysis and presentation techniques.

3.2 Research Design

According to Kombo and Tromp (2006), research design is the structure of research that holds all the elements in a particular research project together. This study used an explanatory research design to determine the effect of asset performance management on profitability of deposit taking SACCOs in Nakuru Town. Specifically, engaged the employees of the deposit taking SACCOs in a survey to find out their perspectives and experiences on the issue of Asset Performance Management and Profitability. Explanatory research seeks to explain why a phenomenon is going on and can be used for hypothesis testing. It also allowed for inferences to be drawn about associations and causality (Saunders et al, 2012). This study design was ideal for this study as explanatory research design helped the researcher to identify predictive relationships by using correlations and regression analysis

3.3 Target Population

The target population for the study was branch and operations managers from each of the Saccos in Nakuru and management staff from various departments of the Deposit Taking SACCOs from the main office including but not limited to heads of departments including marketing and customer care, internal audit and compliance, finance and strategy, ICT, procurement, Treasury and investment as well as human resources departments. These heads of departments make up the top level management and hence the people responsible for the decision making process.

Figure 3. 1: Target Population

Saccos	Human Resource	Finance and strategy	Internal audit and compliance	ICT	Marketing and Customer care	Procurement	Operations and Branch management
Boresha	1	2	2	1	2	1	2
Cosmopolitan	3	4	2	2	3	2	2
Egerton	4	3	3	2	3	3	2
Harambee	3	3	2	2	2	2	2
Metropolitan	3	3	2	2	1	3	1
Mwalimu	4	4	3	3	2	2	2
Stima Sacco	4	4	2	1	1	2	1
Unaitas	2	3	1	1	2	2	2
Uni-County	1	2	1	1	2	1	1
Vision Africa	1	1	1	2	1	1	1
Wananchi	1	2	2	2	1	2	1
Total	27	31	21	19	20	21	17

Source: (Respective Human Resource departments, 2018)

3.4 Sample Size and Sampling Procedure

3.4.1 Sampling Technique

Stratified sampling was used to classify departments into strata with the target population per stratum indicated while stratified proportional sampling was used to allocate the sample size proportionate to size of each stratum. Simple random sampling was employed to determine the final respondents based on years of experience they have worked.

3.4.1 Determination of Sample Size

In view of the researcher's inability to reach out to the entire population, and in order to gain the advantage of an in-depth study and effective coverage, a sample was drawn using random sampling. The optimum sample size (n) of the study was determined using Israel (1992) as shown below;

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{156}{1 + 156(0.05)^2} = 112$$

Where;

n = optimum sample size,

N = number of study population

e = probability of error (i.e., the desired precision, e.g., 0.05 for 95% confidence level).

Stratified proportional sampling was used to allocate the sample size proportional to size of each stratum;

$$n_h = \left(\frac{n}{N} \right) N_h$$

Where:

- n is the strata size.
- N is the target population
- N_h is the optimum sample size

Figure 3. 2: Sample Size

Departments (stratas) Category	Population per stratum	Sample ration per stratum
Human Resource	27	19
Finance and strategy	31	22
Internal audit and compliance	21	15
ICT	19	13
Marketing and Customer care	20	14
Procurement	21	15
Operations and Branch management	17	12
Total	156	110

Source: (Respective Human Resource departments, 2018)

Thus the sample size was 110 respondents

3.5 Data Collection Instruments

In this study, both primary and secondary data was used. Structured questionnaires were used to collect primary data. The questionnaires were self-administered to the respondents. The self-designed questionnaires were designed based on the objectives of the study. Secondary data for the three year period was obtained from SASRA. Primary data was collected on asset performance management which was the independent variable while secondary data obtained was on profitability which was the dependent variable. Employing more than one research instrument by combining qualitative and quantitative approaches eradicates or minimize the disadvantages inherent in each individual method (Nachmias & Nachmias, 2008; Sarantakos, 2005).

3.6 Pilot Testing

The researcher carried out a pilot study at Imarisha Sacco to enhance the validity and reliability of the questionnaire. Ten questionnaires were administered to the staff of Imarisha Sacco. The pretesting of the data collection instrument data helped in assessing the suitability of the research instrument ahead of the actual data collection and thus was not to be used in the actual study.

3.6.1 Reliability of the Instrument

To ensure reliability of the measuring instrument, careful wording, format and content was used. The pretesting results obtained from respondents were used to improve on the questions. The respondents did not indicate their names hence the probability of giving honest answers was high. The researcher used structured questionnaires, the relationships between all the variables of the study was then formed from the information. The researcher expected the questionnaire to be highly reliable to the effect that similar results would be obtained if the study is conducted by other researchers. The reliability of the instrument was determined by the help of the Cronbach alpha (α) method. According to Mohsen and Dennick (2011), a reliability coefficient of .70 or higher indicates consistency. This thus enabled the researcher to go ahead with the main data collection exercise. The data collection instrument returned reliability values on all constructs that were greater than 0.7 indicating good reliability.

Figure 3. 3: Reliability Test

Construct	No. of Test Items	Cronbach Alpha
Loan Performance Management	4	0.752
Fixed Assets Management	5	0.704
Financial Investments Management	5	0.788
Accounts Receivables Management	5	0.803

3.6.2 Validity of the Instrument

Validity is the degree to which results obtained from the analysis of the data represent the Phenomena under study (Mugenda & Mugenda, 2003). This has to do with how the data obtained actually represents the phenomenon under study. To ascertain content and face validity of the questionnaire, it was presented to supervisor who is the authority in the area for scrutiny and advice. The contents of the instrument were improved based on the advice and comments of the supervisor. The questionnaires

were then reconstructed in a way that they relate to each research question. In addition, content validity was done to check the operationalization of the instrument. This ensured that the objectives were clearly defined and operationalized.

3.7 Data Analysis

Data collected was analyzed using both descriptive and inferential statistics. The analysis used a combination of various techniques of data analysis to determine an overall picture of the variables in the population. Different asset performance management variables were identified by explaining their interrelationships with profitability. As soon as the collection of the data was finalized and compiled, it was classified and analyzed to determine its validity. The questionnaires were coded and edited for completeness using SPSS statistical package. A range of Descriptive statistical measures used included the mean and standard deviations to summarize the data. Correlation coefficient analysis was used to measure the nature of correlation between variables under study. Multiple regression analysis was performed on profitability of deposit taking SACCOs as the dependent variable whereas Loan performance management, fixed assets management, financial investments management and accounts receivable management were the independent variables in the model. Analysis of variance (ANOVA) was also used to test the significance of the model in explaining the relationship between variables. The formulated research hypotheses were tested using regression analysis at 5% significance level. The following model was adopted to explain joint effect of predictor variables on the dependent variable

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon;$$

Where;

Y - Profitability of deposit taking SACCOs measured as Net income divided by Total assets

β_0 - Y- intercept

X_1 - Loan performance management

X_2 - Fixed assets management

X_3 - Financial investments management

X_4 - Accounts receivables management

$\beta_1, \beta_2, \beta_3$ & β_4 - Beta coefficients for the independent variables respectively

ε - Error term normally assumed to be randomly distributed

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter presents the results of data analysis, their interpretation and discussions. The presentation of the results is done according to the objectives of the study. The chapter begins with the demographic characteristics of the respondents such as age, educational level, tenure and gender. Descriptive statistics for the items in the instrument are also presented using means for each item to define the relative opinion of the respondents for that particular item. The results from the correlations and the regression analysis are also presented.

4.2 Response Rate

The researcher distributed a total of 110 questionnaires to the respondents from which 82 were completed and returned. This represented response rate of 74.5%. According to Babbie (1990), a response rate of 60% is good, 70% very good and 50% adequate for analysis and reporting from manual surveys. Thus the response rate was deemed sufficient for analyzing the research objectives

4.3 General Characteristic of the Respondents

This section presents the demographics of the study. The key characteristics of the respondents were: frequency distributions and percentages were used to indicate variations of respondents based on age, gender, tenure and length of service.

