ANALYSIS OF CREDIT RISK MANAGEMENT PRACTICES, INFLATION RATE AND FINANCIAL PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES (SACCOs) IN KENYA

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This thesis is my original work and has not been presented before in any institution for any award.

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ABSTRACT

The deposit taking SACCOs (DTS) play a vital role in the socioeconomic advancement of countries as they largely use authority they have over the movement of cash from surplus sources to those who need the funds through financial intermediation. However, it has been observed that the daily activities of Deposit taking SACCOs are faced with challenges. The financial performance of Deposit taking SACCOs in terms of return on asset in Kenya has been declining from the year 2016 to 2020. The main objective of the study was to determine the effect of credit risk management practices on financial performance of Deposit taking SACCOs. A moderating role of inflation rates. The specific objectives of the study were; to establish the effect of solvency on financial performance of deposit taking SACCOs, to establish the effect of liquidity on financial performance of deposit taking SACCOs, to establish effect of leverage on financial performance of Deposit taking SACCOs, to establish the effect of capital adequacy on financial performance of Deposit taking SACCOs and To find out the moderating effect of inflation rate on the relationship between credit risk management practices on financial performance of Deposit taking SACCOs in Kenya The study was guided by three theories, namely; Agency Theory, the Shift Ability Theory, and Pecking Order Theory. This study adopted cross sectional research design. The target population was 164 Deposit Taking SACCOs that operated from 2016 to 2020. The sample size was 61 Deposit Taking SACCOs in Kenya which are registered under SASRA. The study adopted stratified random sampling technique. The study employed the use of secondary data which was collected from the published annual financial statements of the Deposit taking SACCOs. Data was analyzed using descriptive statistics and inferential statistics. Descriptive statistics involved mean, standard deviation, minimum and maximum. Inferential statistics included correlation analysis, panel regression data. The study identified that; solvency had strong positive and highly significant correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. The study concluded that, leverage had a weak, positive and highly significant relationship with financial performance of deposit taking savings and credit cooperative societies (SACCOS). The study recommended that, SACCO should sale more equity to new shareholders, convert debtors into equity holders. This would increase available capital for investments, which in return would enhance their financial performance. Further, the study recommended that, Deposit taking SACCOs in Kenya to reduce holding too much capital idle as this would reduce their profitability significantly.

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ANOVA	analysis such as Analysis of Variance
CAR	Capital Asset Ratio
CBK	Central Bank of Kenya
CPI	Consumer price index
DTS	Deposit Taking SACCOs
EBIT	earnings before interest and tax
FMMP	flexible Minimum Monetary Policy
FP	Financial performance
GDP	Gross domestic performance
IMF	International monetary fund
KSE	Karachi Stock Exchange
LLP	Loan Loss Provision
LLP	Loan Loss Provision
LTDTA	long-term debt to total assets
NIM	Net Interest Margin
NPL	Non-Performing Loan
NPM	net profit margin
NSE	Nairobi Securities Exchange
PM	Profit margin
ROA	Return on assets
ROE	Return on Equity
ROI	Return on Investment

SACCOs Savings and Credit Cooperative Societies

SASRA Sacco and saving regulatory authority

STDTA short-term debt to total assets

TA Total Assets

TCD Total Customers' Deposit

TDE Total debt to equity

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The deposit taking Saccos (DTS) assume vital role in the socioeconomic advancement of countries as they largely use authority they have over the movement of cash from surplus sources to those who need the funds through financial intermediation. DTS are also very important in stimulating profitability by making investment a possibility. The degree to which a deposit taking savings and credit cooperative society (DTS) is able to accomplish its policies, financial goals, and non-financial goals is known as its financial performance (Gweyi & Karanja, 2014).

A SACCO's management can determine if it is running at break-even by looking at the financial performance of its deposit-taking DTS. A DTS that performs well attracts new members, which leads to an increase in deposits. Therefore, measuring financial performance is essential for effective business management (Aziidah, 2017). Rachdi (2013). The administration of SACCOs should work to improve financial performance in order to maximize the advantages to members. The ongoing expansion of DTS's profitability and performance also guarantees that investors continued to get rewards, which promotes additional investment.

1.1.1 Credit Risk management

According to Hays, Stephen and Arthur (2012), credit risk management practices in the United States is defined as the identification, measurement, monitoring, and control of risk arising from the potential for loan repayment default. Credit extended to borrowers may be at risk of default, so while SACCOs extend credit with the understanding that borrowers would repay their loan, some borrowers typically default and as a result, SACCOs experience a decrease in income due to the need to make provisions for such defaults. Earnings vary, exposing deposit-taking SACCOs to an additional risk of variability in their profits where there is no indication

of what percentage of their borrowers would default. Every financial institution takes on some risk when it lends money to individuals and businesses, and as a result, some loan losses do occur when certain borrowers don't pay back their loans on time. The primary source of loss for SACCOs is the potential for non-repayment of principal, interest, or both, as well as non-realization of securities on the loans.

Kabir and Dey (2017) states that, credit risks management arise form routine functions of financial institutions in Bangladesh SACCOs. Some of the major functions of the SACCOs are to accept deposits from customers and also lend loans to the deserving and qualifying citizens. SACCOs use credit advancement to individuals, groups and organizations as a source of income through the interest paid on these loans.

Olweny and Shipo (2017), opined that, credit risk management in Kenya is the most expensive risk in any financial institution and poses a substantial influencerelative to any other risk because it acts as a threat directly to the solvency of the financial institutions. The major places where credit risk can occur include limited capacity of the SACCOs, quick rates of rates, undefined credit policies, mismanagement, and poor liquidity, unreserved laws, poor lending practices, interface from the government and inadequate supervision by the central bank.

1.1.2 Solvency

Solvency, according to Acharya Gale and Yorulmazer (2010), ensures that deposit-taking SACCOs would fulfill their obligations in the event of a suspension of operations or liquidation in the USA. It speaks to a SACCO's capacity to meet long-term liabilities and its long-term financial stability. If the entire assets surpass the total liabilities, a deposit-taking SACCO is deemed solvent. The SACCOs suffer an insolvency risk and are deemed technically insolvent if total assets fall short of total obligations.

A SACCO's capacity to satisfy its short-, middle-, and long-term financial commitments is known as "solvency." In Nigeria, a SACCO is said to be solvent if its current assets and total

liabilities are equal. However, the SACCOs face an insolvency risk and won't be able to pay its debts if total assets are less than current liabilities (Ogege 2012).

The connection between borrowed funds and owner's funds is determined by solvency. The whole assets, operations, and financial expansion of the SACCO in Kenya were all funded by debt and common stock. Solvency ratios are used to gauge a SACCO's capacity to pay down its long-term obligations. Additionally, the solvency ratio offers a prediction of the possibility that a SACCO would keep consolidating its debt commitments (Kaigu & Theuri 2019).

1.1.3 Liquidity

Liquidity can be defined as the ability of SACCOs to honor their financial obligations as and when they come due with a reasonable cost. The ability of the financial institutions to fund asset growth and also to fund the expected and unexpected cash and collateral demands as they rise is dangerous to ongoing viability. A well-organized management of risk related liquidity empowers SACCOs to meet their financial obligations and reduce their likelihood of an adverse situation developing (Khaldum &Muda 2014).

Liquidity in India enhances profitability in the sense that it may make an organization unable to meet the short-term liabilities and this may affect its operations and its reputation too. Besides, insufficient cash or liquid assets can also make an organization to miss those enticements given by the suppliers of credit, services and goods. The loss of such enticements may be hazardous in the sense that it may bring on board higher cost of goods which in turn affect the profitability of the business (Kothari 2018).

Liquidity promotes financial performance of SACCOs in Sierra Leone, when SACCOs fail to check their liquidity, they are likely to fail to meet not only their financial obligations but also their customers' demands which may subsequently negatively influence their financial systems. It is therefore paramount that managers come up with a culture of sound liquidity

management so as not only better their ROA but also to absorb any shocks that might crop up in their financial system (Laminforady, 2018).

1.1.4 Leverage

Leverage is important among the financial institutions in the United States. This is because the interest expense for debt is tax deductible in the United States has led to high leverage level aimed at creating a larger tax benefit for corporate income.However, this higher leverage is also counterproductive to firm because debt comes with a heavier burden to repay its debt since it would have to be repaid with some interest. This may eventually bring on board default risk on the part of the firm Kang, (2011).

Leverage has been adopted by many SACCOs in Nigeria. However, SACCOs should be careful when using debt because it comes with a cost in form of interest which must be paid periodically. Moreover, too much use of debt also makes the SACCOs to be vulnerable to financial distress costs and this might negatively affectthe SACCOs' financial performance (Idada et. al, 2018).

The leverage has a significant impact on the SACCOs operating in Kenya. This has been explained by the fact that SACCOs that rely more heavily on debt produce lower profits than those that rely more heavily on equity. As financial performance declines, dividend payments and liquidity management do as well. This means that if organizations need to rely on less expensive sources of funding to prevent running out of money to pay back loans, they should raise the value of SACCOs so that shareholders can invest their profits instead of requesting dividends (Aziidah, 2017).

1.1.5 Capital adequacy

Capital adequacy in Sri Lanka is one of the main factors in reducing SACCOs risks. SACCOs take cash from the depositors to provide facilities for them. In a case where some borrowers

are unable or unwilling to repay their loans, the only source that SACCOs can rely on it is SACCOs capital. Therefore, a cautious relationship should be existed between SACCOs capital. A SACCOs that holds more capital can be easily survived in difficult economic conditions. By reducing the capital adequacy ratio, a SACCOs increases its level of and this was costly to the bank since it was forced to rely more on foreign financial resources. Besides, low financial adequacy ratio is likely to increase the SACCOs cash costs and thus reducing their profitability of SACCOs (Shafana, 2015).

Capital adequacy is vital in any financial institution in Ethiopia because it acts as a measurement of the institution's strength or ability in terms of financial matters, shows the SACCO's willingness and capacity to endure irregular and operational misfortunes. Further, a financial institution in the Philippines can also use capital adequacy demonstrates the company's capability to embrace extra or additional businesses and also because it gauges the SACCOs' capacity to adequately adapt to risks and liquidation (Sambasivan & Biruk, 2013).

Capital adequacy represents how much funds SACCOs in Kenya hold and with which they can be able to extend credit to customers. These funds are normally gotten in form of customer deposits and also from borrowing from SACCOs (Mwangi, 2014).

1.1.6 Inflation Rate

Inflation rate is a rise in the economy's overall level of prices for goods and services over time in Jordan. It may be summed up as chasing too many unattainable goals. Units of cash are used to purchase fewer goods and services when the general price level rises. In turn, this results in a loss of real value in the currency used as a means of exchange and a unit of account within the economy, which is represented by inflation. The yearly percentage change in a general price index (often the Consumer Price Index) over time is known as the inflation rate, and it is a key indicator of price inflation (Imane, 2014).

Inflation rate is defined as a sustained or continuous rise in the general price level or continuous fall in the value of money in Nigeria. A sustained increase in the general profitability in the SACCOs over period of time reflects a reduction in the credit risk. Borrowers are known to take loans from several financiers without disclosing this information to lenders. Cross borrowing is also a phenomenon in SACCOs. Most SACCOs have their profits diluted by non-performing loans whose cause is attributed to cost push inflation (Baba & Nasieku, 2016).

The yearly growth rate of the consumer price index, which is used to gauge inflation, has a negative impact on the efficiency of SACCOs since it tends to drive up costs and lower cost effectiveness in Kenya. As a sign of an inflationary state and a probable cause of SACCOs' pricing (high interest margin) behavior inefficiencies, the rate of inflation makes SACCOs more susceptible to the nominal values of loans made to clients. The so-called friction in credit risk, which is more severe in SACCOs, is made worse by inflation rate, which has a significant impact on the economics of these cooperatives (Omari, & Ogika, 2020).

1.1.7 Financial performances

A SACCO's financial success is a subjective indicator of how effectively it can employ resources from its main line of business to create income in USA. Financial performance is a crucial component of managing financial risk and refers to the extent to which financial objectives are being or have been achieved. It is the process of evaluating the financial impact of a SACCO's activities and policies. It may be used to aggregate comparable SACCOs in the same industries and assess the overall financial health of SACCOs over a specific time period (Brealey et. Al, 2016).

The most popular metrics for assessing financial performance in China, according to Haung and Song (2016), are the profitability ratio, liquidity ratio, leverage, and efficiency ratio. Direct computation of the ratios using financial statement data is possible. To construct ratios for financial statement analysis, components from the income and balance sheets are used. These

ratios are used to evaluate a company's capacity to create profits in relation to all of its expenses and other pertinent charges during a given time period.

One indicator of financial performance, according to SASRA (2017), shouldn't be consumed by itself. Instead, as there are several variables that affect how well an organization performs, a complete evaluation of its performance should take a variety of metrics into account. Based on financial data and information taken from audited financial statements and reports, SACCO subsector performance is evaluated. Before being presented to members at the annual general meeting, a SACCO's audited finances must be registered with the commissioner of cooperative development.

1.2 Statement of the Problem

Deposit taking SACCOs play a vital role in the re-distribution of economic resource from who have it. Application of solvency, liquidity, leverage, capital adequacy moderated by inflation rates to manage credit risks leads to enhanced Deposit taking SACCOs' financial performance deposit taking SACCOs in Kenya. When credit risk is managed appropriately then it leads increased financial performance for the SACCOs. Financial performance of Deposit taking SACCOs is important since the soundness of Deposit taking SACCOs sector is closely connected to the soundness of the whole economy, the financial strength of Deposit taking SACCOs is unquestionably associated to its financial performance, thus, that most important need of any Deposit taking SACCOs improve financial performance.

The financial performance of some Deposit Taking SACCOs in Kenya has been declining in Return on asset from the year 2016 to the 2020. The profit after tax in 2016 was 14.32%, 2017 was 13.68%, 2018 was 13.07%, 2019 was 12.98% and 2020 was 11.19%. Such a declining trend is a worrying issue since the primarily aim of any business is to increase profit (SASRA 2020).

Although some studies have been done in Kenya, there is little that has been documented to disclose the link between solvency, liquidity, leverage and capital adequacy onone hand and financial performance on the other. For instance, Kamoyo (2016) determinants the effect of solvency on financial performance of deposit taking SACCOs in Kenya, with bias on multiple regression analysis as the study variables. This study did not involve any of the study statistics analysis (Correlation and panel regression model analysis) that the current study seeks to address. Mishra & Pradhan (2015) Impact of liquidity management on profitability among the private sector SACCOs of India. Although the study also used inferential statistics analysis, it failed to look at descriptive statistics analysis. Besides, its findings cannot be used to generalize about Deposit taking SACCOs since it was done in micro finance institutions whose mode of regulation and operation is distinct from those of commercial banks. Khalifa Tailab (2012) evaluate the effect of capital adequacy on financial performance of SACCOs in America. Quasi experimental research design. The study did not focus on the cross sectional used in the current study. It is therefore evident that not much has been documented in this area, hence the reason why this study is being undertaken so as to fill the gap. Inflation raises interest rates. Higher interest rates provide more opportunity for Deposit taking SACCOs to generate profits. The important aspect is to keep both in balance. Hence it was important to study the effects of inflation of ROA, ROE and Net profit to know the financial performance of the Deposit taking SACCOs.

1.3 Objectives of the study

1.3.1 General Objective

The main objective of the study was to determine the effect of credit risk management practices on financial performance of Deposit taking SACCOs in Kenya, moderated by inflation rate.

1.3.2 Specific Objectives

The specific objectives of the study were;

i. To find out the effect of solvency ratio on financial performance of Deposit taking SACCOs in Kenya.

ii. To determine the effect of liquidity on financial performance of Deposit taking SACCOs in Kenya.

iii. To determine the effect of leverage on financial performance of Deposit taking SACCOs in Kenya.

iv. To find out the effect of capital adequacy on financial performance of Deposit taking ACCOs in Kenya.

v. To find out the moderating effect of inflation rate on the relationship between credit risk management practices on financial performance of Deposit taking SACCOs in Kenya

v a) To determine the moderating effect of inflation rate on the relationship between solvency ratio and financial performance of Deposit taking SACCOs in Kenya.

v b) To determine the moderating effect of inflation on the relationship between liquidity and financial performance of Deposit taking SACCOs in Kenya.

v c) To find out the moderating effect of inflation rate on the relationship between leverage and financial performance of Deposit taking SACCOs in Kenya.

v d) To find out the moderating effect of inflation rate on the relationship between capital adequacy and financial performance of Deposit taking SACCOs in Kenya.

1.4 Research Hypotheses

The study was guided by the following hypotheses:

H_{01}: Solvency has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya.

H_{02}: Liquidity has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya.

H_{03}: Leverage has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya.

H_{04}: Capital adequacy has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya.

H_{05}: Inflation rate has no moderating effect on the relationship between credit risk practices on financial performance of Deposit Taking SACCOs in Kenya

H_{05a}: Inflation rate has no statistically significant moderating effect on the relationship between Solvency and financial performance of Deposit Taking SACCOs in Kenya.

H_{05b}: Inflation rate has no statistically significant moderating effect on the relationship between liquidity and financial performance of Deposit Taking SACCOs in Kenya.

H_{05c}: Inflation rate has no statistically significant moderating effect on the relationship between leverage and financial performance of Deposit Taking SACCOs in Kenya.

H_{05d}: Inflation rate has no statistically significant moderating effect on the relationship between capital adequacy and financial performance of Deposit Taking SACCOs in Kenya.

1.5 Significance of the Study

The findings of the study will also help Deposit taking SACCOs in Kenya will know how solvency, liquidity, leverage and capital adequacy affect the financial performance of the Deposit taking SACCOs, and whether inflation (which the Deposit taking SACCOs in Kenya. Stakeholders like the shareholders to know how these four aspects of credit risk (solvency, liquidity, leverage, capital adequacy) influence financial of the Deposit taking SACCOs in Kenya.

Future researchers will gain by referring to the finding in this study. In addition to contributing to the body of academician knowledge, the research will also help and encourage continuity as

far as doing further research is concerned. The government will gain through increase in revenues in the event that financial performance of Deposit taking SACCOs will improve.

1.6 Scope of the Study

Although there are many aspects of credit management practices this study would only concentrate on four practices, namely, solvency, liquidity, leverage and capital adequacy. Most studies have indicated that these four are the most important and common management practices of deposit taking SACCOs. The study covered sample size of 61 of Deposit taking SACCOs in Kenya and it ran for a period of five years from 2016 to 2020. This period was suitable because it carries required indicators relevant for this study. This study adopted cross sectional and descriptive research designs because they enabled the researcher to collect data across various firms and provide clarity on the state of things in those firms.

1.7 Limitations of the Study

The major limitation of the study was inadequacy of published annual reports for most of the SACCOs studied. The researcher wrote and requested audited data from SASRA. Additionally, the study was limited to SACCOs in Kenya consequently; its findings may not apply to other financial or non-financial institutions in Kenya.

1.8 Assumptions of the Study

The study heavily relied on secondary data therefore, it was assumed that the published reports were accurate and unbiased, it also assumed that data for all the Deposit taking SACCOs in Kenya over the period of study was available at all time and not a single deposit taking SACCOs was liquidated, merged or put under receivership over the period of study.

1.9 Operational Definition of Term

Capital adequacy	Capital adequacy is one of the main factors in reducing Deposit taking SACCOs risks. Deposit taking SACCOs take cash from the depositors to provide facilities for them.

Credit risk management practices	Is defined as identification, measurement, monitoring and control of risk arising from the possibility of default in the loan repayment. Credit risk management practice for example: Solvency, Liquidity, leverage and capital adequacy.
Financial performance	Financial performance is a measure of how well a firm uses assets from its primary mode of business to generate revenues.
Inflation rate	Inflation rate is an increase in the general price level of goods and services in the economy over a period of time. It can be defined as too much chasing too few goods - Consumers Price Index
Solvency	Solvency is the ability of a deposit taking SACCOs to meet its obligation in the event of cessation of activity or liquidation. It refers to a Deposit taking SACCO's long run financial viability and its liability cover long-term obligations.
Leverage	Leverage is beneficial during times when the Deposit taking SACCO is earning profits as they become amplified.
Liquidity	Liquidity can be defined as the ability of Deposit taking SACCOs to honor their financial obligations as and when they come due with a reasonable cost.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical Literature

2.1.1 Agency Theory

Jensen and Mecking created this idea in 1976. The idea seeks to clarify the connection between the two parties known as principals and agents. According to the idea, agency relationships are agreements in which one or more principals engage a third party (an agent) to carry out a variety of tasks on their behalf and transfer some decision-making authority to the agent (Solikhah et. al, 2020). This idea states that there is an information gap that causes information asymmetry, where one party (often the agent) appears to have more information than the other. This theory implies that one of the deciding criteria in the selection of accounting procedures is the knowledge asymmetry between agent and principal. Siregar and Farahmita (2012) contend that this information asymmetry forces management to select accounting techniques that can aid in conveying to the market the true value of the market.

The Agency hypothesis is predicated on the idea that everyone strives to their greatest advantage. In other words, the more information asymmetry there is, the more probable the agent would act in an opportunistic manner (Andrijasevic & Pasic, 2018). The paper claims that two fundamental strategies might function as a check on opportunism: control and contractually obliging the agent.

The fundamental drawback of this hypothesis is that, after the venture capital agrees to invest in the new firm, its explanatory power is reduced for three reasons. The objectives of the venture capital and the entrepreneur are the cause things would probably align, which would help to mitigate the possible agency issue. It's possible that the venture capital switches from being a skeptical investor to an eager partner after opting to invest in the new business. The original founder still holds a sizable legal ownership stake in the business, albeit at a smaller

percentage, and continues to make significant, personally relevant investments in it (Moore, 2015).

This theory has been criticized for concentrating only on two stakeholders: the agents and the principals. According to the critics, it's not prudent for a healthy for a corporation to focus on merely two stakeholders and neglect all the other stakeholders that also play key roles in the organization (Cuevas *et. Al*, 2012).

This theory was deemed fit and is relevant to this study because it was used to explain the relationship between solvency and financial performance of deposit taking SACCOs in Kenya. Deposit taking SACCOs borrows funds form external sources to fund its operational. Credit payment is done according to various priorities set with the Deposit taking SACCOs. Top management of Deposit taking SACCOs may sometimes violate the agreed manner of debt settlement. Such violation causes conflicts between Deposit taking SACCO management and creditors. This theory informs objective one of this study.

2.1.2 Shift Ability Theory

This theory was coined by Moulton in 1918. According to the theory, liquidity of an institution is preserved only if the institution holds those assets which can easily be sold or those assets which could easily be converted to other investments in exchange for cash. In the Deposit taking Saccos' scenario, it means that Deposit taking Saccos can maintain a high level of liquidity only if they ensure they maintain assets which are easily saleable. This means that Deposit taking Saccos should ensure they hold those securities that are highly marketable or those that can easily be sold for this assures them of liquidity (Mudanya & Muturi, 2018).

Shift ability theory came with some strong assumptions that the assets are divisible to trading activities taking place regularly in the period with no control of short-term asset sales by borrowing and lending possible at the same interest. This includes every investor which can

hold assets which could easily be converted to other investment in exchange for cash. This theory has major assumptions, that there exist securities that are highly marketable or easily to be sold such that investors may save or unlimited amounts at the risk-free rate, and perfectly divisible assets (Wahyudi et. Al, 2019).

There are several limitations associated with Shift ability theory. It does not provide liquidity to the deposit taking SACCOs and it completely relies on the economic conditions, this theory neglects acute depression, the shares and debentures cannot be shifted to others by the Deposit taking SACCOs and a single Deposit taking SACCOs may have shift able assets in sufficient quantities but if it tries to sell them when there is a run on the Deposit taking SACCOs, it may adversely affect the entire deposit taking SACCOs.

The major criticism of this theory is that it does not consider the fact that in times of cute crisis, it becomes difficult to shit assets to others in the event where financial institutions simultaneously shift their financial assets and hence it is likely to adversely affect both the providers of credit and the users of the credit (Laminfoday, 2018).

This theory is relevant in this study because it was used to explain the relationship between liquidity and financial performance of deposit taking SACCOs in Kenya. Deposit taking SACCOs 'liquidity worthiness determines whether it's able to pay its obligations as it falls due. Deposit taking SACCOS holds such assets that they easily convert to cash to pay its obligations. This theory informs objective two of this study.

2.1.3 Pecking Order Theory

This theory was coined by Stewart C. Myers in 1984. The theory opines that when a firm is in need of additional capital, it prioritizes its sources of financing by utilizing the internal sources before resulting into external sources of financing. That is, the firm utilizes internal sources to finance itself but if the sources are exhausted before it quenches its financial need, it seeks the

additional funding from debts and lastly from external equity if need be (Nyanamba, 2018). This theory maintains that business adhere to a hierarchy of financing when available, and debt is preferred over equity if external financing is required (Kiragu,2010).

This theory is pegged on the assumptions that the cost of internal financing is less than the cost of external financing at all times. Internal financing is the use of retained profits while external financing is the use of borrowed funds. Retained profits are profit the control of management but external funds is not the control of management. The theory assumes that internal and external financing are available at any time. The theory assumes that internal financing is subject to firm's control and that the availability of external financing is not guaranteed at all times (Eldomiaty, *et. al,* 2017).

The Pecking Order Theory has two limitations: That the theory does not consider the influence of taxes, agency cost, the cost of issuing new securities, financial distress of the investment opportunities. The theory ignores the fact that there are problems associated with the decisions of financial managers to accumulate so much financial slack that they become protected to market discipline (Butt *et. al,* 2013).

This theory has been criticized for clinging on a very simple setting where the firm's only financing choice is debt versus equity, ignoring more complicating settings, for example when the firm also chooses between straight and convertible debt (Caselli & Negri, 2018).

This theory is relevant for this study as it was used to explain the relationship between solvency, liquidity, leverage and capital adequacy on financial performance of deposit taking SACCOS in Kenya. Before SACCOs extend credit facility to its customers, it evaluates it available capital. Available capital determines whether or n the SACCOs can meet customers' requirements. SACCOs raise funds form internal sources fully before going for external sources. Collectively funds from internal sources and external sources determines objective

four on capital adequacy in a SACCOs. This theory informs all the four objectives and therefor it is the main theory of this study.

2.2 Empirical Review

2.2.1 Solvency and financial performance

Bourke (2013) determine the connection between bank profitability and solvency for 90 banks in Europe, A multiple regression model was employed in the study to examine performance from 2005 to 2009. Profit margin (PM) and return on assets were used to assess performance, and long-term debt to total assets (LTDTA), short-term debt to total assets (STDTA), and total debt to equity were used to assess solvency (TDE). The study found that ROA and PM had a negligible negative relationship with STDA and LTDTA. In contrast to its unfavorable and negative association with PM, the TDE was discovered to have a good link with ROE. Thus, the study's conclusion that solvency was not a significant factor in determining the firm's success was reached. The research was pertinent to this study's research since it offers a framework for evaluating performance. Descriptive and correlation analyses, which are useful for determining how closely related variables are, were not used. The current study addresses the gaps by using up to date data and adopting descriptive and correlation analysis.

Graham and Brodeleau (2013), conducted research on the effect of solvency on the financial performance of financial institutions in Canada. The purpose of the study was to determine how financial institution performance that is listed on the Canadian Securities Exchange is impacted by solvency. The study used a descriptive research design, and secondary data was taken from 19 financial institutions' balance sheets, income statements, and notes on the Canada Securities Exchange for the years 2010 to 2014. According to the findings, solvency was a reliable indicator of financial performance. The current study uses sample size of 61 which inferences to the larger population.

Abera (2014) investigated how solvency affected the banking sector's profitability in Ethiopia. This study used a mixed methods research strategy, including documentary analysis and in-depth interviews, to analyze the solvency determinants impacting bank profitability for a total of eight commercial banks in Ethiopia for the years 2000–2011. The study found that bank solvency was one of the key factors influencing Ethiopian banks' profitability, despite the regression analysis' conclusions to the contrary. The study came to the conclusion that further research is needed to clarify the effect of Ethiopian banks' solvency on their performance. Regarding the methodology employed in the analysis, there is a need to utilities more inferential analysis such as Analysis of Variance (ANOVA) and regression. The study incorporated inferential analysis tools such as (correlation, simple and multiple regression) in the current study to enhance generalizations and conclusions.

Laertey *et. al*, (2014) examined the solvency and financial performance of banks listed on the Ghana Stock Exchange. The study used a target population of 9 commercial banks listed on the Ghana Stock Exchange and a sample of 7 banks to attempt to characterize the link between the solvency and financial performance of banks on the Ghana Stock Exchange. Correlation analysis was employed in the study. The approach of purposeful sampling was adopted. In conclusion, between 2005 and 2010, listed banks' levels of solvency and financial performance both declined. The solvency and financial performance of the listed banks had a very shaky positive association. The research didn't incorporate descriptive analysis and panel regression. Gaps to be filled by considering of descriptive analysis and panel regression and conducting the study locally.

Omari *et. al,* (2015) looked into how solvency affected the financial health of industrial sectors. In this study, financial performance was measured by variables like earnings before interest and tax (EBIT), net profit margin (NPM), return on assets (ROA), and return on equity (ROE), while solvency was measured by debt ratio and equity ratio. For the analysis, multiple

regressions covered the years 2008 to 2011. According to the survey, the glass and ceramic industries and the mining and extraction industry had the greatest and lowest EBIT, NPM, ROA, and ROE, respectively. According to the study's findings, solvency and a firm's financial success are significantly related. A gap exists as deposit Taking SACCOs as key players in the financial performance have not been adequately studied in past scholarly work. This current study shift focused to Deposit Taking SACCOs as key players in the financial performance.

Kamoyo (2016) conducted study on the determinants of solvency on financial performance of deposit taking SACCOs in Kenya in Kenya, 40 SACCOs registered by SASRA and operating in Kenya from 2006 to 2010 were sampled for the study. To identify the factors influencing the solvency of deposit-taking SACCOs, the study used multiple regression analysis, investigative questionnaires, descriptive statistics, and investigative questionnaires. The study's findings suggested a negligible significant positive relationship between solvency and financial performance. The study failed to use correlation analysis and panel regression model limit generalization ability. The current study applies correlation and panel regression model as well which allow inferences to the larger population.

Ongore and Kusa (2017) conducted research on the factors that influence the financial performance of Kenyan commercial banks' solvency. On panel data, the authors estimated the parameters using a multiple regression model and generalized least squares. For ten years, from 2001 to 2010, this explanatory analysis is based on secondary data collected from published statements of accounts of all commercial banks in Kenya, CBK, IMF, and World Bank publications. 37 commercial banks were taken into account in this investigation. Thirteen of these banks have foreign ownership, while 24 are locally held. Except for the solvency variable, the results indicated that bank-specific factors significantly influenced the performance of commercial banks in Kenya. ROA, ROE, and NIM were all positively correlated with solvency management, although the relationship was quite feeble. Correlation analysis, which deals with

the relationship between independent factors and dependent variables, was not used in the study. The current study addresses the correlation analysis from local perspectives to address the gaps.

Macharia (2017) aimed to investigate the connection between the success and solvency of Kenyan savings and credit cooperative societies. All 43 Savings and Credit Co-operative Societies in Kenya that were in operation from 2008 to 2012 made up the study's population. To quantify profitability and CBK solvency ratio, the study collected secondary data on return on assets. To determine the link between the research variables, descriptive statistics and regression analysis were utilized in the study. The study discovered a significant correlation between the profitability and solvency of Kenyan Savings and Credit Co-operative Societies; nonetheless, the coefficients from the analysis were discovered to be insignificant. The results of the study cannot be trusted because a lower sample size of 43 was employed to analyze the data. The current study try to fill the gaps in the research.

Mwangi (2018) investigated how Kenyan SACCOs' financial performance was impacted by their solvency. The research used borrowings, capital and asset adequacy, profits and liquidity to gauge financial performance. The research design for the study was descriptive. The 43 SACCOs in Kenya that have received licenses as of December 2013 were the study's intended population. ANOVA was used to evaluate the study's primary and secondary data. The study's findings demonstrated a strong inverse association between solvency and SACCOs' financial success. Additionally, the analysis came to the conclusion that having more solvency assets than total assets would maintain greater solvency assets in comparison to total deposits would result in lower returns to Kenyan SACCOs, whereas the opposite would be true. Cross sectional design was not included in the research. The current study focused on cross sectional design in the research to fill the gaps.

Dang (2017), determined solvency the effect of solvency on financial performance of deposit taking Saccos in Kenya . the employed a descriptive and correlation research design and used smple size 120 of deposit taking in Kenya. The finding of the study indicated that solvency had highly positive influence on the financial performance of deposit taking Sacco in Kenya. the study however conducted with deposit taking SACCO in Kenya. The study failed to used panel aggression and correlation analysis. This current study will fill the gap.

Gichinga (2017), conducted study on the effect of solvency on financial performance of commercial listed in Nigeria. The study using a sample size of 29, the study was analysed using regression analysis. The study found that there is effect of solvency on financial performance of deposit taking, study further recommended that the management team to set up a system that should prevent this weakness. The failed to used correlation analysis which good. The current study will used both regression and correlation to fill in gap.

Tsuma and Gichinga (2016) the study aimed to examine the effect of solvency on financial performance of bank in Nigeria. The employed a descriptive research design with both primary and secondary data being utilized. the results of the research indicated that, had a positive effect on the financial performance of banks. The failed to adopt regression and correlation analysis. This current study tried fill the gap.

Ezeoha (2017) did a study on the association between SACCOs consolidation, credit crisis and solvency in Nigerian Savings and Credit Cooperative Societies (SACCOs system. The study aimed at identifying the factors which influence Savings and Credit Cooperative Societies (SACCOs solvency in an era of regulation-induced industry consolidation. Specifically, the study looked at the influence of asset liquidity, profitability, operating efficiency, size of Savings and Credit Cooperative Societies (SACCOs capital, loans to deposits ratio, predictability of depositors' behaviour, and board skill on quality of Savings and Credit Cooperative Societies (SACCOs assets. The study revealed that there was general deterioration

in solvency and increased credit crisis between the periods 2004 and 2008 and this was perceived to be fueled by inability of Savings and Credit Cooperative Societies (SACCOs to optimally use their huge asset capacity to enhance their earnings profiles. Further analysis revealed that huge solvency bases and excess liquidity syndrome influenced uncontrolled lending by Savings and Credit Cooperative Societies (SACCOs; and that increase in the level of unsecured credits in Savings and Credit Cooperative Societies (SACCOs ' portfolios ironically helped to mitigate the level of NPL within the studied period. The current study tried very hard to fil the gaps.

Cheruiyot (2018) studied the influence of solvency on financial performance of Savings and Credit Cooperative Societies (SACCOs in Kenya. The main objective of the study was to investigate the influence of solvency on financial performance of Savings and Credit Cooperative Societies (SACCOs in Kenya. Specifically, the study aimed to A descriptive research design was adopted by this study. Secondary data for the 175 Savings and Credit Cooperative Societies (SACCOs was obtained from audited annual financial reports for individual Savings and Credit Cooperative Societies (SACCOs found on the Savings and Credit Cooperative Societies (SACCOs website and at the SACCOs) of Kenya website and library. The study concentrated on analyzing the quantitative data which were analyzed with the help of Statistical Package for Social Sciences (SPSS) version 20. The findings were presented using percentages, tables and frequencies. Data were analyzed using descriptive statistics. The study found out that there was a strong positive relationship between asset quality and profitability of Credit Cooperative Societies (SACCOs in Kenya and this was attributed to the fact that when the ratio of Non-performing asset to net assets is lower, solvency of Credit Cooperative Societies (SACCOs in Kenya it means that the trade-off between solvency and financial performance is positive. The study used (SPSS) but the current study will use SPSS version 23 to fill gap

Barus *et. al*, (2019) investigated the influence of solvency on the financial performance of savings and credit societies in Kenya. The study further indicated that there were no major significant differences between the public sector Credit Cooperative Societies (SACCOs and the private sector banks as regards to Gross NPA ratio and the Net NPA. By adopting an explanatory research design on 83 Savings and Credit Societies (SACCOs) which had been in existence for five years (2011-2015), Multiple linear regression models were used to analyze both primary and datausing statistical package for the social sciences (SPSS) and STATA. The study revealed that solvency had a positive significant effect on the financial performance of savings and credit societies. The study failed to used any objective while the current study sought to fill gaps.