4.3.1 Gender of the Respondents

Results on gender of the respondents were as presented on Table 4.1

Table 4.1: Gender of the Respondents

Gender	Frequency	Percent
Male	53	64.6
Female	29	35.4
Total	82	100.0

The gender results indicate that 53 (64.6%) of the respondents were male while 29 (35.4%) were female. This means that there is gender parity in the Deposit Taking

Saccos with regard to their employees. Thus the responses would be balanced in terms of the perspectives from personalities of both genders.

4.3.2 Age of the Respondents

Results on age of the respondents were as presented on Table 4.2

Table 4.2: Age of the Respondents

Age	Frequency	Percent
25 years and below	7	8.5
26 – 35 years	36	43.9
36 – 45 years	33	40.2
More than 45 years	6	7.4
Total	82	100.0

The age results indicate that 7(8.5%) of the respondents were of 25 years and below age limit, 36(43.9%) were of age between 26-35 years, 33(40.2%) respondent were between 36-45 years and 6(7.4%) respondents had 45 years or more. This shows that Deposit taking Saccos in Nakuru County have employed both the young and middle age in their Saccos thus representing the Youth and the older generation as well. Thus the responses would be balanced in terms of age differences and experience as well.

4.3.3 Academic Qualification of the Respondents

Results on academic qualification of the respondents were as presented on Table 4.3

Table 4.3: Academic Qualification Respondents

	Frequency	Percent
Diploma	10	12.2
First degree	42	51.2
Postgraduate degree	30	36.6
Total	82	100.0

The academic qualification results indicate that 10(12.2%) of the respondents are Diploma holders, 42(51.2%) hold First degree while 30(36.6%) respondents have Postgraduate degrees. This shows that Deposit taking Saccos in Nakuru County have a myriad of employees across the academia with majority having first or second degree. Thus the responses would be balanced in terms of professionalism.

4.3.4 Departments of the Respondents

Results on departments of the Respondents were as presented on Table 4.4

Table 4.4: Departments of the Respondents

	Frequency	Percent
Marketing and customer care	15	18.3
Operations and Branch management	12	14.6
Finance and strategy	16	19.5
Internal audit and compliance	14	17.1
Procurement	5	6.1
Human resource	11	13.4
ICT	9	11.0
Total	82	100.0

The respondents' departments results indicate that 15 (18.3%) of the respondents were from the Marketing department and customer care, 12 (14.6%) were in the Operations and branch management department, 16 (19.5%) respondents were in the Finance and strategy department, 14 (17.1%) respondent were from the Internal audit and compliance department, 5(6.1%) respondents were Procurement department, 11 (13.4%) respondents were in the Human resource department and 9 (11.0%) respondents were in the ICT department . This shows that Deposit taking Saccos have different departments that all fall into FOSA (Frontal office Savings Account). Thus the responses would be across the board.

4.3.5 Years worked in the SACCO Industry

Findings related to the Years worked in the SACCO Industry is presented on Table 4.5

Table 4.5: Years worked in the SACCO Industry

	Frequency	Percent
Less than 5 years	10	12.2
5 – 10 years	40	48.8
11-15 years	23	28.0
More than 15 years	9	11.0
Total	82	100.0

The years worked in the SACCO industry results indicate that 16 (51.6%) of the respondents have worked for less than five years in the SACCO industry, 9 (29.0%) respondents have for between 5-10 years worked in the SACCO industry and 6 (19.4%) respondents have worked for more than 15 years in the SACCO industry. This shows that Deposit taking Saccos in Nakuru County have employees who worked for a longer period and others who have recently been employed. Thus the responses would be balanced in terms experience that one has in the SACCO industry.

4.4 Descriptive Statistics

This section presents descriptive analysis and discussions relating to the study variables namely; Loans performance management, Fixed assets management, accounts receivables management and financial investments management.

4.4.1 Loan Performance Management

The respondents were asked to indicate their agreement on the following items relating to loan performance management. The results of the responses are presented on Table 4.6

Table 4.6: Descriptive Analysis for Loan Performance Management

	SA	A	N	D	SD	Mean	Standard deviation
Loan portfolio yield has led to increased profitability	31.8%	37.7%	5.9%	15.3%	9.3%	4.40	0.023
Effective management of the loan portfolio has enabled the Sacco increase their profitability	5.7%	3.2%	54.0%	19.0%	18.1%	3.78	0.841
The risk control mechanism in place has enabled the Sacco to improve its profitability	19.0%	21.3%	49.0%	2.7%	8.0%	3.07	0.771
The product mix in the loan portfolio has enabled the Sacco increase its profitability	10.0%	9.6%	27.0 %	32.1%	21.3%	2.99	0.863

The research findings on Table 4.6 indicate that 69.5% of the respondents agreed that Loan portfolio yield had led to increased profitability among deposit taking Saccos in Nakuru County (mean=4.40,SD=0.023). According to Boahene (2012), performing loans add up to the valuable asset portfolio because of the generation of interest income. 54.0% of the respondents held neutral opinion on whether effective management of the loan portfolio had enabled the Saccos increase their profitability (mean=3.78, SD=0.841). There was neutrality among respondents on whether risk control mechanism in place had enabled the Saccos to improve their profitability as indicated by 49% of the respondents (mean=3.07, SD=0.771). Lawrence (2013) asserts effective management of the loan portfolio's credit risk requires that the board and management understand and control the risk profile and its credit culture. To accomplish this, they must have a thorough knowledge of the portfolio's composition and its inherent risks. According to 43.4% of the respondents, product mix in the loan portfolio had not enabled the Saccos increase its profitability (mean=2.99, SD=0.863). According to Lawrence (2013), firms' management must understand the portfolio's product mix, industry and geographic concentrations and average risk ratings. This will ensure profitability and financial performance of the firm is enhanced. Since the standard deviations or respective mean values were close to zero, it was evident that data was close to the mean values of the indicators.

4.4.2 Fixed Asset Management

The respondents were asked to indicate their agreement on the following indicators relating to fixed assets management. The results of the responses are presented on Table 4.7

Table 4.7: Descriptive Analysis for Fixed Assets Management

	SA	A	N	D	SD	Mean	Standard Deviation
Non-current assets portfolio in the Sacco has led to increased profitability	10.3%	17.0%	57%	5.7%	10.0%	4.03	0.133
The acquisition process for non-current assets has led to increased profitability	6.2%	5.7%	33.7%	31.0%	23.4%	3.11	1.256
Efficient utilization of non-current assets has led to increase in profitability	11.1%	17.3%	55.0%	10.5%	6.1%	3.86	0.671
The maintenance approach taken regarding the non-current assets has led to increase in profitability	9.7%	17.3%	17.0%	23.0%	33.0%	3.24	1.432
The method of disposal for non-current assets has led to difference in profitability	7.9%	6.6%	58.0%	13.5%	14.0%	3.75	0.699

The research findings on Table 4.7 indicate that 57% of the respondents held neutral opinion on whether non-current assets portfolio had led to increased profitability (mean=4.03, SD=0.133). According to Smith (1980), non-current assets portfolio management has the major role in the profit ratio determination and the evaluation of risk involved. A fair majority of the respondents (54.4%) disagreed that the acquisition process for non-current assets had led to increased profitability (mean=3.11, SD=1.256). The results are in agreement with those of Okwo et al. (2012) who studied the investment in non-current assets and firm profitability, evidence from the Nigerian Brewery Industry. The results of the tested hypothesis showed that the level of investment in non-current assets does not strongly and significantly impact on the level of reported profit of breweries in Nigeria. 51% of the

respondents held neutral opinion on whether efficient utilization of non-current assets had led to increase in profitability among deposit taking Saccos in Nakuru County (mean=3.86, SD=0.671). Mawih (2014) assert that efficient utilization and control and management of acquired non-current assets are important in enhancing organizations' financial performance and profitability. According to 56% of the respondents maintenance approach taken regarding the non-current assets has not led to increase in profitability among deposit taking Saccos (mean=3.24, SD=1.432), while it was not clear based on fair majority of respondents (58.0%) who held neutral opinion on whether method of disposal for non-current assets had led to difference in profitability among deposit taking Saccos (mean=3.75, SD=0.699).According to Mawih (2014), appropriate acquisition process, proper record keeping, periodically evaluating the efficiency of the non-current asset, regular repair and maintenance and proper disposal of non-current assets will enhance the performance and profitability of firms. The results indicate that data was close to the mean values of the indicators since the respective standard deviations of numerous means values were zero. However there was minimal disparity in the opinions of the respondents with some of the responses registering standard deviation values greater than 1.