2.2.2 Liquidity and Financial performance

Ibe (2011) aimed to ascertain how liquidity affected the US banks' profits. Effects of loan loss provisions on total loans, revenue on total debt, non-interest expenses on total loans, debt to equity annual inflation rate, market capitalization, and money supply increase on commercial banks' profitability were the study's particular goals. The research in the US employed a sample size of 43 banks. Only non-interest expense, equity to total asset, inflation rate, and market capitalization were found to be negatively related to return on liquidity, though the negative relationship was insignificant. The positive relationship between equity to total asset and return on asset was found to be positive. excluding the rate of inflation. According to the study's findings, commercial banks raise loan loss provisions to boost profitability and enhance revenue from their non-lending operations. It suggested that larger sample periods and time series be used in future research to enhance the current one. The results of the study cannot be trusted because a lower sample size of 43 was employed to analyze the data. Current study targets sample size of 61 which larger enough.

Sohaimi (2013) investigates the relationship between liquidity and SACCO system performance in Malaysia. The study's primary goals were to examine liquidity risks and disclosure, as well as to determine how liquidity risks relate to various financial performance indicators by utilizing deposits, cash, the liquidity gap, and non-performing loans as indicators for the SACCOs system in Malaysia. and assess the impact on the capital and reserve of SACCOs. For the years between 1997 and 2012, secondary data were gathered from the balance sheets, income statements, SACCOs' annual reports, and Thompson Data Stream. Multiple regression analysis was then used to determine the relationship between liquidity risk on SACCOs' capital and reserve. The findings showed that liquidity risk has a considerable negative impact on SACCOs' capital and reserves, with non-performing loans (NPLs) acting as an aggravator. Correlation analysis was not used in the research. The current study used the correction analysis in the research.

David and Samuel Adebayo (2013) conducted a study on the relationship between profitability and liquidity in Nigeria. The primary goal of the study was to examine how the availability of liquidity affects the profitability of SACCOs in Nigeria. This study utilized a descriptive research approach with specific goals in mind. Secondary data for the 105 Savings and Credit Cooperative Societies SACCOs was gathered from audited yearly financial reports for individual SACCOs that were located at SACCOs in Nigeria and on the Savings and Credit Cooperative Societies (SACCOs) website. Internet site and library. The statistical package for social sciences (SPSS) version 20 was used to evaluate the quantitative data, which was the study's main focus. Tables, frequencies, and percentages were used to show the results. Utilizing descriptive statistics, data were examined. According to the study, there is a significant link between Credit Cooperative Societies' profitability and liquidity. This was ascribed to the fact that when the debt to equity ratio is lower, the liquidity of Credit Cooperative Societies (SACCOs in Kenya) indicates that there is a favorable trade-off between liquidity and profitability. Gaps arise on need to expand the valuation to include other aspects

of credit risk management practices such as solvency, liquidity, leverage and capital adequacy. The current study expands the scope of credit risk management practices assessed. On the variable aspect, the study focused on solvency, liquidity, leverage and capital adequacy.

Khidmat and Rehman (2014) On the relationship between liquidity and SACCO profitability in Pakistan. The goal of the study was to gather actual data on how SACCOs might improve their liquidity and profitability positions as well as how good liquidity management influences SACCO profitability. The study included quantitative research techniques. The analysis used both primary and secondary data. Descriptive statistics and correlation analysis were employed in the investigation. The research found a substantial positive connection between liquidity and profitability. In light of this, the study concluded that SACCOs should focus more on having effective and efficient liquidity management in order to succeed in their operations and survive, and that both illiquidity and lack of liquidity are "financial diseases" that can quickly erode a SACCO's profit base as they interfere with their efforts to achieve high profitability-levels. The monetary authority should urgently promote and authorize the use of credit cards, encourage SACCOs to maintain a flexible Minimum Monetary Policy (FMMP) or discount rate so that the SACCOs can take advantage of alternative measures to meet the unexpected withdrawal demands, and reduce the tendency of maintaining excess idle cash at the expense of profitability. Mandate the use of checks for large sums of daily company transactions. The study was conducted in Pakistan thus presenting a scope gap. The current study was conducted in Kenya which is easy collect data for the researcher.

Al Nimer *et. al*, (2015) evaluated how Jordanian SACCOs' financial performance was affected by liquidity as shown by ROA. The study's major goal was to determine how financial leverage and liquidity affected the profitability of businesses. In the study, secondary data from a sample of forty listed SACCOs in the textile sector were studied quantitatively using pooled panel regression and descriptive statistics models from 2006 to 2016. The study found that

profitability and financial leverage did indeed have a favorable link. The results demonstrated a substantial positive connection between ROA and quick ratio. The study employed a 40-person sample size; thus the results are based on that number of participants. The current study fills the gaps by considering annual statement documents from the SACCOs.

Mishra and Pradhan (2015) did a study on the impact of liquidity management on profitability among the private sector SACCOs of India. Inferential statistics models were utilized to evaluate both primary and secondary data using the statistical package for the social sciences (SPSS) and STATA in an explanatory study design on 83 Savings and Credit Societies (SACCOs) that had been operating for five years (2011 - 2015). The study found out that liquidity had a significant negative on financial performance of SACCOs in India. The survey also revealed that there were no substantial differences between the private sector and public sector Credit Cooperative Societies SACCOs in terms of the total loan and coverage ratio. The study, however, found no evidence of a connection between SACCO profitability and liquidity taking. The study failed used both inferential statistics and descriptive statistics to analysis data in the research. The current study filled the gaps by considering both inferential statistics and descriptive statistics to analysis data in the research.

Roy *et. al,* (2016) interrogated the link between liquidity on financial performance of SACCOs in Indian. The specific objectives of the study were effects current asset to current liabilities, provision for cash ratio and cash, marketable securities and accounts receivables on profitability. The study took a sample size of 55 SACCOs in the country and data collected was analyzed by use of regression analysis tool. The study found out that there was a positive significant relationship between current ratio and profitability of SACCOs. It was concluded that as liquidity of SACCOs has significant importance on financial system of the county, it may affect economic growth of the country alongside profitability. The study failed to use

correlation analysis which good measuring association of variables. The current study focused on correction, panel regression and descriptive analysis.

Moussa and Boubker (2017) used data from 18 SACCOs in Tunisia from the years 2000 to 2017 to investigate the effect of liquidity on SACCOs' profitability. The ratios of total loans, total deposits, and liquid assets to total assets showed positive significant influences on return on assets, but the ratio of current assets to current liabilities had no significant impact on ROA, according to the study, which used two models of panel statistics. The study also showed that while current assets and current liabilities did not significantly affect return on equity (ROE), the ratios of liquid assets, total assets, total loans, and total deposits had a substantial negative influence on ROE. The study didn't include correlation statistics, which are useful for determining how closely two variables are related. The current study included correction analysis in the research to fill the gaps.

Karani (2017) studied how Kenyan SACCOs' profitability was impacted by liquidity. From 2009 to 2013, secondary data were examined for the research. Regression analysis was performed to find the relationship between the research variables, along with descriptive and inferential statistics. The study clearly demonstrated a large positive association between profitability and liquidity management. To support the competing goals of maintaining sufficient liquidity and long-term profitability, it was advised that finance managers of SACCOs should maintain a balance between the amount of liquid assets and long-term assets. There was no cross-sectional research strategy used in the study. The current study employed cross sectional research design.

Vaita (2019) examined how liquidity affected Tier One listed SACCOs in Kenya's financial performance. The study's goals were to ascertain the effect of managerial effectiveness, domestic product growth, and liquidity coverage ratio on the financial performance of Kenya's Tier 1 Listed SACCOs. The study used a descriptive research approach to study SACCOs in

Kenya. The respondents' primary information was requested, and descriptive and inferential statistics were used to evaluate it. The study's findings revealed that liquidity coverage had no discernible impact on ROA. The study also found a substantial positive association between managerial effectiveness and ROE and ROA. The increase in the gross domestic product was seen as quite good. Although minor, there is a correlation between ROE and ROA. It was determined that in order to achieve the desired financial performance while preserving the minimal necessary liquidity ratio, SACCOs must act appropriately throughout operations. The study used descriptive research design thus presenting a methodological gap. The current student used cross sectional research to fill the gaps.

Manoj *et. al*, (2015) conducted a performance evaluation of public sector banks based on Camel Methodology. The study focused on five large public owned commercial banks in India. The study utilized descriptive statistical analysis to examine the performance evaluation of commercial banks. The findings of the research indicated that the liquidity levels of commercial banks as measured by liquid assets to total assets were a key performance metric. The research failed to examine if any the casualty link between liquidity level and the financial measures of commercial banks. The current sought to fill this gap.

Edem (2015) studied the liquidity and financial performance of deposit money banks in in Nigeria (1986-2011). The research targeted 24 banks which constitute the entire deposit money banking industry in Nigeria between 1986 and 2011. Secondary data were collected and analysed using SPSS. The study utilized descriptive, correlational and inferential analysis. The findings of the study showed a significant relationship between liquidity and the performance banks. The correlation results reveal positive impacts between return on equity and liquidity variable: liquidity and cash reserve ratios, whereas loan to deposit ratio shows negative impact. The study only utilized ROE to measure performance whereas the current study used a large sample size of 61 to fill the gap.

Arif Nauma Anees (2016) analysed the effect of liquidity on financial performance of non financial companies in Kenya. the used a sample size of 20, the study was analysed using mean and regression analysis. The study found that there was effect of liquidity on financial performance. Study further recommended that the management team to set up strong strategy. The failed to used correlation analysis. The current sought to fill the gap.

Pandey (2017) analysed the effect liquidity on financial performance of deposit taking SACCOs in Kenya. The study aimed to find out the effect liquidity on financial performance and to determine the effect on credit ratio financial performance, using a sample size of 30, the study was analyzed using inferential analysis. The study found that liquidity has positive effect on financial performance of deposit taking SACCO, the study further recommended that the deposit taking SACCO manager should set a policy to follow strictly in the SACCOs to help in improves SACCOs. The study did not used cross sectional design but the current study sought considered the cross sectional design.

Sohaimi (2017) analysed the effect of liquidity on financial performance of Insurance companies in Kenya. The study aimed to evaluate the effect of banks size on financial performance and to examine the effect of business risk, using a sample size of 18, the study was nalysed using mean and regression anlaysis. The study found that was had negatively correlation between liquidity and financial performance of deposit SACCOs. The failed to used correlation analysis. This current study sought to fill the gap.

Waleed et. al, (2018) on exploring the influence of liquidity on financial performance in Pakistani SACCOs industry, analyzed data for all the SACCOs for the period of 2010-2015. The results revealed a significant relationship between SACCOs liquidity ratios and return on assets, return on equity, net profit margin, and Tobin Q. However, the study failed to notice any significant relationship between return on investment and earning per share relationship on one hand, and liquidity on the other. The current study sought to notice significant relationship

to fill the gaps.

Sanghani (2019) scrutinized the effect of liquidity on profitability of non-financial companies listed at the Nairobi Security Exchange in Kenya. The specific objectives were to investigate the effects of current ratio, operating cash flow ratio and debt to equity ratio on the performance of the companies listed on the stock exchange. The study took a sample size of 41 non-financial companies listed on the security exchange covered a period of 2009 – 2013. Data collected was analyzed by use of regression analysis model whereby it was found out that current ratio operating cash flow ratio and debt to equity ratio had positive effect on the performance of the companies listed on the stock exchange. The study concluded that all the variables studied positively affects performance of commercial banks. The study recommended that there is need to examine non-financial of commercial bank in Kenya listed on stock exchange to increase current ratio, operating cash flow ratio and debt to equity ratio in order to raise liquidity. It also found that increase in current ratio, operating cash flow ratio and debt to equity ratio improves financial performance. However, further it was recommended that there was need for non-financial companies listed of the security exchange to use operating cash flow ratio by decrease in loan repayment. The study failed to analyze liquidity of commercial banks on profitability which calls for a study. The current study sought to fill gaps.

Malik *et. al*, (2019) examined the impact of liquidity on financial performance on private sector bank of Pakistan. The specific objectives of the study were effects of current ratio, quick ratio and liquidity ratio on financial performance. The study took a sample size of 22 private sector bank registered under the state bank of Pakistan. Data collected was analyzed by use Ordinary Least Square and was found out that there was statically insignificant link between the liquidity of commercial bank liquidity ratio and financial performance measured by level of its return on assets. it was however, concluded that financial performance to be used when return on investment is a proxy on high financial performance. The study that it was obvious that there

was no relationship between liquidity ratio and financial performance which indicated very small p-value showed weak relationship. The study suggested that commercial banks to assess and reform there credit management for effective liquidity ratio to improve stakeholder's growth of equity and improve profitability of banks. Thus, there was no relationship addressed to analyze liquidity and profitability. The study failed to focused on research design statistic which was very important but the current study sought to fill the gaps.

Sardar (2020) evaluated the impact of liquidity on financial performance in banking sector on Iraq. The study aimed at the effects of following specific objectives loan deposit ratio, deposit ratio and cash deposit ratio on financial performance. The sample size of the study was five banks based in Iraq which was randomly selected. Data collected was analyzed by use of Ordinary Least Squares model and the study found out that liquidity ratios had positive impact on profitability in the objective's banks. The study concluded that liquidity and financial performance management were important factors for any successful bank in the country. The study recommended that it would be a good idea for the banks in the county to keep a balance between liquidity and profitability to avoid financial risk. The study was done in Iraq but the current study will be done in Kenya to reduce the cost.

Botoe (2020) studied the impact of liquidity on profitability of commercial banks in Nigeria. The specific objectives of the study were effects of loan asset ratio, deposit ratio, liquidity, regulation, business cycle on profitability of commercial banks. The study took a sample size of 8 commercial banks in Liberia. Data was collected and analyzed by use of by of both descriptive and inferential statistics which included the use of standard deviation, correlation and regression analysis. The study found out that there were positive relationship between bank net income and business cycle and loan. It also found out that there were negative relationship between net income and liquid asset ratio, deposit ratio and asset ratio. The study found that profitability is enhanced for commercial banks holding some liquidity assets,

however, it is believed that there is a point as which holding liquid assets lowers a bank's profitability. It also concluded that a bank with more deposit is able to be more profitable and the higher than loan assertion high profitability. It was further concluded that business cycle and regulation also significantly affect profitability. The study recommended that commercial banks should put in place a policy that regularly monitor the liquid assets of the banks to ensure that it maintained at a level which has no negative effect on the profitability. That, liquid asset to be managed because excess of it negatively affects profitability and that central bank should put down a regulation which allows liquid assets of a bank be maintained from time to time to ensure smooth running of the business. The study used many variables which made the researcher to confused but the current study sought to the gaps.

Abata (2014) assessed the association between liquidity on financial performance of Credit Cooperative Societies (SACCOs) in Nigeria. The study observed that whereas there is no significant relationship between Credit Cooperative Societies (SACCOs loans and Credit Cooperative Societies (SACCOs profitability, there existed a strong negative relationship between Credit Cooperative Societies (SACCOs liquidity (which was defined by Loans and advances, loan loss provisions and non-performing loans) and its performance. The study therefore recommended on the need for the Credit Cooperative Societies (SACCOs to embrace better credit risk management to safeguard their liqudity and protect the investors' interests. The study failed to used both correlation and panel regression. The current will fill the gaps by using both correlation and regression.

Paul and Prakash (2016) on the impact of liquidity on profitability of Credit Cooperative Societies (SACCOs in Kenya targeted scrutiny of secondary data for the 175 Credit Cooperative Societies (SACCOs and the study found out that there is a strong positive relationship between liquidity and profitability of Credit Cooperative Societies (SACCOs in Kenya and this was attributed to the fact that higher levels of equity would decrease the cost

of capital, leadingto a positive impact on profitability. The study was done on profitability of credit cooperative Societies(SACCOs) in Kenya while the current study will be done financial performance of deposit taking SACCOs in Kenya.

Mwongela (2015) assessed the relationship between liquidity and profitability of commercial bank in Kenya. A sample size of 43 banks was used for the study in Kenya. Data collected was analyzed by use of correlation and regression analysis and was found out that there was positive relationship between liquidity and profitability. The study concluded that commercial banks increase loan loss provision to improve profitability and to generate more income for their non-lending activities. It recommended that future studies could improve the study by taking a longer sample period and time series. The study used smaller sample size of 43 while the current study will the gaps by using a larger sample size.

2.2.3 Leverage and Financial performance

Rajkumar in (2014) undertaken a research on the impact of leverage on the financial performance of deposit-taking SACCOs in Sri Lanka. Finding the connections between leverage ratio and financial performance was the study's main goal. The target DTS population for the trial was 60. Regression and correlation analysis were used to gather data from secondary sources across a 7-year period, spanning the years 2006 to 2012. The factors under examination were found to be negatively correlated. The results also demonstrated that leverage ratio has a significant impact on the financial success of the organization under study. Researchers should repeat the study on different businesses or industries because the study's reach is limited because just 60 DTS were used. The study was conducted in Sri Lanka thus presenting a scope gap. The current study was conducted in Kenya.

Bhardwaj (2017) examined of leverage on financial performance of deposit taking SACCOs in India. Out of the 135 SACCOs licensed in India, 40 were chosen conveniently. Three years of

data, 2010 to 2012, were used. Both a descriptive and analytic design were used in the investigation. A negligible insignificant negative relationship between leverage and financial performance analysis, with a test conducted at a 99 percent confidence level. Due to the reduced sample size and constrained range of organizations examined, the results could not be generalized. The study used a smaller sample size of 40 which is not wider enough to give a good result for research. This current study used sample size of 61which was wider enough to give a good result for research.

Haron and Ahmed (2018) undertaken A study on the impact of leverage on the performance of non-financial enterprises in Malaysia. The information was made up of businesses excluded from financial firms that were listed in the Malaysia 20 Share Index as of August 1, 2014. From 2008 to 2013, six years of data were used. The study used a model for regression analysis and a descriptive design. The results of the study revealed a substantial inverse relationship between leverage and firm performance using ROA as the performance parameter. Since the study mainly focused on companies listed in the Malaysia 20 share index, excluding financial businesses, it is important to apply caution when interpreting its conclusions. The study only included 20 participants, thus it is impossible to generalize the findings. The current study included sample size of 61 which is good to generalize the findings.

Zahoor et. al, (2015) conducted studied on the impact of leverage on the financial performance of Pakistani. The purpose of the study was to determine how leverage ratio affected Pakistani business efficiency. Between the years of 2006 and 2011, panel data from 154 textile companies listed on the Karachi Stock Exchange (KSE) were used. Data analysis techniques included descriptive statistics, correlation, and multiple regression analysis. The results indicated a poor correlation between leverage and company performance. Given that it includes all textile companies registered on the Karachi Stock Exchange, the study's scope is sufficiently broad. Similar investigations have to be carried out in other areas and across other sectors. The

trial was ineffective in correlation analysis. The study focused on textile companies thus presenting a scope gap. The current study focused on Deposit Taking SACCOs in Kenya to fill the gaps.

Gudeta (2013) did research on the impact of leverage on the financial performance of commercial banks in Ethiopia. Data from all 44 banks over a 5 years term 2008 to 2012 was used. study adopted descriptive and multiple regression analysis using SPSS. The findings portrayed a substantive link amid leverage ratio ad financial performance. Negative relationship exists amid growth in assets and profitability. When ROE and leverage ratio were tested, a negative associated was noticeable. The study failed to use correlation statistics which good measuring association of variables. The current study used correction statistics in the research to the gaps.

Allini *et. al*, (2014) carried out research with an Egyptian goal. The study employed an ex-post factor research approach on six quoted pharmaceutical businesses in Egypt to determine the relationship between leverage ratio and financial success. Data from 12 years of financial reports, from 2001 to 2012, were the subject of a correlation and multiple regression analysis investigation. The research discovered a negligible relationship between the financial success of the sampled enterprises and independent factors. Although the study's time frame is lengthy enough to yield trustworthy results, panel regression analysis was not used. The current study used the panel regression to fill the gaps.

Abubakar (2015) conducted a study on the link between leverage and financial performance of banks in Nigeria. The study a selective sample of 11 out of the 23 deposit taking banks in Nigeria and covered 9 year period from the year 2005 to 2013. Regression analysis was used and results showed that there exists a considerable relationship amid debt to equity and return on equity. Similar studies should be conducted and tested using other ratio measures other than the ones studied above. The study failed to use correlation statistics and descriptive statistics.

The current study employed both statistics in research to fill the gaps.

Baoko *et. al,* (2016) conducted a research on the association between leverage and financial performance of listed chemical companies of Ghana. Data from 20 quoted organizations from chemical sector of KSE over 8-year period from 2006 to 2013 was used. descriptive statistics, correlation and regression analysis were adopted to reach the study's objectives. The findings portrayed positive connection between ROA, Net Profit margin and ROE with debt-to-equity ratio. The debt-to-equity ratio was the only metric of leverage used other ratios such debt ratio and long-term debt ratio should be tested on similar studies. The study focused only on smaller sample size of 20 which not good to give full information. The current study focused on a larger sample size of 61 which is good to give full information.

Amenya (2020) conducted study on the relationship between the leverage and the financial results of companies listed on the NSE. Over the course of six years, from 2008 to 2013, information was gathered on 26 randomly chosen companies out of the 61 companies listed at the NSE. Regression, correlation, and a descriptive design were used in the study. According to the study, leverage ratio has a detrimental effect on a company's financial success as evaluated by ROE. Secondary data were used in the study. Different conclusions may be drawn from an examination of the same case utilizing primary data sources that involved stock market specialists. The study focused on cross-sectional research design thus presenting a gap. The current study focused on cross sectional research design to fill the gap.

Gweyi and Karanja (2017) documented on the effects of financial leverage on financial performance of deposit taking savings and credit co-operative in Kenya. Specifically, the study wanted to investigate the influence of Debt Ratio on financial performance of deposit taking Saccos in Kenya. A sample of 40 Savings and Credit Co-operative Societies (SACCOs) took partin the survey whereby their secondary data for the period 2010 to 2012 was examined. It was evident from the study that there exists a positive significant relationship between debt

equity ratio and ROE and profit after tax. The study used small sample size of 40. The current study sought to fill the gaps by using a larger sample.

Kang (2018) investigated the effect of financial leverage on profitability in lodging companies In US. The purpose of the study was to investigate the influencers of leverage, to discover the link between Revenue per Available Room and debt ratio, and to document on the association between profitability and debt ratio. The study believed that an examination of data for the period 2001 and 2010 would help arrive at substantive conclusions. The study registered a positive relationship between debt ratio and property, plant and equipment ratio and Revenue perAvailable Room; and that there was a negative effect of long-term debt ratio on ROA. It was concluded that there exists a negative relationship between growth opportunities and debt ratio, although there was no significant relationship witnessed between debt ratio and growth opportunities. The study failed to used panel regression and correlation analysis but the current study will fill gaps by using both panel regression and correlation analysis.

Czech *et. al*, (2018) reported on the association between company returns and leverage depending on the business sector. The purpose of the study was to bring on board the influence of leverage and corporate performance, using the corporate financial data for the year 2014, of selected companies. It was revealed that leverage has a negative influence on ROE. However, the study confirmed a positive relationship between the company profitability and leverage. This study is not clear because many point missing on its but the current will be up to date.

Megawati (2019) did an exploration of the influence of operating leverage, financial leverage, and liquidity on profitability in the telecommunications industry listed in Indonesia Stock Exchange. The study aimed to analyze the effect of operating leverage (DOL), financial leverage (DFL) and liquidity (CR) on profitability (ROA) in the telecommunications industry

listed in the IDX. A descriptive research design was deemed to be appropriate for the study. Purposive sampling technique was employed to select a sample of five companies whose data for the period 2012- 2018 was analyzed. The study found out that operating leverage and financial leverage had a positive significant effect on profitability, that liquidity had a negative significant influence on profitability, and that when considered jointly, liquidity, operating leverage and financial leverage had a significant influence on profitability. The study failed to applied secondary data. The current try to fill the gaps.

Jensen and Meckling (2016) considered the interrelation of leverage and profitability of the SACCOs and argued that conflicts of interest between shareholders and managers arise because of agency costs. Debt financing raises the pressure of managers to perform, but implies payment of interest obligations that must be contented by managers, and the company may become under the threat of a bankruptcy if these obligations are not satisfied. Consequently, a positive influence of leverage on corporate profitability should exist. The firms with higher leverage should the most inclined to higher profitability. However, higher leverage contributes higher agency costs because of divergence interest between shareholders and debt holders: this suggests that leverage may be negatively associated with profitability.

Data (2018) analysed leverage on financial performance of insurance sector. The used a sample size of 12 insurance sectors. The study adopted multiple regression and correlation to analysed data. The study found that the leverage affecting insurance sector performance. The study recommended that insurance sectors should apply strategy approach to improves insurance sector performance. The current tried to fill the gap.

Naceur and Kandil (2017) analysed the of leverage on financial performance of deposit taking SACCOs in Egypt. the study focused on leverage regulations set by the government and the Basle committee. The study found that high leverage requirement increased the cost of intermediation. On the other hand, the leverage increased the SACCOs size leading to

increased SACCO activity and therefore improved performance. The study concluded that leverage regulation improved performance.

Kadionglu *et. al,* (2017) analyzed the effect of leverage on financial performance of SACCOs in Turkey. The study took a sample size of 55 SACCOs in the country and data collected was analyzed by use of regression analysis tool. The study found out that there was a positive significant relationship between non-performing loan and financial performance of SACCOs. It was concluded that as leverage of SOCCAs has significant importance on financial system of the county, it may affect economic growth of the country alongside financial performance. The study recommended that regulations aiming to ensure low leverage be put in place by both national and international organization and that risk models be developed with regard to the issue. The current study will solve the gaps of issue.

Kasavica (2019) explored the effect an leverage and financial performance of commercial bank in Kenya. The study took a sample size of 17 commercial banks. The data collected was analyzed with the used of regression model where the results found out that maturity of majority of the variables affects financial performance which was maintained mainly by the fact that it act as rule on long term loan on annual lowers the rates of interest which short-term loan gives slightly higher interest rate. It was also found out that leverage are more expensive which and generally decreases the profit margin within the relationship between interest and the source. The study concluded that the higher the performance of loans, the lower the provisioning and that the higher the level of loans under less favorable rating cost, the more the cost and the lesser the profit. The study recommended that specific practical tool for determining the characteristic of the leverage and the effect on financial performance used in the study be used in other commercial banks to give comparison results. The study was done on commercial banks in Kenya but current study will be done on deposit taking SACCOs.

2.2.4 Capital adequacy and financial performance

Khalifa and Tailab (2012) conducted the study on the effect of capital adequacy on the financial performance of SACCOs in America. The study employed quasi experimental research design in the research. Although there was a significant positive relationship between capital adequacy and financial performance as evaluated by ROA, ROE, Net Interest Margin (NIM), and Loan Loss Provision LLP, only the relationship between capital and ROA was statistically significant for the years 2002 to 2009 from a sample of 19 SACCOs. The study failed to use cross sectional research design. The current study applied cross sectional research design on SACCOs

Bhowmick and Srivastava (2017) conducted a study in India to determine the impact of capital adequacy on the profitability of Punjab SACCOs. The results of the study showed that Total Shareholders' Fund, Return on Capital Employed, Return on Assets, Return on Equity, Dividends per Share, and Dividend Payout Ratio all have a positive, significant impact on capital adequacy. The study did not utilize descriptive statistics. The current study used of utilize descriptive statistics in the research to fill the gaps.

Al-Tamimi and Obeidat (2013) reported on the influencers of capital adequacy on performance in Jordanian SACCOs. The study aimed at identifying the salient factors which affect the capital adequacy of commercial SACCOs. Secondary data were obtained from Amman Stock Exchange for SACCOs for the period from 2000 – 2008 and a multiple linear regression was run. The study found out that capital adequacy had a strong positive effect on financial performance, and the rate of return on assets; and a strong negative significant relationship on ROE and interest rate risk. However, the study failed to witness any significant effect of capital adequacy on capital risk, credit risk, and the rate of force – revenue. The current study witnessed any significant effect of capital adequacy on financial performance.

Haris et. al, (2014) on the influence of capital adequacy on the profitability of Pakistani SACCOs, the study used primary data from the questionnaire and interview that employed three measures of capitalization (capital ratio, capital adequacy ratio, non-performing asset and minimum capital requirement), to ascertain its effect on financial performance as measured by return on average asset, return on average equity, net interest margin and profit margin. A total of 29 Pakistani SACCOs was scrutinized over the period from 2007-2018. The findings showed there was insignificant negative relationship between capital adequacy and financial performance, that financial performance and capital adequacy exhibited an inverted U-shaped relationship with financial performance decreases with an decreases in capitalization up to a certain level, while beyond that level, a further decreases in capitalization decreases financial performance. The study failed to used secondary data from the published annual financial statement which is easy to understand. The current study used secondary data to fill gaps.

Mendoza and Rivera (2015) did a study on the effect of capital adequacy on the profitability of SACCOs in the Philippines has been well documented. The objectives of the study were to identify a measure of credit risk, capital adequacy, and SACCOs profitability; and to come up with a viable econometric model that can be used to forecast its causation with profitability; secondly, to ascertain whether credit risk and capital adequacy ratio have a significant impact on the profitability, and lastly to come up with useful policy recommendations on how SACCOs can uphold sound financial health in order to hedge from potential failure as a result of disregard on credit risk and capital adequacy. The study used descriptive statistic. The study examined the credit risk and capital adequacy of the 175 SACCOs in the Philippines to investigate how both variables affect SACCOs profitability. From the analysis, it was evident that although capital adequacy had no significant influence on profitability, there was a negative significant relationship between credit risk and profitability of SACCOs in Philippines. The study therefore recommended on the need for SACCOs to investigate if capital infusion has influence on profitability than increasing debts. The study failed to use

cross sectional research design. The current study used cross sectional research design in the research to fill the gaps.

Umoru and Osemwegie (2016) to examine how capital adequacy directed the financial performance of credit Cooperative Societies (SACCOs) in Nigeria. Using primary data collected from a sample a sample of 518 staff of SACCOs and also secondary data from published financial statement of SACCOs were used from 2006 -2010, the study failed to notice and significant relationship capital adequacy and profitability based on the primary data collected although the analysis if the secondary data indicated that there was significant positive effect of capital adequacy on SACCOs profitability. The study failed to use panel regression analysis. The current study used panel regression analysis, correction analysis and descriptive analysis in the research to fill the gaps.

Rahman (2017) evaluated the effect of capital adequacy on the performance of mid-tier SACCOs in Bangladesh. The study was purely quantitative research and it involved analyzing secondary data for fourteen second tier SACCOs over a period of four years, from 2013 to 2016. After analyzing the data using descriptive and inferential statistics and then the results presented in a multiple regression model, the study found out that capital adequacy had strong and significant positive influence on financial performance of the said SACCOs. In view of this, the study recommended on the need for SACCOs of Kenya (Central bank of Kenya CBK) to regularly monitor SACCOs by ensuring that they publish their quarterly results to the public. The study failed to use a larger sample size which might have brought out a different outcome. The current study used a larger sample size which is good to give out different outcome.

Zerfeshewa (2017), carried out a research on influence of capital adequacy on banks' profitability in Ethiopia. The study was anchored to the Modigliani and miller theory proposition I and II. The researcher employed descriptive research design. The study targeted all the 44 commercial banks in Kenya. Secondary data was collected from published accounts

of commercial banks. Findings established that holding adequate capital is not enough and banks must be ready to point out various risk, which might affect their capital. The study concluded that bank capitalization is an economic change with an aim of restoring consistency; steadiness and profitability in the banking sector and build sureness with its customers. The researcher recommended that banks strengthen their capital base to overcome risks which might shake their capital adequacy to remain attractive to the shareholders. The study failed to use cross sectional research design. The current study used cross sectional research design to fill gaps.

Aymen (2018) explored the relationship between profitability and capital adequacy of Credit Cooperative Societies (SACCOs in Tunisia, by analyzing data from all the licensed Credit Cooperative Societies (SACCOs in Kenya over the period 2004 to 2009. Using ROA and ROE as the measures of profitability; and Capital Asset Ratio (CAR) as the measure of capital adequacy, the study ran a regression model which was further modified to include the control variables (credit risk, market power, operating efficiency, activity mix and size). The study failed to gather sufficient proof to the existence of any significant relationship between capital adequacy and ROE even after the inclusion of the control variables. However, the research observed the existence of significant negative relationship between capital adequacy and ROA. Similar results were witnessed even after the inclusion of the control variables. The study failed to use correlation statistics and descriptive statistics. The current study used both statistics to fill gaps.

Mugwang'a (2019) the factors that influence capital adequacy on Profitability of SACCOs in Kenya, considered secondary data four years, from 2010 to 2013 which were obtained from Nairobi Securities Exchange (NSE) and using multiple linear panel data and the karl Pearson's coefficient to analyze it, the study found out that capital adequacy had a strong significant relationship on financial performance of SACCOs. However, the study failed to gather

sufficient evidence to proof the existence of a significant relationship between capital adequacy and the following: credit risk, liquidity risk, ROA, interest rate risk, return on equity ratio and revenue power ratio. It was recommended on the need for the report of financial statements and data to include rules and basis on which capital adequacy measurement is based, which led to raising SACCOs and finance awareness that enhanced SACOOs competitive positions with regional and international SACCOs. The study failed to use correlation analysis and penal regression analysis based, which would increase knowledge of SACCOs and finance and strengthen SACOOs' competitive positioning against regional and global SACCOs. Both penal regression analysis and correlation analysis were not used in the study. The current study applied both analysis in research to fill gaps.

Suka (2019), conducted a study on influence of capital adequacy on financial performance of financial institution quoted at the Nairobi stock exchange. The specific objective was to assess the effect of capital adequacy ratio on the financial performance of commercial banks. In the study, the researcher adopted the agency theory, trade off theory and pecking order theory. Descriptive research design was employed. The target population was nine banks listed at Nairobi stock exchange. Secondary data was utilized as the source of data for the study. The data was acquired from the Kenya Capital Market Authority Library, Internet and website of the quoted commercial banks quoted at the national stock exchange. The study established that capital adequacy eventually shows the capability of banks to manage shocks in the balance sheets. He concluded that capital adequacy has a positive effect on banks' performance, unlike assets size which has no effect. The researcher suggested that there should be a wide capital base gap on influence of capital adequacy on financial performance of deposit taking SACCOs in Nairobi. The study was done on commercial banks and not on SACCOs. The current study was carried on SACCOs to fill the gaps.

Kipruto *et al.* (2018) evaluated the effect of capital adequacy ratio on the performance of mid-

tierSACCOs in Kenya. The study was purely quantitative research and it involved analyzing secondary data for fourteen second tier SACCOs over a period of four years, from 2013 to 2016. After analyzing the data using descriptive and inferential statistics and then the results presented in a multiple regression model, the study found out that capital adequacy had strong and significant positive influence on financial performance of the said SACCOs. In view of this, the study recommended on the need for the SACCOs of Kenya (CBK) to regularly monitor SACCOs by ensuring that they publish their quarterly results to the public.