4.4.3 Financial Investments Management

The respondents were asked to indicate their agreement on the following items relating to financial investments management. The results of the responses are presented on Table 4.8

Table 4.8: Descriptive Analysis for Financial Investments Management

	SA	A	N	D	SD	Mean	Standard Deviation
Financial investments are a major component of the assets of the Sacco	33.3%	21.7%	16%	18%	11.0%	4.98	0.889
Assets allocation mix for financial investments has led to improved profitability for the Sacco	15%	47%	13%	8.8%	16.2%	4.79	0.568
The diversification strategy adopted for financial investments has minimized risks thus increasing profitability for the Sacco	10.3%	15.6%	56%	13%	5.1%	3.74	0.176
The investment strategy adopted (active or passive investment strategy) on financial investments has increased the profitability for the Sacco	23%	28%	30%	6%	13%	3.67	0.451
Ability to understand market processes, information management and fundamental securities analysis has enhanced profitability for Saccos	7.7%	6.7%	59.0%	13.6%	13.0%	3.61	0.558

The research findings on Table 4.8 indicate that 55% of the respondents indicated that financial investments were major component of the assets of the Sacco (mean =4.98,

SD=0.889). A larger majority of the respondents (62%) agreed that assets allocation mix for financial investments had led to improved profitability for the Sacco (mean=4.79, SD=0.568). The results are in agreement with those of Roger (2010) who asserts that the manner on which a firm allocates funds among investment channels matters most on total performance of each channel of investment and profitability of the firm. There was neutrality among larger majority of the respondents (56%) on whether diversification strategy adopted for financial investments had minimized risks thus increasing profitability for the Sacco (mean=3.74, SD=0.176). Makokha, Namusonge, and Sakwa (2016) examined the effect of portfolio diversification on Commercial Banks financial performance. They established a positive statistically significant relationship between portfolio diversification and financial performance. The investment strategy adopted (active or passive investment strategy) on financial investments has increased the profitability of deposits taking Saccos according to 51% of the respondents (mean=3.67, SD=0.451). According to Pandey (2008) investment strategy adopted require very special attention as it influences a firm's growth and risk level. Majority of respondents (59%) held neutral opinion on whether the ability to understand market processes, information management and fundamental securities analysis had enhanced profitability among deposits taking Saccos (mean=3.61, SD=0.558). Since the standard deviations or respective mean values were close to zero, it was evident that data was close to the mean values of the indicator

4.4.4 Accounts Receivables Management

The respondents were asked to indicate their agreement on the following items relating to accounts receivables management. The results of the responses are presented on Table 4.9

Table 4.9: Descriptive Analysis for Accounts Receivables Management

	SA	A	N	D	SD	Mean	Standard Deviation
Accounts receivables are a major component of the assets of the Sacco	20.3%	31.1%	23.2%	15.4%	10.0%	3.17	0.333
There is improved effectiveness of collection efforts over time on collection of receivables	10.3%	17.7%	60%	7.9%	4.1%	3.37	1.322
The transaction costs involved in accounts receivables have affected the profitability of the Sacco	28.9%	40.6%	13%	11.5%	6%	2.88	1.566
The efficiency of accounts receivables management has increased the profitability for the Sacco	4.3%	1.1%	27%	37.3%	30.3%	3.86	0.013
The debtor's turnover ratio for the Sacco is at an ideal level	7.7%	6.7%	59.0%	13.6%	13.0%	2.61	0.879

On Accounts receivables management, 51.4% of the respondents agreed that accounts receivables are a major component of the assets of deposits taking Sacco (mean=3.17, SD=0.333). According to Pindado (2007), accounts receivable management is a crucial in assets portfolio because of its effects on a firm's profitability and risk, and consequently on the firm's value. Majority of respondents (60%) held neutral opinion that there is improved effectiveness of collection efforts over time on collection of receivables (mean=3.37, SD=1.322). According to Gitau et al. (2014), purpose of credit control is to ensure that trade debts are recovered early enough before they become uncollectible and a loss to the business. The transaction costs involved in

accounts receivables affects the profitability of deposits taking Saccos as agreed by 69.5% of the respondents (mean=2.88, SD=1.566). Marotta (2005) asserts that the existence of receivables is explained by commercial reasons, transaction-cost motivations, and financial incentives. 67.6% of the respondents disagreed that efficiency of accounts receivables management has increased the profitability for the Sacco (mean=3.86, SD=0.013). A larger majority of respondents (59%) disagreed that the debtor's turnover ratio for the deposits taking Saccos was at an ideal level (mean=2.61, SD=0.879). A study by Divya, Simran and Vartika (2015) examined the effect of efficiency of receivables management, measured by debtor's turnover ratio, on the firm's profitability. The findings indicated a significant positive relationship between debtor's turnover ratio and profitability of the firm. This implied that receivables management should be a key focus point for improving profitability in this industry. Although there was minimal disparity in respondents' opinions with some of the responses registering standard deviation values greater than or equal to 1, the results indicate that the data was close to the mean values of the indicators since standard deviations were not very far from zero.

4.4.5 Profitability of the Sacco

Profitability was the dependent variable of the study. To measure profitability of SACCOs, the study collected longitudinal data on return on assets across a three year period. According to Adquith and Weiss (2016), a three to five a year period allows one to not only look for consistency in performance, but also trends in the firm's operations. The results on Table 4.10 indicate that across the three year period, the maximum annual mean return on assets ranged from 0.1460 for the year 2015 and 0.1922 in for the year 2017. The mean ROA thus seems to have increased over time from year 2015 to 2017. The mean ROA have low variability across the periods though out as shown by standard deviation values. The standard deviations of ROA are persistently below the mean ROA across all years indicating improved homogeneity of the SACCCOs with time. It can be implied that mean ROA overtime shows an increasing trend over the period under study indicating persistence increase in profitability of deposit taking SACCOs which could be explained by sound assets performance management. According to Adnan (2012) sound asset performance management is a prerequisite for a financial institution's stability and continuing

profitability, while deteriorating asset performance management is the most frequent cause of poor financial performance and condition.

Table 4.10: Annual Mean Returns on Assets

Year	Obs	Mean	Std.	Min	Max
2015	12	.1460	.0289025	.101	.101
2016	12	.1685	.0482597	.088	.250
2017	12	.1922	.0609681	.094	.327

It was deemed right to carry out unit root test to examine the nature of the panel data and assess the time series aspect of profitability. A unit root is a feature of some stochastic processes that can cause problems in statistical inference involving time series models (Enders, 2004). Thus, a unit root test was conducted to establish whether the time series variable was non-stationary that is whether it possessed a unit root. The results on Table 4.11 show that the LLC bias-adjusted test statistic $t^* \delta = -4.023$ was significantly less than 0.05 ($p < 0.000$), so the null hypothesis “a unit-root is present” was rejected by accepting the alternative hypothesis that “the panels were stationary”.