Dao and Nguyen (2018) explored the effects of and capital adequacy ratio and SACCOs performancein Vietnam. The main purpose of the study was to single out determinants of capital adequacy ratio and also to identify the link between capital adequacy ratio and financial performance of Vietnamese banks. Data for 175 SACCOs were considered for the period 2010 to 2017. The study found out that capital adequacy ratio has a negative significant influence on the performance of SACCOs. As part of the recommendations, the study warned against keeping a large or only making high quality loans since, even though this method generates high capital adequacy ratio, for SACCOs, it results in lower profits.

Kioko (2018) observed the effect of capital adequacy regulation on savings and credit co-operative societies in Kenya. The specific objectives of the study were why it was necessary for SACCOs to adhere to capital adequacy requirement, changes faced to comply with the requirement and the strategies SACCOs had undertaken to meet the requirement for capital adequacy. The study sample size was 35 deposit taking SACCOs in Kenya. Data was collected and analyzed using correlation analysis where the study found that level of capital adequacy was beneficial in meeting regulatory requirement, that the capital adequacy was influence enabling the institution to manage credit risk and for growth base. It was also found that reduced payout on members lending capacity posed a challenge. The study concluded that SACCOs had profited much from adhering to the capital adequacy and that they had overcame

the changes of separating capital from members and institutional capital and calculation of ratios. The SACCOs had engaged in strategies to increase capital. The study recommended that review of lending rates through cost pricing methods and training executives by the regulator was necessary.

Dore, (2018), analysed the effect of capital adequacy on financial performance of non financial companies in Kenya. The study aimed to examine the effect of capital adequacy ratio and credit ratio on financial performance, using a sample size of 518, the study was analysed using linear regression analysis. The study found that capital adequacy has effect on non financial performance, the study further recommended that non financial companies in Kenya should used credit ratio strategy in the management of capital adequacy to improve the performance of non financial companies in Kenya. The study failed to used correlation

Obumuyi, (2019), analysed the effect of capital adequacy on financial performance of deposit taking SACCos in Kenya. The study using a sample of 27 deposit taking SACCOs statements, the study analysed data using cross-section and correlation analysis, the finding of the study show that capital adequacy has positive effect financial performance, the study recommended that higher capital adequacy need to raise in the level of deposit taking SACCOs causes to SACCOs to achieve objective goal. The study failed to used larger sample size. This current sought to fill gap.

Scott, and Arias, (2019), analysed the effect of capital adequacy on financial performance of banks in Kenya. The study aimed to examine the effect of interest ratio of financial performance, using a sample size of 11, the study was analysed using correlation analysis. The study found that risk effected on the financial performance, the study further recommended that management should make sure to set capital adequacy policy that not affect the financial performance. The study used only correlation and failed to used correlation analysis. This current tried to fill the gap.

Fadun, (2020), analysed the effect of Capital adequacy on financial performance of in Kenya. The study aimed to examine the effect of Net facilities ratio on financial performance and to evaluate the effect of credit interest ratio on financial performance using a sample size of 18, the study was analysed using generalized method of moments and regression analysis. The study found that credit interest affected on financial performance, the study further recommended that management should put strong internal system policy not affect the financial performance in the bank setting. This current sought to fill gap

Njogo, (2016), analysed the effect of capital adequacy on financial performance of non financial companies in Kenya. The study aimed to determine the effect of leverage ratio on financial performance and to find out the effect of Non performing loans on financial performance using a sample size of 108, the study was analysed using mean and regression analysis. The study concluded that credit risk affected strong on effectiveness of the capital adequacy. The study found that the capital adequacy affect non financial performance. The study recommended that the non financial companies should adopt strategy approach as highly improve performance of the companies in Kenya. The current study addresses the gaps by using both correlation and regression

Zahangir and Masukuji, (2017), analysed the effect of capital adequacy on financial performance of deposit taking SACCOs in Kenya. The study aimed to determine the effect of Gross loan ratio of financial performance and to evaluate the effect of Credit facilities ratio on financial performance using a sample size of 20, the study was analysed using correlation analysis and regression analysis. The study concluded that SACCO's financial performance had been affected by capital adequacy. The study found that the capital had a positive effect on the deposit taking in Kenya. The study failed to used secondary data to analyse data. The current study fill the gaps.

Nzioka (20118) considered data for the years 2010 to 2014 to discuss the impact of capital

adequacy on the financial performance of SACCOs in Kenya. A descriptive research design was done where the study investigated 175 SACCOs. Only secondary data was deemed fit to be analyzed through inferential statistics using Statistical Package for Social Sciences (SPSS) version 20.0. The study discovered that there was a weak negative relationship between ratio of Gross NPA / Gross Loans & advances and ROA implying that those banks which did not monitor their credit loans tend to be less profitable as compared to those which focused more on capital adequacy. It was also evident from the study that there was also a weak positive relationship between Total Investment Assets to Total Assets ratio and financial performance ROA of the said SACCO that, there was a strong significant relationship between financial performance and Total Non- Performing Assets to Total Assets ratio. This led to the conclusion that capital adequacy had a negative influence on SACCOs' financial performance as measured by ROA. It was therefore recommended that, in order for high assets quality levels to be achieved, improved investment assets levels and the low rate of non-Performing Assets are to be realized through credit risk identification, measurement, monitoring and controlling. The study failed to used correlation analysis. This current study sought to fill the gaps.

Lucky and Nwosi (2019) seeking the association between capital adequacy and financial performance of Savings and Credit Cooperative Societies (SACCOs) in Nigeria. The purpose of the study was to investigate the relationship between capital adequacy and the financial performance of 175 Savings and Credit Cooperative Societies (SACCOs) that were quoted in the period 1980 – 2013. The study relied on secondary data which were sourced from the annual reports of the SACCOs under study. Focusing on Return on Investment (ROI) as the dependent variable, the study used percentage of non-performing loans to Total Loans, percentage of Nonperforming Loans to Total Customers' Deposit (NPL//TCD), percentage of Loan Loss Provision to Total Asset (LLP/TA) and percentage of Loan Loss Provision to Total Loans (LLP/TL) to formulate a multiple regression model. The findings from the study indicated that that percentage of nonperforming Loans to Total Customers' Deposit and percentage of non-

performing loans to Total Loans have a positive significant influence on Return on Investment while percentage of Loan Loss Provision to Total Asset and percentage of Loan Loss Provision to Total Loans have anegative significant influence on Return on Investment of the Savings and Credit Cooperative Societies (SACCOs.

Swamy (2019) wanted to develop a model that links Savings and Credit Cooperative Societies (SACCOs capital adequacy and profitability. The main aim of the study was to investigate the determinants of SACCOs capital adequacy and profitability by employing using panel data techniques and robust data sets for the period between 1997 and 2009. The study revealed that priority sector credit had very little role to play in influencing non-performing assets (NPAs). It was also found out that bad debts are more influenced by the performance of the SACCOs industry, that it has become increasingly difficult for public sector banks to reduce bad debts compared to Savings and Credit Cooperative Societies (SACCOs), and this was attributed to the fact that Savings and Credit Cooperative Societies (SACCOs) have brought on board far superior risk management procedures and technology, which definitely allows them to finish with lower levels of NPAs. As far as the factors that influence profitability are concerned, the study found out that, whereas asset size has no significant influence on profitability, investment activity and capital adequacy have no influence on profitability of Savings and Credit Cooperative Societies (SACCOs). The study failed to used cross sectional design was not included in the but the current study used it.

2.2.5 Inflation rate and Financial performance

Zulfiqar and Din (2015) investigated the effect of inflation rate on financial performance of SACCOs of Pakistan textile industry. To conduct data analysis, multiple regression model analysis was used. According to the study findings, it was revealed that inflation rate was negatively though significantly related to financial performance of a SACCOs. Time series data set was used it appropriate to use Vector Error Correction Model in examining the long

run relation amongst inflation rate factors and performance of the SACCOs. The study failed to applied descriptive and correlation analysis which is good for measuring relationship of variables. The current study addressed the gaps by applies descriptive and correlation analysis which is good for measuring relationship of variables.

Badullahewage (2019), investigate the impact of inflation rate on financial performance of Deposit taking SACCOs in Sri Lanka. Studied inflation rate variables comprised of GDP, Money supply, interest and exchange rate. The study descriptive research design. Secondary data for period between 1990 and 2012 was used. The study discovered that there existed a strong relationship association amongst the inflation rate factors and financial performance; exchange rates were identified as factors with comparatively higher effects on inflation rate performance. The study was carried out in Sri Lanka. The current study was carried out in Kenya among the deposit Taking SACCO's to fill the gaps.

Alemu and Negasa (2015) examined the determinants of Inflation rate on financial performance of commercial banks in Ethiopia. The study relied on data from banks over the period 2002 to 2013. The research adopted a quantitative approach and utilized secondary data. The study used correlation analysis and descriptive statistics. The empirical results showed that industry specific, firm specific and macroeconomic variables have a notable influence on the FP of banks. Industry specific factors such as market share and ownership have a notable influence on the bank. However, inflation rate showed insignificant and positive relationship for FP given by ROA. The management of banks has control over firm's specific factors and thus it is possible to improve the performance by focusing on these factors for example bank size and capital structure. Predicting the effect of macroeconomic variables on bank performance can help commercial banks to improve their profitability. Moderating variable was ignored in the study. The current study used Inflation rate as moderator in the research to fill gaps.

Baba and Nasieku (2016), examined the effect of Inflation rate on the performance of Nigerian banks. The study adopted an explanatory research design and relied on secondary data gathered from banks annual reports, World Bank, Nigerian bureau of statistics and research centers. 23 licensed banks in Nigeria participated in this study. The study used ROE as a measure of performance. The empirical findings indicated that exchange rate, unemployment rate, and interest rate are adversely and significantly related with the FP of banks while inflation rate has an insignificant relationship. An increment in exchange rate positively affects the performance of banks while an increment in the interest rates deteriorates financial performance. The study also failed to use a larger sample size which is being used in the current study.

Chimkono (2017) studied the impact of inflation rate on financial performance of companies in Malawi. Secondary data was gathered from audited financial reports and covered a fifteen years period from 2000 to 2014. The study used descriptive research design. The population of study constituted companies licensed in Malawi. Publications prepared by the World companies and reserved companies of Malawi were also used as sources of data. The study revealed that independent variables (lending interest rate, cost efficiency and asset quality) have a significant effect on the financial performance of Companies. Moderating variables (economic growth) has a significant effect on the independent variables. The study additionally revealed that the credit adversely influences the performance of companies. The study used economic growth as moderating variable while the current study used inflation rate moderating in the research to fill gaps.

Obeng-Krampah (2020) looked at the relationship between inflation rate factors and the success of companies listed on the Ghana Stock Exchange. Both ROA were used to assess financial performance, and they served as the dependent variables. The primary inflation rate factors, which included interest rate and currency rate, were the independent variables. Panel data from the years 2007 to 2015 were used. The study made a significant connection between

inflation rate variables and firm performance and further argued that while inflation rate alone lacks sufficient explanatory power to explain variations in firm performance, combining it with financial indicators like firms' dividend pay-out, growth in company sales, leverage, and total assets offers a significant amount of explanatory power. The study also discovered that while interest rates have a negative impact on ROE, inflation has a negative impact on ROA. Descriptive statistics and correlation statistics were not used in the study. The current study used both correctional and descriptive statistics in the research to fill gaps.

Ng'ang'a (2020), undertook a study to examine the impact of inflation rate on performance of Insurance industry in Kenya. The performance was regressed against the credit risk indicators; average interest rates as computed by Central Bank rate, real exchange rates, GDP growth rate, was calculated by CPI and unemployment rate. The study applied a descriptive research design. It utilized secondary data collected quarter yearly. The study was done in a ten-year period from 2006 to 2015. The data was analyzed though use of descriptive analysis, correlation and multiple regression analysis. Findings reveal that exchange rate, interest rates, and unemployment rates are not significant predictors of insurance industry's financial performance. The study failed to use cross sectional research design. The current study used cross sectional research designs to fill the gaps.

Ball and Pitchford (2018) analyzed the impact on inflation rate and financial performance in Philipines. The study focused on the consumption exports, which was a small proportion of its total output and therefore the domestic demand wouldn't influence the price of the commodities. The study that domestically generated inflation would arise from the behavior of domestic goods, prices and wages that were controllable by the monetary and fiscal policies. The findings of the study indicates that a rise in import prices would affect equilibrium and thus creating excess supply. Therefore, the inflation rate would fall and affect the balance of payments in the economy leading to a fall in domestic prices and this had an impact on the

profit levels.

Wamucii (2019) analysed the ten (10) year relationship between inflation rate and the financial performance of commercial banks in Tunisia. The analysis of the data was done through regression of inflation against the commercial banks' economic performance for the period under analysis. The findings indicated that there was an inverse relationship between inflation and financial performance and therefore, he concluded that as inflation decreased, the profits for the same period increased. This study did not clearly identify the relationship between inflation rates and how they influence profitability since there are other factors such as the negative impact of inflation that discourages investment and saving influences growth and performance. The study covered the period between 2000 and 2009 while this study will cover the period between 2013 and 2017. Different periods produce different results since inflation is calculated from the weighted average of selected price changes that are modified over time and therefore, the current period will provide the calculation of a more accurate inflation rate. Consequently, this period will give a conclusive comparison between inflation and profitability. Inflation, the was a limitation to only three variables used, which were assets, profits and cash flows and this this study will focus on more control variables to give an extensive comparison of this relationship.

Vena (2012) analysed the impact of inflation rate on the yields of companies listed in Kenya. She observed that inflation rate was a major problem in Kenyan and with a rise in inflation there was a corresponding rise in the CPI due to the rising interest rates resulting to a fall in price of shares for the listed companies. Since the overall goal of a company is wealth maximization, with the fall in the share price there was a fall in the returns for the companies. The study was conducted between 1998 and 2013 and the researcher used the GARCH model that highlighted the effect of inflation on firms' yields. The findings indicated that inflation has an adverse effect on profitability and it was concluded that stock returns are low when there

is high inflation since investments are moved from stock exchange into business ventures that are not influenced by inflation. The study did not show a clear effect of inflation on the stock market return and volatility which ultimately influence the profitability of the firms.

Derrick Adul *et. al*, (2016) assessed the effect of inflation rate on financial performance of Ghananian banks from 2004 – 2013 by using panel data five banks. Pooled, random effects and generalized moment method (GMM) models were used estimate the effect of inflation on financial sector results. The quadratic function was used to estimate thresholds beyond which the financial sector performance is detrimental. They concluded that inflation rate would continue to have a positive impact on the financial sector development, except it hits a 15% threshold. To support the development of the financial sector, the study recommends a minimum threshold not above 15 per cent of inflation rate.

Kiganda (2019) also did a study focusing on inflation rate and profitability of commercial banks in Kenya while Equity bank limited was the research focus. Yearly data was used in the study which covered the period 2008 to 2012. Multiple regression model was adopted for the study where the results indicate that inflation rate has an insignificant positive influence on the profitability of banks with emphasize on one bank that is Equity Bank Limited. This study was however focused on Equity Bank Limited and hence this cannot be extended to commercial banks in Kenya.

Ongore and Kusa, (2018) in her study on the relationship between inflation rates and liquidity of companies quoted at the Nairobi Stock Exchange observed that the overall inflation rates influence the stock market liquidity at varying degree depending on segment. Regression models were developed using monthly inflation rates as independent variable and both segment wise and market wide trading volume as dependent variable. The statistical method vector auto regression (VAR) was used to find and analyse the association. Interview was also conducted

to gather opinions of investors in stock exchange of Thailand on how inflation affects equity value. The findings demonstrate that movement to stock prices is irrelevant to inflation.

Mcmillian and Schumacher, (2020), conducted a study Inflation rate on performance of deposit taking Saccos before and after the last five general elections in Kenya namely 2011 and 2015. The deposit taking saccos month end indices for the period between 31st January 1991 and 30th September 2008 obtained from the deposit saccos were analysed using line graphs, percentages, mean , variance and other statistical measures. The study results indicate the deposit taking saccos performance was influenced by the political activities and expectations around the election period in the short term. The study also reveals that the first two years after election performed better than the last 2 years before the next general election. The study failed to used statistics analysis. This current study sought to fill gaps.

2.2.6 Financial performance

Norseen *et al.,* (2018) evaluate the study on the impact of finance/ial performance on leverage of deposit-taking SACCOs in Pakistan from 2010 to 2012. Forty SACCOs registered with SASRA were sampled for the study. The analysis made use of secondary information gathered from the organizations' financial statements. The study used an analytical and descriptive research approach. The study found a link between leverage (as determined by the debt-to-equity ratio), return on equity, and profit after taxes. Leverage, return on assets, and income growth all have a strong and positive correlation. The study's 40-person sample size was too small to provide accurate data.

Bandari (2013) investigated the effects of financial performance on deposit-taking SACCOs' solvency ratios in US. Panel study design was used as an explanatory strategy. The financial statements of 120 SACCOs in the US were collected from the CBK and commercial bank survey for 2009 since the study was interested in the years 2002 to 2008. To examine the data and demonstrate the link between the research variables, multiple linear regression was

utilized. The study discovered that the financial performance of commercial banks in the United States is significantly negatively impacted by asset quality. However, before performing the inferential analysis, the study did not perform diagnostic tests. Additionally, the moderating effects of inflation in the sought-after relationships between the variables were not considered in the aforementioned study. Correlation analysis was not used in the research. The current study applied correctional analysis to fill the gaps.

Almazari and Alamri (2014) conducted research the factors that determine the Saudi Arabian commercial banks' solvency in terms of financial performance. The study covered the years 1999 to 2006, and it employed a panel of 16 commercial banks that was imbalanced and included of participants from 42 different nations, including Saudi Arabia. The study's analysis was conducted using random effect panel techniques. The study's factors included GDP, bank size, operational effectiveness, liquidity ratio, and capital sufficiency. The study's findings suggest that solvency has a negative, considerable impact on the financial performance of commercial banks. This research used panel regressions analysis which highlights the relationship between variables and failed to use correction analysis which is bring out the addressed by the current study.