Table 4.11: Unit-Root Test for Panel Data Stationarity

	Statistic	p-value
Unadjusted t	-3.602	
Adjusted t*	-4.023	0.000

4.5 Correlations

In this subsection a summary of the correlation analyses is presented. It seeks to first determine the degree of interdependence of the independent variables and also show the degree of their association with the dependent variable separately. These results are summarized in Table 4.12.

Table 4.12: Correlations between the independent and the dependent variables

		Loan performance management	Fixed assets management	Financial investments management	Accounts receivables management Practices	Saccos profitability
Loan performance management	Pearson Correlation	1				
	Sig. (2- tailed)					
	N	82				
Fixed assets management	Pearson Correlation	.061	1			
	Sig. (2- tailed)	.430				
	N	82	82			
Financial investments management	Pearson Correlation	.038	.310	1		
	Sig. (2- tailed)	.442	.310			
	N	82	82	82		
Accounts receivables management Practices	Pearson Correlation	.476	.127	.272	1	
	Sig. (2- tailed)	.401	.137	.321	.000	
	N	82	82	82	82	
Saccos Profitability	Pearson Correlation	.866*	.645*	.622*	.782*	1
	Sig. (2- tailed)	.003	.024	.026	.030	
	N	82	82	82	82	82

*. Correlation is significant at the 0.05 level (2-tailed).

The correlation summary shown in Table 4.12 indicates that the associations between the independent variables and the dependent variable were significant at the 95% confidence level. Correlation coefficients less than 0.5 represent a weak relationship, correlation coefficients greater than 0.5, but less than 0.8, represent a moderate relationship whereas correlation coefficients greater than 0.8 represent a strong relationship (Devore & Peck, 2006). The research findings indicate that there exist a significant strong positive correlation between loan performance management and

profitability of deposits taking Saccos in Nakuru County ($r=0.866, p<0.05$). There exist a significant moderate positive correlation between fixed assets management and profitability of deposits taking Saccos in Nakuru County ($r=0.645, p<0.05$). Further the results indicate that there is a significant moderate positive correlation between financial investments management and profitability of deposits taking Saccos in Nakuru County ($r=0.622, p<0.05$) and a significant moderate positive correlation between accounts receivables management and profitability of deposits taking Saccos in Nakuru County ($r=0.782, p<0.05$).

4.6 Hypotheses Testing

The joint effect of independent variables on the dependent variable was tested using multiple regression analysis

4.6.1 Model Summary

The findings on table 4.13 indicate that the overall $R^2= 0.702$ which indicates 70.2 percent of the change in the dependent variable is explained by the predictor variables that are included in the model with 29.8 % variation of dependent variable being explained by other factors not included in the model denoted by (ϵ) in the model.

Table 4.13: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.726 ^a	.702	.664	.64784

- a. Predictors: (Constant), Loan performance management, Fixed assets management, Financial investments management, Accounts receivables management.

The findings on table 4.14 shows that the F-statistics of the regression result= 15.84512 and its significant p -value ($p<0.05$) proves there is a significant relationship between the dependent variable and independent variables). Thus, the coefficients of the model are not equal to zero, suggesting that the model fits the data significantly.

Table 4.14: ANOVA Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	26.601	4	6.6502	15.84512	0.000
	Residual	32.321	77	.4197		
	Total	58.922	81			

a. Dependent Variable: Profitability of deposit taking Saccos in Nakuru County

b. Predictors: (Constant), Loan performance management, Fixed assets management, Financial investments management, Accounts receivables management.

The regression model which explains the combined effect of predictor variables on the dependent variable was obtained using the unstandardized beta coefficients. Unstandardized beta coefficients explains how the dependent variable varies as a result of a unit change in the independent variables. The following multiple regression equation was obtained;

$$\text{PDS} = 4.535 + 0.316 \text{ LPM} + 0.206 \text{ FAM} + 0.336 \text{ FIM} + 0.256 \text{ ARM}$$

Where:

PDS- Profitability of deposit taking SACCOs

LPM- Loan performance management

FAM- Fixed assets management

FIM- Financial investments management

ARM- Accounts receivables management

The regression results on table 4.15 indicate that there exist a statistically significant positive relationship between loan performance and profitability of deposits taking Saccos in Nakuru County ($\beta = 0.316$, $p < 0.05$), implying that if loan performance management increases by one unit, profitability of deposits taking Saccos increases by 0.316. Thus, null hypothesis (H_{01}) was rejected by accepting the alternative hypothesis (H_{a1}) implying that loan performance management has a significant effect on profitability of deposit taking Saccos in Nakuru County. Performing loans add up to the valuable asset portfolio for banks because of the generation of interest income (Boahene, 2012). The management team must have a thorough knowledge of the portfolio's composition and its inherent risks. They must understand the portfolio's product mix, industry and geographic concentrations, average risk ratings, and other

aggregate characteristics. They must be sure that the policies, processes, and practices implemented to control the risks of individual loans and portfolio segments are sound and that lending personnel adhere to them (Lawrence, 2013).

It was established that there exist a statistically significant positive relationship between fixed assets management and profitability of deposits taking Saccos in Nakuru County ($\beta = 0.206$, $p < 0.05$). This means that when fixed assets management increases by 1 unit, profitability of deposits taking Saccos in Nakuru County increases by 0.206. Thus, null hypothesis (H_{02}) was rejected by accepting the alternative hypothesis (H_{a2}) concluding that fixed assets management has a significant effect on profitability of deposit taking Saccos in Nakuru County. Fixed assets management has the major role in the profit ratio determination and the evaluation of risk involved (Smith, 1980). Effective organization of fixed assets is the most important part of the entire corporation and in creating the value of shareholders.

A statistically significant positive relationship between financial investments management and profitability of deposits taking Saccos in Nakuru County was also established ($\beta = 0.336$, $p < 0.05$). The beta coefficient of 0.336 means that when financial investments management increases by 1 unit, profitability of deposits taking Saccos in Nakuru County increases by 0.336. Thus, null hypothesis (H_{03}) was rejected by accepting the alternative hypothesis (H_{a3}) concluding that financial investments management has a significant effect on profitability of deposit taking Saccos in Nakuru County. Roger (2010) reported that financial investments management with key aspect of assets allocation affects profitability level of the firm. The study recommended that financial institutions should invest in a combination of assets which are negatively correlated because this maximizes revenue (returns) and minimizes losses (risks).

Further it was established that there exists a statistically significant positive relationship between accounts receivables management and profitability of deposits taking Saccos in Nakuru County ($\beta = 0.256$, $p < 0.05$). Numerically, the 0.256 beta coefficient of accounts receivables management variable implies that when accounts receivables management increases by one unit, profitability of deposits taking Saccos in Nakuru County increases by 0.256. The null hypothesis (H_{04}) was thus rejected by accepting the alternative hypothesis (H_{a4}) that accounts receivables management

have significant effect on profitability of deposit taking Saccos in Nakuru County. A study by Divya, Simran and Vartika (2015) examined the effect of efficiency of receivables management, measured by debtor's turnover ratio, in the commercial vehicle industry in India on the firm's profitability. The findings indicated a significant positive relationship between accounts receivables management and profitability of the firm.

Table 4.15: Regression analysis coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.535	.523		8.671	.036
Loan performance management	.316	.302	.325	1.046	.014
Fixed assets management	.206	.077	.118	2.675	.021
Financial investments management	.336	.058	.255	5.793	.028
Accounts receivables management	.256	.063	.237	4.063	.000

a. Dependent Variable: Profitability of deposit taking SACCOs in Nakuru County.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings, conclusions and recommendations of the study based on the research objectives. Suggestions for further research are also given at the end of the chapter. The implications of the research are discussed and suggestions made on areas of further study. Some useful recommendations for all the stakeholders are proposed by this study at the end of the chapter to enlighten and enable them to craft viable solutions with regard to the problem statement based on the research findings.

5.2 Summary of the Findings

The study determined effect of loan performance management, fixed assets management, financial investments management and accounts receivables management on profitability of deposits taking Saccos in Nakuru County. Primary data was used which was collected using structured questionnaires, summarized and analyzed using descriptive and inferential statistics. The study's response rate was 74.5%.

The first objective of the study was to establish effect of loan performance management on profitability of deposits taking Saccos in Nakuru County. Respondents agreed that Loan portfolio yield had led to increased profitability of deposit taking Saccos in Nakuru County. There was neutrality in opinion among respondents on whether effective management of the loan portfolio had enabled the Saccos increase their profitability and on whether risk control mechanism in place had enabled the Saccos to improve their profitability. Product mix in the loan portfolio was found not to have enabled the Saccos increase its profitability. There exist a significant positive correlation between loan performance management and profitability of deposits taking Saccos in Nakuru County ($r=0.866$, $p<0.05$), and a statistically significant positive relationship between loan performance and profitability of deposits taking Saccos in Nakuru County ($\beta = 0.316$, $p<0.05$).

The second objective of the study was to assess effect of fixed assets management on profitability of deposits taking Saccos in Nakuru County. Respondents held neutral

opinion on whether fixed assets portfolio had led to increased profitability with fair majority of the respondents disagreeing that the acquisition process for fixed assets had led to increased profitability. There was neutrality in opinion among respondents on whether efficient utilization of fixed assets had led to increase in profitability among deposit taking Saccos in Nakuru County. Maintenance approach taken regarding the fixed assets has not led to increase in profitability among deposit taking Saccos, while it was not clear whether method of disposal for fixed assets had led to difference in profitability of deposits taking Saccos in Nakuru County. A significant moderate positive correlation exist between fixed assets management and profitability of deposits taking Saccos in Nakuru County ($r=0.645$, $p<0.05$), a statistically significant positive relationship exist between fixed assets management and profitability of deposits taking Saccos in Nakuru County ($\beta = 0.206$, $p<0.05$).

The third objective of the study was to establish effect of financial investments management on profitability of deposits taking Saccos in Nakuru County. The research findings indicate that the financial investments were major component of the assets of the Sacco and assets allocation mix for financial investments had led to improved profitability for the Sacco. There was neutrality among respondents on whether diversification strategy adopted for financial investments had minimized risks thus increasing profitability for the Sacco. The investment strategy adopted (active or passive investment strategy) on financial investments has increased the profitability of deposits taking Saccos while respondents held neutral opinion on whether the ability to understand market processes, information management and fundamental securities analysis had enhanced profitability among deposits taking Saccos in Nakuru County. The results indicate that there is a significant moderate positive correlation between financial investments management and profitability of deposits taking Saccos in Nakuru County ($r=0.622$, $p<0.05$). A statistically significant positive relationship between financial investments management and profitability of deposits taking Saccos in Nakuru County was also established ($\beta = 0.336$, $p<0.05$).

The fourth objective of the study was to establish effect of accounts receivables management on profitability of deposits taking Saccos in Nakuru County. Respondents agreed that accounts receivables are a major component of the assets of deposits taking Sacco. There was neutral opinion among many respondents on whether there was improved effectiveness of collection efforts over time on collection

of receivables. The transaction costs involved in accounts receivables was found to affect the profitability of deposits taking Saccos. Respondents disagreed that efficiency of accounts receivables management had increased the profitability for the Sacco with majority of respondents also disagreeing that the debtor's turnover ratio for the deposits taking Sacco in Nakuru County was at an ideal level. There exist a significant moderate positive correlation between accounts receivables management and profitability of deposits taking Saccos in Nakuru County ($r=0.782$, $p<0.05$). It was established that there exists a statistically significant positive relationship between accounts receivables management and profitability of deposits taking Saccos in Nakuru County ($\beta = 0.256$, $p<0.05$).

5.3 Conclusions

It can be concluded that loan portfolio yield had led to increased profitability of deposit taking Saccos in Nakuru County. It was not clear whether effective management of the loan portfolio had enabled the Saccos increase their profitability and on whether risk control mechanism in place had enabled the Saccos to improve their profitability. It can be concluded that Product mix in the loan portfolio have not enabled the Saccos increase its profitability. Conclusions can be made that loan performance management has a significant effect on profitability of deposit taking Saccos in Nakuru County.

It can be concluded that that the acquisition process for non-current assets has not led to increased profitability and maintenance approach taken regarding the non-current assets has not led to increase in profitability among deposit taking Saccos. Conclusions can also be made that it was not clear whether method of disposal for non-current assets had led to difference in profitability of deposits taking Saccos in Nakuru County. It can be concluded that fixed assets management has a significant effect on profitability of deposit taking Saccos in Nakuru County.

It can be concluded that financial investments were major component of the assets of the Sacco and that assets allocation mix for financial investments had led to improved profitability for the Sacco. The investment strategy adopted (active or passive investment strategy) on financial investments has increased the profitability of deposits taking Saccos. Conclusions can be made that financial investments

management has a significant effect on profitability of deposit taking Saccos in Nakuru County.

Conclusions can be made that transaction costs involved in accounts receivables affect the profitability of deposits taking Saccos, efficiency of accounts receivables management increases the profitability of deposits taking Saccos while the debtor's turnover ratio for the deposits taking Saccos in Nakuru County is not really at an ideal level. Accounts receivables management has significant effect on profitability of deposit taking Saccos in Nakuru County.

5.4 Recommendations

In this study, some recommendations have been made to increase the profitability of deposit taking Saccos in Nakuru County and in other financial institutions.

The Saccos should put more effort in encouraging their employees to come up with suggestions and useful decisions and endeavor to incorporate them into the organization's decisions and policy with regard to Loan performance management, Fixed assets management, Financial investments management, and Accounts receivables management Practices.

Managers should increase the frequency and level of loan performance assessment due to the fact that it was found to be the most significant in enhancing deposits taking Saccos profitability. Every organization should endeavor to create a clear-cut loan performance evaluation process to ensure it is done in a way that enhances the profitability of the institution.

The study also recommends that the product mix in the loan portfolio be enhanced to avoid the risk of a particular loan category having a problem and leading to loan defaults for the deposit taking Saccos. The acquisition process for fixed assets should also be streamlined as it is also a major source of increased profitability. Another area that the Saccos should concentrate on is the efficient utilization of fixed assets.

The study further recommends that the manner of allocation adopted for financial investments in the Saccos be improved as well as ensuring that there is continuous expansion program for the financial investments. The transaction costs involved in

accounts receivables should also be kept at a minimum as these also affect the profitability of the Sacco.

5.5 Recommendations for Further Studies

On the recommendations for further studies, it is noted that the researchable aspects of the effects of asset performance management on profitability of deposit taking Saccos in Nakuru County have not been exhausted in this work. Therefore suggestion is being put forward for further research into the concept of asset performance management in the area of problems that limit or jeopardize the practice of asset performance management in deposit taking Saccos in Kenya.

Additional research can be conducted to determine the perceptions of clients or customers that interact with the deposit taking Saccos. This is underlined by the increasing emphasis on the importance of users and customers in the innovation process.

Another research can be done on the development of policies and strategies that will ensure proper management of expenditures so as ensure high profitability. Expense management is a key duty for the board and management of Saccos and so there is need to lower the expenses in order to have a higher efficiency and hence improved profitability.