Bosede *et al*., (2016) looked at the impact of financial performance on the banking sector's capital adequacy in Nigeria. Annual data were used in the study. During the years 1994 through 2011 on the four biggest banks. Over 70% of Nigeria's financial assets are held by these four biggest banks. Asset quality, liquidity, capital sufficiency, and bank earning capacity were considered as independent factors in the study, while the dependent variable was bank financial performance. ROE was the gauge of financial performance utilized. The study discovered that adequate capital has a considerable detrimental impact on ROE. Because the study was focused on Nigeria, the conclusions may not be applicable to Nigeria as a whole. The panel regression

data in the research were not used. The current study used panel regression data in the research to fill the gaps.

Dore (2018) investigated how Ghanaian commercial banks' financial performance was impacted by their liquidity ratio. The sample size for the study was 20, and the research design was descriptive. The outcome showed indicates the Ghanaian commercial banks' financial performance and the liquidity ratio have a poor and negligible connection. This shows that there is no causal connection between Ghanaian commercial banks' financial performance and liquidity ratio. The study only employed a 20-person sample size. The current study employed a larger sample size of 61 in the research to fill study.

Onyango (2019) looked at the effect of financial performance on the leverage of deposits taken by Savings and Credit Co-operative Societies In Nairobi County, Kenya, from 2010 to 2014, The research used borrowings, leverage, asset adequacy, profits, and liquidity to evaluate wealth. The study was descriptive statistics in nature. The 43 SACCOs in Nairobi County with valid licenses as of December 2014 were the study's target population. The analysis of the study's primary and secondary data using ANOVA. According to the report, SACCOs' wealth's leverage ratio has been rising yearly during the research period. The study found that the leverage ratio of wealth is positively and significantly impacted by external factors. The study descriptive statistical analysis and failed to used inferential statistics analysis which brings out the associative power between the dependent and independent variables

2.3 Research Gaps

Bourke (2013) The relationship solvency and banks profitability for 90 banks in Europe. Used a multiple regression model to investigate performance. The failed to apply descriptive and correlation analysis which is good for measuring relationship of variables. The current study addresses the gaps by using up to date data and adopting descriptive and correlation analysis.

Graham and Brodeleau (2013) The impact of solvency on financial performance of financial institutions in Canada. The study used target population of 19 financial institutions in the Canada securities exchange for period covering 2010 to 2014. The study used a smaller sample size of 19 to analysis data and hence the findings cannot be reliable. The current study uses sample size of 61 which inferences to the larger population.

Abera (2014) Affecting solvency on profitability of banking industry in Ethiopia. Mixed methods research approach by combing documentary analysis and in-depth interviews eight commercial banks in Ethiopia. The study incorporated inferential analysis tools such as (correlation, simple and multiple regression) in the current study to enhance generalizations and conclusions. The study came to the conclusion that further research is needed to clarify the effect of Ethiopian banks' solvency on their performance.

Kamoyo (2016) determinants of solvency on financial performance of deposit taking SACCOs in Kenya. The study used a multiple regression model to investigate financial performance and failed to use correlation analysis and panel regression model limit generalization ability. The current study applies correlation and panel regression model as well which allow inferences to the larger population.

Ongore and Kusa (2017) The determinants of solvency on financial performance of commercial banks in Kenya. Explanatory research design, sample 37 multiple regression model and generalized Least Square on panel data The study did not include correlation analysis which deals with association of independent variables and dependent variables. The current study addresses the correlation analysis from local perspectives to address the gaps.

Macharia (2017) Examine the relationship between the profitability and solvency of Savings and Credit Co-operative Societies in Kenya. The population of the study was comprised all 43 Savings and Credit Co-operative Societies in Kenya operating in the years 2008 to 2012 The

study used a smaller sample size of 43 to analysis data and hence the findings cannot be reliable. The current study try to fill the gaps in the research.

Ibe (2011) Determine the impact of liquidity on the profitability of banks in US. A sample size of 43 banks was used for the study in US. The study used a smaller sample size 43 to analysis data and hence the findings cannot be reliable. Current study targets sample size of 61 which larger enough.

Al Nimer *et. al,* (2015) Effect of liquidity on financial performance of SACCOs in Jordanian as evident on ROA. A sample of forty listed SACCOs. The study used a smaller sample size 40 to analysis data and hence the findings cannot be reliable. The current study fills the gaps by considering annual statement documents from the SACCOs.

Mishra and Pradhan (2015) Impact of liquidity management on profitability among the private sector SACCOs of India. The study used inferential statistics to analysis the data but the study failed used both inferential statistics and descriptive statistics to analysis data in the research. The current study filled the gaps by considering both inferential statistics and descriptive statistics to analysis data in the research.

Moussa and boubaker (2017) Impact of liquidity on SACCOs profitability suing data for eighteen SACCOs in Tunisia. Used 2 models of penal statistics. The study failed to use correlation statistics which is good measuring association of variables. The current study included correction analysis in the research to fill the gaps.

Vaita (2019) The role of liquidity on financial performance of Tier One Listed SACCOs in Kenya. Used a descriptive research design to SACCOs in Kenya. The study failed to use cross sectional research design The current student used cross sectional research to fill the gaps.

Rajkumar(2014) Effect of leverage ratio on financial performance of deposit taking SACCOs in Sri Lanka. study used target population of 60 of DTS, regression and correlation analyze.

The study failed to used descriptive statistical analysis is used to describe variables. The study was conducted in Sri Lanka thus presenting a scope gap. The current study was conducted in Kenya.

Bhardwaj (2017) examined of leverage on financial performance of deposit taking SACCOs in India. The sampled of 40 SACCOs registered by SASRA operating in Kenya from the period of 2006 to 2010 and the study used a smaller sample size of 40 which is not wider enough to give a good result for research. This current study used sample size of 61which was wider enough to give a good result for research.

Zahoor *et. al*, (2015) The effect of leverage ratio on financial performance of Pakistan firms. Used Panel da from 154, descriptive analysis and inferential analysis of textile firms quoted at the Karachi Stock Exchange KSE). The study failed to use panel regression analysis. The study focused on textile companies thus presenting a scope gap. The current study focused on Deposit Taking SACCOs in Kenya to fill the gaps.

Gudeta (2013) The impact of leverage ratio on the financial performance of commercial banks in Ethiopia. Used sample size of 44 banks over a 5 years term 2008 to 2012, descriptive and multiple regression was used. The study failed to use correlation statistics which good measuring association of variables. The current study used correction statistics in the research to the gaps.

Abubakar (2015) The link between leverage ratio and financial performance of banks in Nigeria. Regression analysis was used. The study failed to use correlation statistics and descriptive statistics. The current study employed both statistics in research to fill the gaps.

Khalifa Tailab (2012) evaluate of capital on financial performance of SACCOs in America. The study employed quasi experimental research design in the research and The study failed

to used cross sectional research design. The current study applied cross sectional research design on SACCOs.

Haris *et. al.*, (2014) the influence of capital adequacy on the profitability of Pakistani SACCOs. The influence of capital adequacy on the profitability of Pakistani SACCOs, but the study used primary data from the questionnaire and interview. The current study used secondary data to fill gaps.

Rahman (2017) The effect of capital adequacy ratio on the performance of mid-tierSACCOs in Bangladesh. The data using descriptive and inferential statistics. The study failed to use research design such as cross sectional research design. The current study used a larger sample size which is good to give out different outcome.

Zerfeshewa (2017). Influence of capital adequacy on banks' profitability in Ethiopia. The study used Employed descriptive research design, secondary data. The study failed to use cross sectional research design. The current study used cross sectional research design to fill gaps.

Aymen (2018). The relationship between profitability and capital adequacy of Credit Cooperative Societies (SACCOs in Tunisia. The study ran a regression model. The study failed to use correlation statistics and descriptive statistics. The current study used both statistics to fill gaps.

Suka (2019) Influence of capital adequacy on financial performance of financial institution quoted at the Nairobi stock exchange. Descriptive research design was employed The study failed to use cross sectional research design. The current study was carried on SACCOs to fill the gaps.

Zulfiqar and Din (2015) Effect of inflation rate on financial performance of SACCOs of Pakistan textile industry. The study used a multiple regression model to investigate financial performance and the study failed to applied descriptive and correlation analysis which is good

for measuring relationship of variables. The current study addressed the gaps by applies descriptive and correlation analysis which is good for measuring relationship of variables.

Baba and Nasieku (2016) Effect of Inflation rate on the performance of Nigerian banks. 23 licensed banks in Nigeria participated in this study The study focused only on the smaller sample size of 23 of licensed banks in Nigeria. The study also failed to use a larger sample size which is being used in the current study.

Obeng-Krampah (2020) Effect of inflation rate variables and performance of firms quoted on the Ghana Stock Exchange. Panel data were used of the period 2007 to 2015. The study failed to use correlation statistics and descriptive statistics. The current study used both correctional and descriptive statistics in the research to fill gaps.

2.4 Conceptual Framework

The conceptual framework of this study spells out the relationship between the Financial Performance which is the dependent variable and Solvency, Liquidity, Leverage and Capital Adequacy as the independent variables all practices combined are assumed to have effect on Deposit taking SACCOs.

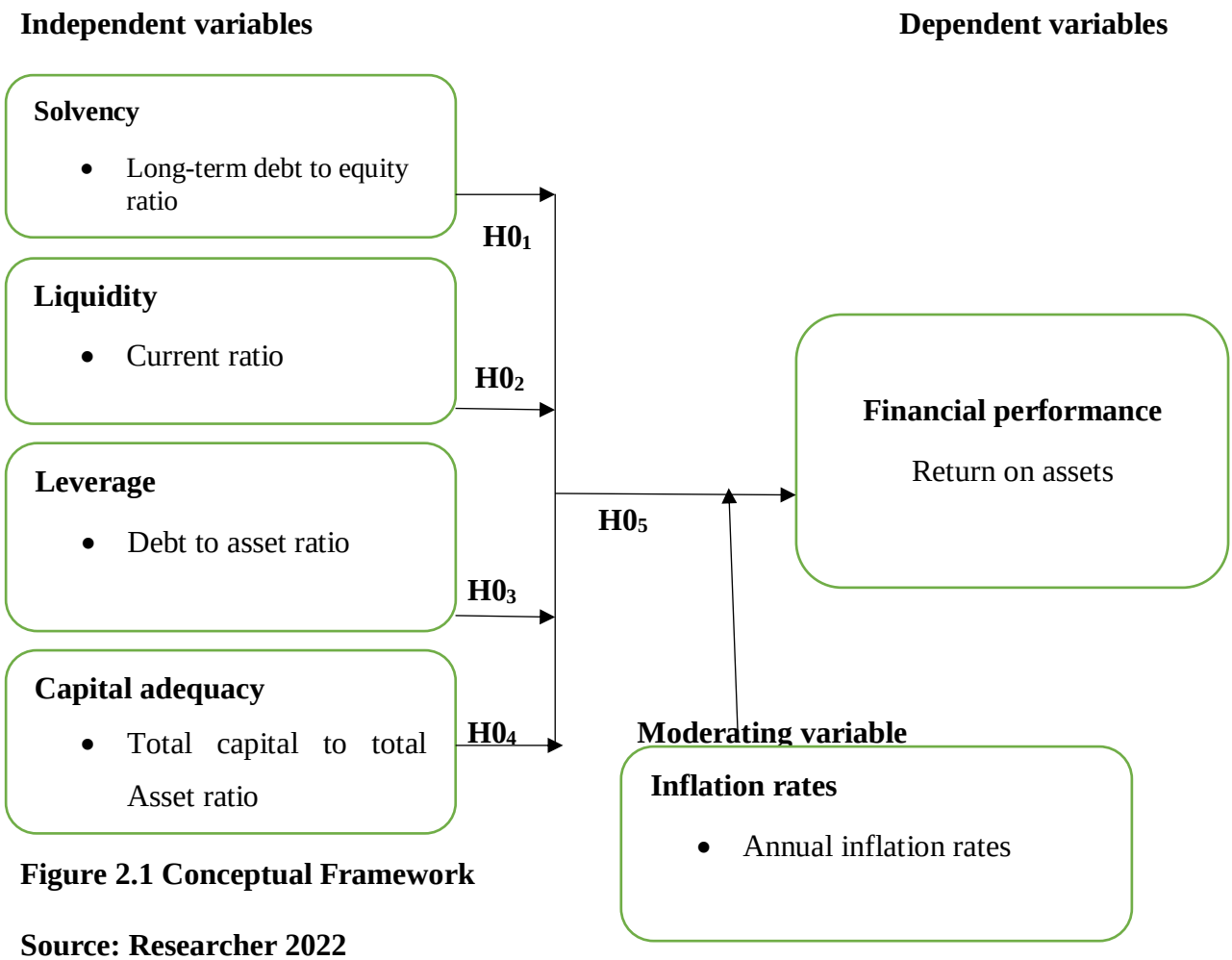


Figure 2.1 Conceptual Framework

Source: Researcher 2022

Deposit-taking SACCOs are said to be solvent when their overall assets exceed their present obligations and they are able to pay their bills. A SACCO's capacity to access loans, funding, and investment capital is impacted by its level of solvency, which reflects the SACCO's short- and long-term financial health and stability. Given that stakeholders are also interested in SACCO solvency, solvency can impact how well a deposit-taking SACCO performs. While the financial performance of deposit-taking SACCOs declines, solvency rises.

By calculating indicators such as the current ratio, quick ratio, and operating cash flow ratio, liquidity assess a company's capacity to service debt and its margin of safety. The greater the quick ratio and current ratio, the stronger the company's financial standing. However, a SACCO that lacked the managerial skills to put those resources to use may have a very high current ratio as a sign that company is sitting on a lot of cash.

A leverage is any of a number of financial metrics that examine the amount of capital that originates from debt (loans) or evaluates a company's capacity to satisfy its financial commitments. Because businesses often employ a combination of debt and equity to fund their operations, the leverage category is crucial. Knowing how much debt a company has may help determine if it was able to pay off its loans when they are due. As soon as the leverage decreases, financial performance followed suit. Conversely, when the leverage rises, financial performance is anticipated to follow suit. SACCOs perform worse financially when their leverage is higher, but it also allows them to accumulate bigger capital reserves and weather financial crises more readily. A lower leverage can improve SACCOs' financial performance, but it can also leave them with fewer capital reserves and make it impossible for them to weather a financial catastrophe.

The ratio of a deposit-taking SACCO's primary assets to its assets (loans and investments) is known as capital adequacy, and it is used to assess a SACCO's financial performance or the stability of its finances. Financial performance of SACCOs that have a high capital adequacy It has been demonstrated that economies with better capital adequacy have greater sustainability, efficiency, and reach. The better the SACCOs are able to withstand potential losses, the higher their capital adequacy must be one of the fundamental capital strength ratios. It is anticipated that when the ratio increases, the SACCO's financial performance would improve and its demand for outside financing decreased. This demonstrates the SACCO's capacity to manage current exposures and absorb losses. For SACCOs, having more capital adequacy is frequently seen to be expensive, which implies that having more capital adequacy hinders financial performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Philosophy

The formation of knowledge that researchers use in their study is referred to as research philosophy (Saunders *et. al*, 2007). Positivism is the one philosophical research philosophies. The purpose of this study is to examine credit risk management practices and determine how it affects the financial performance of DT SACCOs in Kenya. In order to establish some "law-like generalizations," the positivist philosophies was used in this study to gather reliable data from the DT SACCOS. This philosophy is grounded in theories that may be utilized to create hypotheses that can be evaluated to provide statistical support for conclusions drawn from the experimentally testable hypothesis (MCMillan & Schumacher, 2010).

According to the research philosophy of positivism, the only knowledge is something that can be observed and measured, using the senses. According to this theory, the researcher's job is limited to gathering data and interpreting it objectively. The study findings are often observable and quantitative (Manduku, 2020). As a result, the researcher must make sure to remove human interest from the study while remaining independent from it. Dudovskiv (2016) begins by emphasizing that positivism-based research is often grounded on verifiable facts and assumes that the world is external and objective. According to Alexander and Dmitry (2013), this research philosophy is quantitative and uses highly organized procedures for evaluating hypotheses. Murithi (2016) used the positivist research methodology in her study titled "Effect of the financial risk on the financial performance of SACCOs in Kenya was studied using positivism. These are example philosophy of positivism was used in the study: Ontology, epistemology and Axiology.

Ontology is the nature of existence. Ontology is divided into schools of thought: realism and relativism, which believe that there is one fixed reality and multiple realities, respectively. The

first school of thought holds that there is only one truth that never changes, whereas the second holds that there are multiple realities and that the truth evolves and changes based on the researcher's perception (Kauna, 2017).

The study of the nature of knowledge is known as epistemology. Its research focuses on the methods for acquiring knowledge and distinguishing between truth and falsehood. Epistemology is fundamental to understanding how and why we think, or how we acquire knowledge, rely on our senses and from concepts in our minds. From an epistemological standpoint, the research can adopt passivism, in which the research is a simple reality (Akira, 2014).

Axiology is the evaluation of the function of the researcher's own point of view at all stages of the research procedure. It focuses on what the researcher values in his or her research. The study adopted the positivist approach, which advocates for the application of techniques from natural sciences to the investigation of social reality and history (Ryan, 2018).

3.2 Research Design

Research design can be defined as the method used to carry out the entire research or the way the research is designed (Ezeoha, 2011). This study adopted cross sectional research designs. The study was cross sectional because it used data from various Deposit Taking SACCOs under study over a five year period, that is, from 2016-2020 (Kothari 2004). The study by Barasa (2017), adopted cross sectional research design in his research entitled effect of credit risk on financial performance of SACCOs in Kenya.