REFERENCES

- Adnan, T. (2012). *The impact of assets quality management on profitability and shareholders' value - the Case of Jordanian Listed Commercial Banks*. .
- Alice, K. J. (2016). Effect of Asset performance management on Performance of Commercial Banks in Rwanda (A Case Study of Equity Bank Rwanda Ltd). *International Journal of Business and Management Review Vol.4, No.4*, , 1-12.
- Asea, P. K. (1998). Lending cycles. . *Journal of Econometrics*. 83(1-2): , 89-120.
- Bagchi, T. P. (2013). Working capital and profitability – Establishing causality. *Journal of Accounting and Management*, 3(2), 1-26.
- Baral, K. J. (2008). Health Check-up of Commercial Banks in the Framework of CAMEL: A Case Study of Joint Venture Banks in Nepal. *The Journal of Nepalese Business Studies*, 8, 211-298.
- Bastos, R. &. (2012, 03 01). Trade credit during a financial crisis: A panel data analysis. *Journal of Business Research*.
- Baumol, W. J. (1952). *The Transactions Demand For Cash: An Inventory Theoretic Approach*. New York: Pearson publications.
- Bhattacharya, H. (1987). *Bank Lending: Principles, Theory and Practice*. . Calcutta, Naya Prakas.
- Bhattacharya, H. (2014). *Working Capital Management: Strategies and Techniques*. Delhi.: PHI Learning Private Limited.
- Birchall, E. F. (2004). *Intermediate Financial Management* (8th ed.). Machill, London.
- Black, F. (1971). Implications of the random walk hypothesis for portfolio management. *Financial Analysts Journal*, 27, 16–22.
- Black, F. (1972). Capital Market Equilibrium With Restricted Borrowing: 25. *The Journal Of Business*, 21-32.
- Boahene, S. D. (2012). Credit risk and profitability of selected banks in Ghana. *J. Finance. Account*, 6-15.

- Caprio, G., & Klingebiel, L. R. (2002). Bank regulation and Supervision: What works best? *Journal of Financial Intermediaries*, 13, 205-248.
- Central Bank of Kenya, (2013). *Financial Sector Stability Report 2013*. Issue No. 4. Nairobi: Author.
- Collins Dictionary of Business, (2005). *Accounts receivable*. 3rd ed. Author. UK.
- Clement, O., & Martin, O. (2012) Financial Practice as a Determinant of Growth of Savings and Credit Co-Operative Societies' Wealth. (A Pointer to Overcoming Poverty Challenges in Kenya and the Region). *International Journal of Business and Social Science Vol. 3 No. 24 [Special Issue – December 2012]*.
- Comptroller, H. (1998) *Loan Portfolio Management*. Comptroller of the Currency: Administrator of National Banks.
- Dell, A., Ariccia, G., & Marquez, R. (2006). Lending booms and lending standards. *J. Finance*. 61(5):2511–2546.
- Deloof, M., & Jegers, M. (1999). Trade Credit, Corporate Groups and the Financing of Belgian Firms; *Journal of Business Finance and Accounting*, Vol. pp. 585-700.
- Deloof, M. (2003). Does Working capital management affect profitability of Belgian firms? *Journal of Business Finance & Accounting*, Vol. 30 (3 & 4), pp. 58-83.
- Demirgüç-Kunt, A., & Maksimovic, V. (2001), Firms as financial intermediaries: Evidence from trade credit data, *World Bank Working Paper 269.6*.
- Divya J., & Simran, J. (2015). Effect of Receivables Management on Profitability: A Study of Commercial Vehicle Industry in India. *Journal School of Management Vol.6, (4), pp. 118-293*.
- Enders, W. (2004) *Applied Econometric Timeseries*, Wiley, 2nd Edition.
- Eurofinas, (2016). European Consumer Credit Market Survey. http://www.eurofinas.org/uploads/documents/statistics/Annual%20Survey%202016_public.pdf.

- Farlex Financial Dictionary, (2012).Performing loan.Retrieved September 3 2017 from <http://financial-dictionary.thefreedictionary.com/performing+loan>.
- Fofack, H. (2009). Nonperforming loans in Sub-Saharan Africa: causal analysis and macroeconomic implications. *World Bank Policy Research Working Paper* (3769).
- Gill, A., Bigger, N., &Atnur, C. (2010). The Relationship between working capital management and profitability: Evidence from the United States. *Business and Economic Journal, Bej-10, 1-9*.
- Gitau, B. N., Nyangweno, G., Mwencha, N., &Onchagwa, G.A. (2014). Influence of cash management practices on Financial Performance of Agribusiness Enterprises in Kenya. *International Journal of Social Studies and Enterprises, Vol. 1.Issue 12*.
- ICA, (2012). Statement on the Cooperative Identity. *International Cooperative Alliance*.
- ICA, (2015).*Survey of Co-operative Capital Report*.<https://ica.coop/en/scc>
- ICA, (2005) *Statement on the cooperative Identity*. Available from the University of Wisconsin Center for Co-operatives at <Http://www.wisc.edu/uwcc/rin-html>.
- ICA report, (2013).*Survey of Co-operative Capital Report*.<https://ica.coop/en/scc>
- ICMA, (2017). International Conference of Multidisciplinary Academic: Asset Performance Management.
- Jared, M., Charles, M., & Willy, M. (2013) The Challenges Facing Deposit-Taking Savings and Credit Cooperative Societies' Regulatory Compliance in Kenya.A Case of the Gusii Region.*Interdisciplinary Journal of Contemporary Research in Business Institute of Interdisciplinary Business Research* 1013 VOL 4, NO 12.
- Kamau, M. H. (2013).*The Relationship between Underwriting Profit and Investment Income for the General Insurance Industry in Kenya*, longhorn publishers, Nairobi.

- Kieso, D.E., Weygandt, J. J., & Warfield T. D. (2010). *Intermediate Accounting* 13th Edition, Wiley.
- Kilonzi, B. K. (2012). *The impact of Sasra regulations on the financial performance of Sacco's in Kenya*. University of Nairobi Research Archives
- Kilonzi, B. K. (2012). *The Impact of SASRA regulations on the financial performance of Saccos in Kenya*. Unpublished MBA project, Nairobi: University of Nairobi.
- Ksenija, D. (2015). *Impact of Accounts Receivable Management on the Profitability during the Financial Crisis: Evidence from Serbia*. <https://www.researchgate.net/publication> [Accessed Aug 6, 2017].
- Kothari, C.R. (2005). *Research Methodology*. New Age International (P) Limited Publishers, New Delhi.
- Kombo, R., & Tromp, A.L. (2006): Entrepreneurship and Financial Constraints in Thailand, *Journal of Corporate Finance*, viewed on April 20, 2011 <http://www.elsevier.com>.
- Krueger, T. M. (2005). An Analysis of Working Capital Management Results across Industries: *American Journal of Business*, Vol. 20 Issue:2, Pp.11-20.
- Lawrence, A. (2013). Individual Investors and Financial Disclosure: *Journal Of Accounting And Economics*, Vol. 24 Issue:4, Pp.43-72.
- Levine, R. (2008). *Finance and the Poor*: The Manchester School.
- Linter, J. (1965). The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets: *The Review of Economic and Statistics*, Vol 47, No 1.
- Llewellyn, D. T. (1998). Principles of Effective Regulation and Supervision of Banks: *Journal Of Financial Regulation And Compliance*, Vol. 6 Issue: 4, pp. 312-319.