3.3 Study Area

The study was carried out in Deposit Taking SACCOs registered under SASRA in Kenya for period of five years from 2016 to 2020. According SASRA, there are 164 Deposit Taking

SACCOs registered in Kenya. Kenya is located in East Africa, it borders South of Ethiopia, Somalia to west, Tanzania to the south and Uganda to the east. The 164 Deposit Taking SACCOs were on actively operation in Kenya as at 31 Dec 2020.

3.4 Target Population

A population is a set of events, services, things or households or a set of people that is well defined and being investigated (Ngechu, 2004). The target population for this study was all the Deposit Taking SACCOs which were in operation from 2016 to 2020. The latest listing as at December 2020 had 164 Deposit Taking SACCOs. The target population of 164 SACCOs has been shown on Appendix III. These 164 SACCOs operated continuously from 2016 to 2020.

Table 3.1

Target Population

Deposit Taking SACCOs	Number of SACCOs
Teacher based SACCOs	36
Government based SACCOs	38
Farmers based SACCOs	55
Private Institutions based SACCOs	14
Community based SACCOs	21
Total	164

Source: SASRA 2020

3.5 Sampling design

3.5.1 Sample Size

The sample size of 61 Deposit Taking SACCOs participated in the study. The study used scientific formula by (Kothari, 2004) to determine the sample size as follows: According to Rose Loru (2020) who applied Kothari formula in her study indicated that, the formula is useful

in determining a sample size form a target population that is fairly large. It gives equal representation and eliminates biasness.

$$n = \frac{Z^2pqN}{e^2(N-1) + Z^2pq}$$

Where;

N is the size for a population which is the number of deposit taking SACCOs

n is sample size

p+q is population reliability (or frequency estimated for a sample size n), where is 0.5

p+q = 1

e is margin of error considered is 10% for this (1/10)

Z = is level of significance (1.96)

$$n = \frac{Z^2pqN}{e^2(N-1) + Z^2pq}$$

$$= \frac{(1.96)^2 \times 0.5 \times 0.5 \times 164}{(0.1)^2 (164 - 1) + (1.96^2 \times 0.5 \times 0.5)}$$

$$= \frac{3.8416 \times 0.25 \times 164}{(0.01 \times 163) + (3.8416 \times 0.25)}$$

$$= \frac{157.5056}{1.63 + 0.9604}$$

$$= \frac{157.5056}{2.5904}$$

= 61

The sample size was 61 Deposit taking SACCOs in Kenya operating from 2016 to 2020 as shown on appendix IV

Table 3.2

sample size

Deposit Taking SACCOs	Number of SACCOs
Teacher based SACCOs	13
Government based SACCOs	14
Farmers based SACCOs	21
Private Institutions based SACCOs	5
Community based SACCOs	8
Total	61

Source: Researcher 2020

3.5.2 Sampling frame

Caselli and Negri (2018), defined a sampling frame as a schedule or list of events, people, things that are relate to the entire population from where a sample is selected. The sample frame for the study was all the Deposit Taking SACCOs which are operating in Kenya over the period 2016-2020.

3.5.3 Sampling Procedure

A sampling procedure is a method or technique for selecting a subset of a population to take part in a research; it is the process of picking a number of people in such a manner that they fairly and transparently reflect the broader group that was chosen (Ogula, 2005). The study obtained a complete list of Deposit Taking SACCOs that were operating in Kenya as at December 2020. From this list, the researcher identified those Deposit Taking SACCOs which continuously SACCOs from 2016 up to the year 2020. The study adopted stratified random sampling technique to select 61 SACCOs from 164 SACCOs which continuously operated from 2016 up to the year 2020.

3.6 Data collection

The study employed the use of secondary data. These data was collected from the published annual financial statements of the SACCOs. Specifically, the balance sheet and income statements over the years under study (2016-2020) was extracted so as to provide the necessary data. From these quantitative data, Return on Assets (ROA), was calculated and used to make conclusions. The data was collected using document analysis guide.

3.7 Data Analysis and Presentation

The study used descriptive and inferential statistics to analyze data. In descriptive statistics, the study applied minimum, maximum, mean and standard deviation. Further, the study applied simple regression, multiple regressions and Pearson product moment correlation analysis was used to assess the effect of the independent variable on the outcome in the study. Correlations analysis was used to measure the association between the variable and quantitate the strength of their relationship. Regression analysis was adopted to determine the effects of independent variables on financial performance of DT SACCOs.

3.7.1 Analytical Model

The empirical model was used in the study to test the relationship between credit risk management practice and financial performance of deposit taking SACCOs in Kenya. There are various variables which was calculated so as to disclose the association between the variables under study. To begin with, the end year annual measures of solvency was the Total Debt to by total Equity, and Long-Term debt to total Equity, liquidity was measured by calculating the, Current ratio, quick ratio. Leverage was given by taking Debt to Asset ratio, Debt To Capital ratio and capital adequacy calculated by Total capital to total Asset ratio, Total Deposit to total Equity and financial performance was measured by Return on asset. Panel data.

The Panel regression model used was as follow;

To establish objective one and test out its hypothesis which sought to establish the relationship between solvency and financial performance deposit taking SACCOs in Kenya, the following simple regression model used was:

$Y_{it} = \alpha + \beta_1 X_{1it} + \varepsilon_{it}$ ……. Equation (3.1)

Where:

Y*it* = Financial performance of deposit taking SACCOs *I* for *t* year,

α = Constant (coefficient of intercept),

B_1 = change in deposit taking SACCOs financial performance for I unit increment change in X_1 *i*t, that is, solvency which predicts the value of deposit taking SACCOs *I* for years *t*., years

ε_{it} = the error term reflecting other factors outside the model that affects deposit taking SACCOs *I* for years *t*., years

To establish objective two and test out its hypothesis which sought to establish the relationship between liquidity and financial performance deposit taking SACCOs in Kenya, the following simple regression model used was:

$Y_{it} = \alpha + \beta_2 X_{2it} + \varepsilon_{it}$ …….Equation (3.2)

Where:

Y*it* = Financial performance of deposit taking SACCOs *I* for *t* year,

α = Constant (coefficient of intercept)

B_2 = change in deposit taking SACCOs financial performance for I unit increment change in

X_{2it} = score on the liquidity which predicts the value of deposit taking SACCOs *I* for years *t*., years

ε_{it} = the error term reflecting other factors outside the model that affects deposit taking SACCOs *I* for years *t*., years

To establish objective three and test out its hypothesis which sought to establish the relationship between leverage and financial performance deposit taking SACCOs in Kenya, the following simple regression model used was.

$Y_{it} = \alpha + \beta_3 X_{3it} + \acute{\varepsilon}_{it}$ …….Equation (3.3)

Where:

Y*it* = Financial performance of deposit taking SACCOs *I* for *t* year,

α = Constant (coefficient of intercept)

B_3 = change in deposit taking SACCOs financial performance for I unit increment change in

X_{3it} = score on the leverage which predicts the value of deposit taking SACCOs *I* for years *t*., years

$\acute{\varepsilon}_{it}$ = the error term reflecting other factors outside the model that affects deposit taking SACCOs *I* for years *t*., years

To establish objective four and test out its hypothesis which sought to establish the relationship between capital adequacy and financial performance deposit taking SACCOs in Kenya, the following simple regression model used was.

$Y_{it} = \alpha + \beta_4 X_{4it} + \acute{\varepsilon}_{it}$ ……. Equation (3.4)

Where:

Y*it* = Financial performance of deposit taking SACCOs *I* for *t* year,

α = Constant (coefficient of intercept)

B_4 = change in deposit taking SACCOs financial performance for I unit increment change in *t*., years

X_{4it} = score on the capital adequacy which predicts the value of deposit taking SACCOs *I* for years *t*., years

$\acute{\varepsilon}_{it}$ = the error term reflecting other factors outside the model that affects deposit taking SACCOs *I* for years *t*., year

To establish the combined effect on the relationship between inflation rate and financial performance of deposit taking SACCOs in Kenya and test its hypothesis, the following multiple regression model used was:

$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \acute{\varepsilon}_{it}$ .....Equation (3.5)

Where

Y*it* = Financial performance of deposit taking SACCOs *I* for *t* year,

β_0 = Constant (coefficient of intercept)

Therefore, the interaction term between predictor and moderating variables multiplying the two variables that produced an interaction effect as specific model. To establish the moderating effect of credit risk management practices on financial performance of deposit taking SACCOs in Kenya. Hierarchical regression Model was used.

$Y_{it} = \beta_0 + \beta_1 X_{1it} I + \beta_2 X_{2it} I + \beta_3 X_{3it} I + \beta_4 X_{4it} I + \acute{\varepsilon}$ .....Equation (3.6)

Where:

Y*it* = Financial performance of deposit taking SACCOs *I* for *t* year,

B_o = Constant (coefficient of intercept)

I = Inflation rate

An Analysis of Variance (ANOVA) test was run to determine the significance of the independent variables on the dependent variables. F-test was used to test the hypotheses.

3.7.2 Hypothesis Testing

Table 3.3:

Summary of Statistical Tests for Hypotheses and Interpretations

Objectives	**Hypotheses**	**Statistical Test**	**Model**	**Interpretation**
To establish objective one and test out its hypothesis which sought to establish the relationship	**H_{01}:** Solvency has no statistically significant effect on financial performance of	Simple Regression Analysis	Simple Regression Analysis $Y_{it} = \alpha + \beta_1 X_{1it} + \acute{\varepsilon}_{it}$ **Where:**	Change in (R^2) value. If β for Solvency are positive F, β and are significant ($p \leq 0.05$). Then, Solvency

between solvency and financial performance deposit taking SACCOs in Kenya	Deposit Taking SACCOs in Kenya		Y*it* = Financial performance α = Constant (coefficient of intercept) B_1 = change in deposit taking SACCOs financial performance	positive and significant relationship on financial performance
To establish objective two and test out its hypothesis which sought to establish the relationship between liquidity and financial performance deposit taking SACCOs in Kenya	**H_{02}:** liquidity has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya	Simple Regression Analysis	Simple Regression Analysis $Y_{it} = \alpha + \beta_1 X_{1it} + \acute{\varepsilon}_{it}$ **Where:** Y*it* = Financial performance α = Constant (coefficient of intercept) B_1 = change in deposit taking SACCOs financial performance X_{1it} = score on the solvency $\acute{\varepsilon}_{it}$ = the error term Simple Regression Analysis $Y_{it} = \alpha + \beta_1 X_{1it} + \acute{\varepsilon}_{it}$ **Where:** Y*it* = Financial performance α = Constant (coefficient of intercept) B_1 = change in deposit taking SACCOs financial performance	Change in (R^2) value. If β for liquidity are positive F, β and are significant ($p \leq 0.05$). Then, liquidity positive and significant relationship on financial performance

			X_{1it} = score on the liquidity $\acute{\varepsilon}_{it}$ = the error term	
To establish objective three and test out its hypothesis which sought to establish the relationship between leverage and financial performance deposit taking SACCOs in Kenya	**H_{03}**: leverage has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya	Simple Regression Analysis	Simple Regression Analysis $Y_{it} = \alpha + \beta_1 X_{1it} + \acute{\varepsilon}_{it}$ **Where:** Y*it* = Financial performance α = Constant (coefficient of intercept) B_1 = change in deposit taking SACCOs financial performance X_{1it} = score on the leverage $\acute{\varepsilon}_{it}$ = the error term	Change in (R^2) value. If β for leverage are positive F, β and are significant ($p \leq 0.05$). Then, leverage positive and significant relationship on financial performance
To establish objective four and test out its hypothesis which sought to establish the relationship between capital adequacy and financial performance deposit taking SACCOs in Kenya	**H_{04}**: capital adequacy has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya	Simple Regression Analysis	Simple Regression Analysis $Y_{it} = \alpha + \beta_1 X_{1it} + \acute{\varepsilon}_{it}$ **Where:** Y*it* = Financial performance α = Constant (coefficient of intercept) B_1 = change in deposit taking SACCOs financial performance X_{1it} = score on the capital adequacy $\acute{\varepsilon}_{it}$ = the error term	Change in (R^2) value. If β for capital adequacy are positive F, β and are significant ($p \leq 0.05$). Then, capital adequacy positive and significant relationship on financial performance

To establish the combined effect on the relationship between inflation rate and financial performance of deposit taking SACCOs in Kenya and test its hypothesis	**H_{05}:** Inflation rate has no moderating effect on the relationship between credit risk practices on financial performance of Deposit Taking SACCOs in Kenya	Multiple Regression Analysis	Multiple Regression Analysis $Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \acute{\varepsilon}_{it}$ **Where:** Y*it* = Financial performance β_0 = Constant (coefficient of intercept) $B_1 - B_4$= change in deposit taking SACCOs financial performance X_{1it} = score on the solvency X_{2it} = score on the liquidity X_{3it} = score on the leverage X_{4it} = score on the capital adequacy $\acute{\varepsilon}_{it}$ = the error term	Change in (R^2) value. If β for solvency, liquidity, leverage and capital adequacy are positive and t are significant ($p \leq 0.05$) solvency, liquidity, leverage and capital adequacy has a positive and significant relationship on financial performance
To establish the moderating effect of credit risk management practices on financial performance of deposit taking SACCOs in Kenya		Hierarchical Regression Analysis	Hierarchical Regression Analysis $YI_t = \beta_0 + \beta_1 X_1 I_{t\,I} + \beta_2 X_2 I_{t\,I} + \beta_3 X_3 I_{tI} + \beta_4 X_4 I_{tI} + \acute{\varepsilon}$ **Where:** Yit = Financial performance of deposit taking SACCOs B_o = Constant (coefficient of intercept) $B_1 - B_4$= change in deposit taking SACCOs	If change in (R^2) after adequate interaction term(F, β, t) ($p \leq 0.05$). Then, Inflation rate has moderating effect on the relationship between credit risk practices on financial performance of Deposit Taking SACCOs in Kenya

			financial performance X_{1it} = score on the solvency X_{2it} = score on the liquidity X_{3it} = score on the leverage X_{4it} = score on the capital adequacy I = Inflation rate $\acute{\varepsilon}_{it}$ = the error term	

Source: Researcher 2020

3.8 Diagnostic Test

The study carried out diagnostic test to validate the model and make inferences possible for the researcher. Linearity, normalcy auto-correlation, multi-collinearity, and homoscedasticity are some of the fundamental presuppositions of linear regression. The study results are likely to provide skewed estimations of the parameters when these assumptions are broken. Saunders *et. al,* (2007).

3.8.1 Test of Autocorrelation

Data must have little to no autocorrelation in order to do regression analysis. When the residuals are not zero, autocorrelation arises apart from one another. Most statistical methods presume independent observations. Using Durbin-Watson d statistics, the independence test for each of the four predictor variables was carried out. When independent variables repeat themselves or have an impact on one another and are unable to sufficiently predict the dependent variables, the Durbin-Watson test is utilized. Tests of autocorrelation have been shown to be important for demonstrating the distribution of disturbance, according to Srivastava et al., (2005) (errors). Before developing least squares strategies for estimating "a" and "b," it is crucial to establish if there are any auto-correlated disturbance terms in the series. The Durbin-Watson statistics value varies from 0 to 4, with 2 being the best value for non-autocorrelation. A score closer to

4 suggests a negative autocorrelation, whereas 0 denotes a positive autocorrelation (Srivastava et al., 2005). Accordingly, coefficient values between 1.5 and 2.5 indicate the absence of autocorrelation, but coefficient values between 2.5 and 4 indicate the existence of autocorrelation.

3.8.2 Multi collinearity Test

Regression assumed that the data's multi-collinearity is negligible to nonexistent. When the independent variables are not independent of one another, multi-collinearity arises. A multi-linearity test was ran to look for any unnecessary variables. Excluding one of the variables from the model when multi-collinearity is present does not lessen the explanation of the dependent variables (Y). The coefficient of correlation assesses the strength of the association between independent variables. When a two variable relationship is strong independent variables are referred to as multi-collinearity (Waters, 2011). Multilinearity means that one variable may accurately predict the result of another variable (Srivastava et al., 2005). To evaluate the level of multicollinearity between the ith independent variable and the order independent variables in a regression model, O'Brien (2007) advises that both variance inflation factor and tolerance be extensively employed. It is advised to eliminate one of the elements causing this issue in such a scenario. A variance inflation factor (VIF) of more than 10 or a tolerance of less than 0.1 both suggest the presence of multicollinearity. A VIF measures the influence of multicollinearity among Xs in a regression model on the predictors, according to Robinson and Schumacker (2009) the accuracy of a prediction. A statistic called the variance inflation factor (VIF) was used to assess the likelihood of multicollinearity among the explanatory predictors.

3.8.3 Homoscedasticity Test

Homoscedasticity is the property that all levels of the independent variables have the same error variance. Hererodasticity is demonstrated when the variance of errors varies at various values of the independent variables. Homoscedasticity was examined using Levene's test. Tabachnick and Fidell (2001) claim that little heteroscedasticity has no impact on significance tests, but substantial heteroscedasticity can seriously undermine the analysis and distort the results, increasing the likelihood of Type I error.

3.9 Ethical Considerations

A set of norms and concepts known as ethical considerations are to be upheld when conducting human affairs. A person cannot act in a way that is damaging to society or another person, thanks to ethical concerns. It forbids nasty behavior by both individuals and groups. All ethical issues pertaining to this study was taken into account by the researcher at all times, and all data collected throughout the study was used only for that reason. Confidentiality also be upheld. The researcher made sure that the three ethical principles are followed. These include justice, charity, and respect. Participants' autonomy, rights, and dignity shall be respected and protected during the study time. Research shall be carried out in a fair, honest, and open manner.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Descriptive Statistics

The aimed at determining how credit risk management practices affect financial performance of deposit taking SACCOs in Kenya. The rate of inflation was used to moderated the relationship between independent variables and dependent variable. The study specifically focused on solvency, liquidity, leverage, capital and adequacy. Financial performance was the dependent variable and it was measured using return on assets.

4.1.1 Solvency

The study described solvency of Deposit taking SACCOs in Kenya. The study carried out descriptive analysis and findings were presented below in table 4.1.