- Makokha, A., Namusonge, G., & Sakwa, M. (2016b). Effect of Risk Management Practices on Financial Performance in Kenya Commercial Banks. *Research Journal of Finance and Accounting*, 7, 16, PP—222-226.
- Marotta, G. (2005). Does trade credit redistribution thwart monetary policy? Evidence from Italy, *Applied Economics*, 29, 1619–162.
- Mathuva, D. M. (2009). The Influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms. *Research Journal of Business Management*, 3 1-11.
- Mathuva, D. (2010). The Influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms, *Research Journal of Business Management*, 4, 1-11.
- Mawih K., & Ani, A. (2014). Effects of Assets Structure on the Financial Performance: Evidence from Sultanate of Oman. *Journal of US-China Public Administration*, ISSN 1548-6591 Vol. 11, No. 2, 170-179.
- Mbula, K. J., Memba, S. F., & Njeru, A. (2016). Effect of Accounts Receivable on Financial Performance of Firms Funded By Government Venture Capital in Kenya. *IOSR Journal of Economics and Finance*, vol. 7, no. 1, pp. 62-69.
- Modigliani, F., & Miller, M. (1963). Corporate income taxes and the cost of capital: A correction. *American Economic Review*, 433-443.
- Mohsen, T. & Dennick, R. (2011); Making Sense of Cronbach's Alpha: *International Journal of Medical Education* Vol. 4, No. 1, 17-29.
- Mugenda, O. M., & Mugenda, A. G. (2003); *Research Methods, Quantitative & Qualitative Approaches*, Africa Centre for Technology Studies, ACTS press, Nairobi Kenya.
- Mukesh, B. A., & Dinesh, B. A. (2014). Investors or Speculators-Behavior of Stock Market Players: *International Journal of Engineering Sciences*. Vol 4, PP 12-31.
- Njeru, M. D., Agnes, N., Florence, M., & Ondabu, I. T. (2015). Effect of Loan Repayment on Financial Performance of Deposit Taking Saccos in Mount

- Kenya 41 Region; *International Journal of Innovation and Applied Studies*. Vol. 10 No. 4, pp. 1238-1244.
- Nyabwanga, R. (2011). Effect of Working Capital Management Practices on Financial Performance: A Study of Small Case Enterprises in Kisii South District, Kenya. *African Journal of Business Management* Vol. 6(18-26).
- Okwo, I.M., D. O., Ugwunta, A., & Nwez, U. (2012). Investment in fixed assets and firm profitability: Evidence from the Nigerian brewery industry. *European Journal of Business and Management*, 4(20). Available from www.iiste.org.
- Ombaba, K. M. B. (2013). Board Composition of Financial Distress of Listed Firms in Kenya. An Empirical Analysis: *Journal of Finance and Investment Analysis* Vol. No. 4, pp. 38-44.
- Onchangwa, G. A., Ongoncho, S., Onchonga, D. M., & Njeri, B. (2013). Influence Of cooperatives policy framework on members' investment in Kenya. *International Journal of Social Sciences and Entrepreneurship*, 1 (7), 564-570.
- Pandey, I. M. (2008). *Financial Management: 10th Ed.* New Delhi: Vikar Publishing House.
- Petersen, M. A., & Rajan, R. G. (1997). Trade Credit; Theories and Evidence: *The Review of Financial Studies*, Vol 10, No. 3: Oxford University Press.
- Rafuse, M.E (1996). Working capital management: An urgent need to refocus. *Journal of management decision*, 34(2), 59-63.
- Raheman, A., & Nasr, M. (2007). Working Capital Management and Profitability, Case of Pakistani Firms. *International Review of Business Research Papers*, vol. 3, no. 1, pp. 279-300.
- Richards, V. D., & Laughlin, E. J. (1980) A Cash Conversion Cycle Approach To Liquidity Analysis: *Financial Management*, Vol 9. No. 3, pp. 79-105.
- Richard, C. H., Jonathan, M., & Sharon, W. (2014). *Business Climate and International Franchise Expansion*: Salisbury University, Cam Dave.
- Roger, M. (2010) Legal Risks in the Financial Markets: *Journal of Risk and Insurance: Browse Publications*. No. 2, pp. 89-116.

- Sagwa, E.V., &Kembu, A. S. (2016).Effects of Competitive Strategy on the Performance of Deposit Taking Saccos in Nairobi County, Kenya. *European Journal of Business and Management* www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.8, No.8.
- SASRA, (2015).*An Annual Report on the performance and operations of DT-SACCO Societies in Kenya*,The Sacco Supervision Annual Report 2015.
- Saunders, M. L. P., &Thornhill, A. (2012).*Research Methods for business studies*.Edinburg: Prentice Hall.
- Scott, D. L. (2003).*WallStreet Words: An A to Z Guide to Investment Terms for Today's Investor*.Houghton Mifflin Company.
- Sharpe, W. F. (1964). *Capital Assets Prices: A Theory of Market Equilibrium under Conditions Of Risks*: Blackwell Publishing For the American Finance Association.
- Simeyo, O., Benard, O. O., Patrick O., & Francis, M. (2013). An Assessment of Effect of Government Financial Regulations on Financial Performance in Savings and Credit Cooperative Societies (Saccos): A Case Study of Saccos in Kisii Central, Kenya. *International Journal of Business and Social Science* Vol. 4 No 3.
- Smith, (1980).*Profitability versus liquidity tradeoffs in working capital management, in readings on the management of working capital*.New York: West Publishing Company.
- Songor, D., 7 Curtis, D. (2005) —*Banks loans portfolio diversification*ll. (*Master's and Bachelor's thesis*), University of Gothenburg
- Soshko, O. (2010). Modelling Inventory Management System at Distribution Company: Case Study. *Scientific Journal of Riga Technical University*.Volume 44 Pp. 87-93.
- Van Horne, J. C., &Dhamija, S. (2016). *Financial Management and Policy*, Pearson India Education Services Pvt. Ltd, Chennai.

World Bank, (2013) Tanzania. *Diagnostic review of consumer protection and financial literacy*, Volume I. Key findings and recommendations, Washington: World Bank.

Weston, J. F., & Eugene, F. B. (1979).*Essentials of Managerial Finance*, Harcourt Brace College Publishers.

Zhang, L., & Zhang, W. X. (2009).Design and implementation of fixed assets management system based on JavaEE. *Computer engineering and design*, 30(16),3797-3800.

APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Dear Sir/ Madam,

RE: DATA COLLECTION

I am a Master of Science (Finance) student at Jomo Kenyatta University of Agriculture and Technology (JKUAT). In line with the University's requirements, I am currently conducting a study titled: ***EFFECTS OF ASSET PERFORMANCE MANAGEMENT ON PROFITABILITY OF DEPOSIT TAKING SACCOS IN NAKURU COUNTY.***

I am kindly requesting you to participate in the study by filling in the questionnaire attached herewith. The data collected will be treated with utmost confidentiality.

Yours faithfully,

Cheptoo Lydia

APPENDIX II: RESEARCH QUESTIONNAIRE

Kindly answer the following questions by ticking in the appropriate box (✓) or comment on the indicated statements by ticking in the blank spaces

PART A

Section I: Background Information

1. Name of the SACCO (Optional)
.....
2. Kindly indicate your gender. Male [] Female []
3. Kindly indicate your age.
25 Years and below [] 26 – 35 Years []
36 – 45 Years [] More than 46 Years []
4. What are your highest academic qualifications?
Certificate [] Diploma []
First degree [] Postgraduate degree []
5. Which is your department-----
6. How long have you worked within the SACCO industry?
Less than 5 Years [] 5 – 10 Years []
11 – 15 Years [] More than 15 Years []

PART B

Section I: Loan Performance management

Kindly indicate your level of agreement with the statements on loan performance on a scale of 1-5 where: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4= Agree (A) and 5 = Strongly Agree (SA)

	SA	A	N	D	SD
1. Loan portfolio yield has led to increased profitability					
2. Effective management of the loan portfolio has enabled the Sacco increase their profitability					
3. The risk control mechanism in place has enabled the Sacco to improve its profitability					

4. The product mix in the loan portfolio has enabled the Sacco increase its profitability					
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Section II: Fixed Assets management

Kindly indicate your level of agreement with the statements on Fixed Assets management on a scale of 1-5 where: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4= Agree (A) and 5 = Strongly Agree (SA)

	SA	A	N	D	SD
1. Non-current assets portfolio in the Sacco has led to increased profitability					
2. The acquisition process for non-current assets has led to increased profitability					
3. Efficient utilization of non-current assets has led to increase in profitability					
4. The maintenance approach taken regarding the non-current assets has led to increase in profitability					
5. The method of disposal for non-current assets has led to difference in profitability					

Section III: Financial Investments management

Kindly indicate your level of agreement with the statements on Financial Investments management on a scale of 1-5 where: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4= Agree (A) and 5 = Strongly Agree (SA)

	SA	A	N	D	SD
1. Financial investments are a major component of the assets of the Sacco					
2. Assets allocation mix for financial investments has led to improved profitability for the Sacco					
3. The diversification strategy adopted for financial investments has minimized risks thus increasing profitability for the Sacco					
4. The investment strategy adopted (active or passive					

investment strategy) on financial investments has increased the profitability for the Sacco					
5. Ability to understand market processes, information management and fundamental securities analysis has enhanced profitability for Saccos					

Section IV: Accounts Receivables management

Kindly indicate your level of agreement with the statements on Accounts Receivables management on a scale of 1-5 where: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4= Agree (A) and 5 = Strongly Agree (SA)

	SA	A	N	D	SD
1. Accounts receivables are a major component of the assets of the Sacco					
2. There is improved effectiveness of collection efforts over time on collection of receivables					
3. The transaction costs involved in accounts receivables have affected the profitability of the Sacco					
4. The efficiency of accounts receivables management has increased the profitability for the Sacco					
5. The debtor's turnover ratio for the Sacco is at an ideal level					

APPENDIX III: RETURN ON ASSETS OF DEPOSITS TAKING SACCOs

No.	Name of SACCO	ROA		
		2015	2016	2017
1.	AFYA SACCO SOCIETY LTD	0.137	0.151	0.243
2.	BORESHA SACCO SOCIETY LTD	0.158	0.144	0.149
3.	COSMOPOLITAN SACCO SOCIETY LTD	0.127	0.176	0.171
4.	EGERTON SACCO SOCIETY LTD	0.119	0.088	0.094
5.	HARAMBEE SACCO SOCIETY LTD	0.101	0.159	0.179
6.	METROPOLITAN NATIONAL SACCO SOCIETY LTD	0.144	0.236	0.327
7.	MWALIMU NATIONAL SACCO SOCIETY LTD	0.131	0.166	0.174
8.	STIMA SACCO SOCIETY LTD	0.131	0.159	0.179
9.	UNAITAS SACCO SOCIETY LTD	0.157	0.250	0.241
10.	UNI-COUNTY SACCO SOCIETY LTD	0.154	0.177	0.199
11.	VISION AFRICA SACCO SOCIETY LTD	0.199	0.215	0.223
12.	WANAINCHI SACCO SOCIETY LTD	0.195	0.101	0.128

APPENDIX IV: TOTAL ASSETS OF DEPOSIT TAKING SACCOs

NAME OF SACCO	2015 (KES)	2016 (KES)	2017 (KES)
AFYASACCO SOCIETY LTD	13, 425, 541, 251	13,960,671,360	14,462,370,006
BORESHA SACCO SOCIETY LTD	4,315, 403, 536	5,560,372, 777	5, 962, 677,890
COSMOPOLITAN SACCO SOCIETY LTD	3, 371, 820, 654	3,471, 990, 772	4, 608, 555, 643
EGERTON SACCO SOCIETY LTD	2, 141, 033, 487	3,444, 206, 370	4, 377, 350, 666
HARAMBEE SACCO SOCIETY LTD	20, 378, 275, 651	22, 560, 320, 410	25, 101, 610, 350
METROPOLITAN NATIONAL SACCO SOCIETY LTD	8,550, 627, 577	9, 600, 403, 270	10, 352, 607,003
MWALIMU NATIONAL SACCO SOCIETY LTD	32,322, 172, 000	33, 112, 610, 110	35, 670, 380, 010
STIMA SACCO SOCIETY LTD	20, 270, 591, 000	21, 350, 160, 000	22, 470,610, 302
UNAITAS SACCO SOCIETY LTD	9, 286, 190, 757	10, 202, 200, 350	12, 476, 360, 005
UNI-COUNTY SACCO SOCIETY LTD	87, 206, 374	90, 301, 311	92,414, 370
VISION AFRICA SACCO SOCIETY LTD	372, 930, 027	382, 560, 320	394, 207, 120
WANAINCHI SACCO SOCIETY LTD	1, 158, 367, 768	2, 851, 763, 867	2, 906, 883, 966

Source: (SASRA, 2018)

APPENDIX V: NET INCOME/PROFIT OF DEPOSIT TAKING SACCOs

Name of SACCO	2015 (KES)	2016 (KES)	2017 (KES)
AFYA SACCO SOCIETY LTD	1, 835,418,700	2, 105, 372, 804	3, 514, 604, 110
BORESHA SACCO SOCIETY LTD	681, 205, 645	800, 470, 350	889, 340, 620
COSMOPOLITAN SACCO SOCIETY LTD	427, 311, 173	610, 350, 733	788, 460, 350
EGERTON SACCO SOCIETY LTD	256,314, 043	302, 610, 111	411, 605,350
HARAMBEE SACCO SOCIETY LTD	2, 065, 006, 538	3, 413, 611, 007	5,333, 202, 117
METROPOLITAN NATIONAL SACCO SOCIETY LTD	1, 227, 449, 577	2, 270, 350, 270	3,330, 502, 410
MWALIMU NATIONAL SACCO SOCIETY LTD	4, 228, 000, 000	5, 502, 611, 112	6, 200, 103, 412
STIMA SACCO SOCIETY LTD	2, 662, 913, 000	3, 415, 203, 114	4, 023, 622, 437
UNAITAS SACCO SOCIETY LTD	1, 455, 370, 763	2, 554, 370, 373	3, 002, 402, 300
UNI-COUNTY SACCO SOCIETY LTD	13, 431, 472	16, 002, 420	18, 472, 410
VISION AFRICA SACCO SOCIETY LTD	74, 366, 694	82, 612, 333	88, 116, 320
WANAINCHI SACCO SOCIETY LTD	226, 247, 420	289, 470, 320	372, 444, 204

Source: (SASRA, 2018)

**APPENDIX VI: LIST OF LICENCED DEPOSIT TAKING SACCOS IN
NAKURU COUNTY**

NO	NAME OF SOCIETY	POSTAL ADDRESS
1.	AFYA SACCO SOCIETY LTD	P.O.BOX 11607 – 00400, NAIROBI.
2.	BORESHA SACCO SOCIETY LTD	P.O.BOX 80–20103, ELDAMA RAVINE.
3.	COSMOPOLITAN SACCO SOCIETY LTD	P.O.BOX 1931 – 20100, NAKURU.
4.	EGERTON SACCO SOCIETY LTD	P.O.BOX 178 – 20115, EGERTON.
5.	HARAMBEE SACCO SOCIETY LTD	P.O.BOX 47815 – 00100, NAIROBI.
6.	METROPOLITAN NATIONAL SACCO SOCIETY LTD	P.O.BOX 5684 – 00100, NAIROBI.
7.	MWALIMU NATIONAL SACCO SOCIETY LTD	P.O.BOX 62641 – 00200, NAIROBI.
8.	STIMA SACCO SOCIETY LTD	P.O.BOX 75629 – 00200, NAIROBI.
9.	UNAITAS SACCO SOCIETY LTD	P.O.BOX 38721– 00100, NAIROBI.
10.	UNI-COUNTY SACCO SOCIETY LTD	P.O BOX 10132-20100, NAKURU.
11.	VISION AFRICA SACCO SOCIETY LTD	P.O BOX 18263-20100, NAKURU.
12.	WANAINCHI SACCO SOCIETY LTD	P.O BOX 222 – 10109, NAKURU.

Source: (KUSCCO, 2018)