Table 4.1

Solvency

	N	Minimum	Maximum	Mean	Std. Deviation
Acumen SACCO Society Ltd	5	.04	.06	.0542	.00850
Afya SACCO society ltd	5	.12	.21	.1536	.03791
Airport SACCO Society Ltd	5	.01	.10	.0515	.04359
Ardhi SACCO Society Ltd	5	.10	.11	.1065	.00178
Bandari SACCO society ltd	5	.09	.13	.1056	.01722
Baraton University SACCO Society Ltd	5	.01	.01	.0117	.00016
Biashara SACCO Society Ltd	5	.08	.14	.1163	.02364
Breameg SACCO Society Ltd	5	.01	.03	.0183	.00839
Capital SACCO Society Ltd	5	.03	1.48	.3390	.63665

Chuna SACCO Society ltd	5	.19	.47	.3424	.11190
Daima SACCO Society Ltd	5	.01	.24	.1018	.08752
Elgon Teacher SACCO Society Ltd	5	.02	.40	.2087	.15847
Elimu SACCO Society Ltd	5	.01	.07	.0412	.02167
Faridi SACCO Society Ltd	5	.04	.07	.0546	.01245
Fortitude SACCO Society Ltd	5	.02	.19	.0999	.07052
Good Faith SACCO Society Ltd	5	1.51	1.70	1.6107	.08590
Harambee SACCO Society Ltd	5	.02	.24	.1126	.08102
Imarika SACCO Society Ltd	5	.01	.08	.0431	.03194
Imarisha SACCO Society Ltd	5	.18	1.03	.5754	.33304
Jamii SACCO Society Ltd	5	.02	.05	.0337	.00924
Kathera Rural SACCO Society Ltd	5	.01	.16	.1073	.05668
Kentours SACCO Society Ltd	5	.15	1.89	1.0370	.79661
Kenya Achievas Kenya SACCO	5	.01	.04	.0208	.01348
Kenya Police SACCO Society Ltd	5	.09	.25	.1503	.06270
Kenpipe SACCO Society Ltd	5	.04	.10	.0281	.04200
Kimisitu SACCO Society Ltd	5	.10	.22	.1538	.04709
Kingdom SACCO Society Ltd	5	.02	.10	.0624	.04080
KolengeTea SACCO Society Ltd	5	.04	.14	.0916	.03814
Koru SACCO Society Ltd	5	.04	.17	.1158	.04988
Lontels SACCO Society Ltd	5	.05	.29	.1227	.09710
Maisha Bora SACCO Society Ltd	5	.01	.13	.0658	.04722

Metropolitan SACCO Society Ltd	5	.05	.15	.1060	.03958
Mombasa Port SACCO Society Ltd	5	.02	.10	.0640	.03539
Muki SACCO Society Ltd	5	.02	.15	.0801	.06064
Miliki SACCO Society Ltd	5	.07	.71	.2300	.26852
Mwalimu SACCO Society Ltd	5	.01	.12	.0785	.05268
Mwito SACCO Society Ltd	5	.08	.71	.4136	.26109
Mzima SACCO Society Ltd	5	.03	.10	.0719	.03057
Nafaka SACCO Society Ltd	5	.04	.20	.1155	.05739
Nacico SACCO Society Ltd	5	.05	.26	.1423	.08465
Nandi Farmer SACCO Society Ltd	5	.08	.18	.1464	.03742
Ollin SACCO Society Ltd	5	.01	.50	.1917	.18837
Safaricom SACCO Society Ltd	5	.03	3.38	.7948	1.44804
Sheria SACCO Society Ltd	5	.02	.11	.0586	.03731
Shirika SACCO Society Ltd	5	.05	.15	.1002	.03774
Simba SACCO Society Ltd	5	.04	.17	.0936	.05329
Siraji SACCO Society Ltd	5	.02	.08	.0564	.02229
Stima Investment SACCO society ldt	5	.01	.10	.0293	.04081
Tai SACCO Society Ltd	5	.01	.03	.0141	.01427
Torch SACCO Society Ltd	5	.03	.13	.0393	.05233
Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd	5	.03	.16	.0860	.06589
Un SACCO Society Ltd	5	.01	.18	.0733	.08530
Unisa SACCO Society Ltd	5	.04	.17	.0503	.07079
Unison SACCO Society Ltd	5	.07	.14	.1083	.02612

Ushuru County Farmer SACCO Society Ltd	5	.02	.13	.0845	.04336
United Nationas SACCO Society Ltd	5	.08	.20	.1257	.04799
Vihiga County Farmers SACCO Society	5	.07	.10	.0887	.01295
Vision Point SACCO Society Ltd	5	.05	.13	.0861	.03124
Wakenya Pamoja SACCO Society Ltd	5	.03	.21	.1162	.06377
Wipo SACCO Society Ltd	5	.02	.12	.0597	.05404
Yetu SACCO Society Ltd	5	.01	.22	.1083	.10260
Valid N (listwise)	5				
Average mean				0.16311	

Source: Field data 2022

Acceptable solvency level may vary from one industry to another, however, the rule of the thumb is a solvency ratio of less than 20% or 30% is assumed to be financially health. The study noted that, solvency for the majority of SACCOs was less than 30%. For instance, the solvency ratio for Acumen SACCO Society Ltd was 5.42%, Afya SACCO society ltd 15.36%, Airport SACCO Society Ltd 5.15%, Ardhi SACCO Society Ltd 10.65 %, Bandari SACCO society ltd h10. 56% Baraton University SACCO Society Ltd 1.17 %, Biashara SACCO Society Ltd 11.63 %, Breameg SACCO Society Ltd 01.83%. Daima SACCO Society Ltd 10.18%. Elgon Teacher SACCO Society Ltd 20.87 %, Elimu SACCO Society Ltd 04.12%. Faridi SACCO Society Ltd 5.46%, Fortitude SACCO Society Ltd 09.99 %, 7. 052%, Harambee SACCO Society Ltd 11. 26%, Imarika SACCO Society Ltd 04.31 %, Jamii SACCO Society Ltd 3.37 %, Kathera Rural SACCO Society Ltd 10.73 %, Kenya Achievas Kenya SACCO 02.08 %, Kenya Police SACCO Society Ltd 15.03 %, Kenpipe SACCO Society Ltd 2.81%,

Kimisitu SACCO Society Ltd 15.38 %, Kingdom SACCO Society Ltd 6.24%, Kolenge Tea SACCO Society Ltd 9.16%, Koru SACCO Society Ltd 11.58%, Lontels SACCO Society Ltd 12.27. Maisha Bora SACCO Society Ltd 6.58%, Metropolitan SACCO Society Ltd 10.60%. Mombasa Port SACCO Society Ltd, 6.40%, Muki SACCO Society Ltd 8.01%, Miliki SACCO Society Ltd 23.00. Mwalimu SACCO Society Ltd 7.85 %, Mwito SACCO Society Ltd 41 .36 %, Mzima SACCO Society Ltd 7.19 %. Nafaka SACCO Society Ltd 11.55 %, Nacico SACCO Society Ltd, 14.23%, Nandi Farmer SACCO Society Ltd 14. 64%, Ollin SACCO Society Ltd 19.17 %. Safaricom SACCO Society Ltd had mean of .79.48%, Sheria SACCO Society Ltd 5.86%. Shirika SACCO Society Ltd 10.02%. Simba SACCO Society Ltd 9.36%, Siraji SACCO Society Ltd 5.64%, Stima Investment SACCO society ldt 2.93 %. Tai SACCO Society Ltd 1.41%, Torch SACCO Society Ltd 3.93 %, Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd 8.60%, Un SACCO Society Ltd 7.33%. Unisa SACCO Society Ltd 05.03%, Unison SACCO Society Ltd 10. 83. Ushuru County Farmer SACCO Society Ltd 8.45% United Nationas SACCO Society Ltd 12.57%, Vihiga County Farmers SACCO Society 8.87%, Vision Point SACCO Society Ltd 8.61%. Wakenya Pamoja SACCO Society Ltd 11.62, Wipo SACCO Society Ltd 5.97% and Yetu SACCO Society Ltd 10.83%. the solvency level for these SACCOs was lower than the generally accepted limits and hence, higher financial performance since they spend less income on interest payment in long-term liabilities.

The study further established that, the solvency of some SACCOs was above the generally recommended levels. For instance, solvency for Capital SACCO Society Ltd was 33.90 %. Chuna SACCO Society ltd 34.24 Imarisha SACCO Society Ltd 57.54%. Mwito SACCO Society Ltd 41.36 % and Safaricom SACCO Society Ltd.79.48%. Consequently, the had higher solvency ratio, thus, their financial performance was reduced due to higher interests paid on long-term liabilities. These findings agreed with Acharya Gale & Yorulmazer (2010), who opined that, Solvency, ensures that deposit-taking SACCOs would fulfill their obligations in the event of a suspension of operations or liquidation in the USA. It speaks to a SACCO's

capacity to meet long-term liabilities and its long-term financial stability. If the entire assets surpass the total liabilities, a deposit-taking SACCO is deemed solvent. The SACCOs suffer an insolvency risk and are deemed technically insolvent if total assets fall short of total obligations.

4.1.2 Liquidity

The study determined the liquidity of Deposit taking SACCOs in Kenya. The study carried out descriptive analysis and findings were presented in table 4.2 below.

Table 4.2

Liquidity

	N	Minimum	Maximum	Mean	Std. Deviation
Acumen SACCO Society Ltd	5	.03	.18	.2101	.06610
Afya SACCO SOCIET LTD	5	.01	.17	.0433	.07083
Airport SACCO Society Ltd	5	.02	10.24	2.0815	4.56087
Ardhi SACCO Society Ltd	5	.01	.01	.2110	.00008
Bandari SACCO society ltd	5	.02	.13	.1600	.05148
Baraton University SACCO Society Ltd	5	.01	.12	.2360	.04664
Biashara SACCO Society Ltd	5	.02	.09	.0559	.02717
Breameg SACCO Society Ltd	5	.02	.05	.3310	.01451
Capital SACCO Society Ltd	5	.01	.11	.3014	.04452
Chuna SACCO Society ltd	5	.01	.20	.2870	.08280
Daima SACCO Society Ltd	5	.01	.12	.3380	.04602
Elgon Teacher SACCO Society Ltd	5	.02	.03	.1600	.01358

Elimu SACCO Society Ltd	5	.01	.01	.1810	.00023
Faridi SACCO Society Ltd	5	.01	.12	.3601	.04722
Fortitude SACCO Society Ltd	5	.01	.20	.1507	.08299
Good Faith SACCO Society Ltd	5	.02	.15	.1601	.06831
Harambee SACCO Society Ltd	5	.03	.16	.0835	.06823
Imarika SACCO Society Ltd	5	.06	.16	.1911	.04096
Imarisha SACCO Society Ltd	5	.01	.01	.0115	.00022
Jamii SACCO Society Ltd	5	.02	.51	.1988	.19780
Kathera Rural SACCO Society Ltd	5	.04	.31	.2140	.10472
Kentours SACCO Society Ltd	5	.01	.01	.1910	.00031
Kenya Achievas Kenya SACCO	5	.01	.62	.2414	.29408
Kenya Police SACCO Society Ltd	5	.03	.05	.3093	.01223
Kenpipe SACCO Society Ltd	5	.02	.15	.0739	.05297
Kimisitu SACCO Society Ltd	5	.11	.20	.1466	.04016
Kingdom SACCO Society Ltd	5	.04	.18	.1612	.05649
KolengeTea SACCO Society Ltd	5	.03	.09	.0694	.02475
Koru SACCO Society Ltd	5	.06	.20	.1316	.06553
Lontels SACCO Society Ltd	5	.02	.86	.2100	.36430
Maisha Bora SACCO Society Ltd	5	.01	.10	.0475	.03297

Metropolitan SACCO Society Ltd	5	.02	.11	.2690	.04416
Mombasa Port SACCO Society Ltd	5	.02	.18	.36030	.06956
Muki SACCO Society Ltd	5	.04	.09	.2060	.02106
Miliki SACCO Society Ltd	5	.03	.30	.1900	.11612
Mwalimu SACCO Society Ltd	5	.01	.14	.4890	.05327
Mwito SACCO Society Ltd	5	.01	.15	.0865	.06586
Mzima SACCO Society Ltd	5	.02	.20	.2142	.06840
Nafaka SACCO Society Ltd	5	.03	.08	.0456	.01911
Nacico SACCO Society Ltd	5	.03	.12	.0598	.03940
Nandi Farmer SACCO Society Ltd	5	.07	.11	.1870	.02033
Ollin SACCO Society Ltd	5	.03	.16	.0694	.05485
Safaricom SACCO Society Ltd	5	.04	.09	.1660	.02038
Sheria SACCO Society Ltd	5	.02	.12	.0458	.04321
Shirika SACCO Society Ltd	5	.01	.06	.2705	.01928
Simba SACCO Society Ltd	5	.02	.14	.0586	.04963
Siraji SACCO Society Ltd	5	.02	.09	.2410	.03102
Stima Investment SACCO societ ldt	5	.03	.96	.2353	.40557
Tai SACCO Society Ltd	5	.03	.06	.0498	.01243
Torch SACCO Society Ltd	5	.03	.06	.0476	.01257
Ukristo Na Ufanisi Wa Angalican SACCO Society	5	.05	.15	.1850	.04154

Ltd					
Un SACCO Society Ltd	5	.01	.78	.2214	.32162
Unisa SACCO Society Ltd	5	.04	.55	.1659	.21591
Unison SACCO Society Ltd	5	.02	.60	.2077	.23201
Ushuru County Farmer SACCO Society Ltd	5	.01	.21	.1804	.06967
United National SACCO Society Ltd	5	.03	.10	.0460	.02800
Vihiga County Farmers SACCO Society	5	.01	.16	.0844	.07038
Vision Point SACCO Society Ltd	5	.01	.12	.2500	.04567
Wakenya Pamoja SACCO Society Ltd	5	.03	.05	.2400	.00714
Wipo SACCO Society Ltd	5	.01	.07	.3406	.02059
Yetu SACCO Society Ltd	5	.04	.83	.2498	.32897
Valid N (listwise)	5				
Average mean				.2148	

Source Field data: 2022

According to the SACCOO society (DT-SACCO business) regulations of 2010 13(2), SACCOs shall maintain 15% of its savings deposits and shot- terms liability in liquid assets. The study established had liquidity of some SACCOs was above the statutory requirement. For instance, liquidity for Acumen SACCO Society Ltd was 21.02%,Airport SACCO Society Ltd 20.815 %, Ardhi SACCO Society Ltd 21.10%, Bandari SACCO society ltd 16.00%, Baraton University SACCO Society Ltd 23.60%, Breameg SACCO Society Ltd 33.10%, Capital SACCO Society Ltd 30.14%, Chuna SACCO Society ltd 28.70%, Daima SACCO Society Ltd

33.80%, Elgon Teacher SACCO Society Ltd 16.00% Elimu SACCO Society Ltd 18.10%, Faridi SACCO Society Ltd 36.01%, Fortitude SACCO Society Ltd 15.07%, Good Faith SACCO Society Ltd 16.01% Imarika SACCO Society Ltd 19.11% Kathera Rural SACCO Society Ltd 21.40%, Kentours SACCO Society Ltd 19.10%, Kenya Police SACCO Society Ltd 30.93%, Muki SACCO Society Ltd 20.60%, Miliki SACCO Society Ltd 19.00%, Mwalimu SACCO Society Ltd 48.90, Mzima SACCO Society Ltd 21.42%, Nandi Farmer SACCO Society Ltd18.70%, Safaricom SACCO Society Ltd 16.60%, Shirika SACCO Society Ltd 27.05%, Siraji SACCO Society Ltd 24.10%, Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd 18.50%, Vision Point SACCO Society Ltd 25.00%, Wakenya Pamoja SACCO Society Ltd 24.00%, Wipo SACCO Society Ltd 34.06%, Jamii SACCO Society Ltd 19.88%, Kenya Achievas Kenya SACCO 24.14%, Lontels SACCO Society Ltd 21.00%, Stima Investment SACCO society 23.53%, Un SACCO Society Ltd 22.14%, Unisa SACCO Society Ltd 16.59%, Unison SACCO Society Ltd 20.77% and Yetu SACCO Society Ltd 24.98%. Thus, with higher liquidity above the statutory requirements, these SACCOs were able to meet their short-term obligations as and when they fall due, hence, increase in financial performance.

On the other hand, the study identified that liquidity of a few SACCOs under study was below statutory requirements. For instance, Afya SACCO SOCIET LTD 4.33%, Ardhi SACCO Society Ltd 1.21%, Biashara SACCO Society Ltd 5.59%, Good Faith SACCO Society Ltd 6.11%, Harambee SACCO Society Ltd 8.35%, Imarisha SACCO Society Ltd 1.15 %, Kenpipe SACCO Society Ltd 7.39%, Kimisitu SACCO Society Ltd 14.66%, Kolenge Tea SACCO Society Ltd 6.94% , Koru SACCO Society Ltd 13.16% Maisha Bora SACCO Society Ltd 4.75%, Metropolitan SACCO Society Ltd 6.92%, Mombasa Port SACCO Society Ltd 6.03%, , Mwito SACCO Society Ltd 8.65%, Mzima SACCO Society Ltd 12.42%, Nafaka SACCO Society Ltd 4.56%, Nacico SACCO Society Ltd 5.89%, Ollin SACCO Society Ltd 6.94, Sheria SACCO Society Ltd4.58%, , Simba SACCO Society Ltd 5.86%, Tai SACCO Society Ltd 4.98%, Torch SACCO Society Ltd 4.76%, United National SACCO Society Ltd 4.60%, Vihiga

County Farmers SACCO Society 8.44%. The liquidity of these SACCOs was less than the statutory requirements thus, with Low liquidity they were unable to meet short-term obligation and hence, decrease in financial performance. To enhance profitability, they should cut overhead expenses, dispose unnecessary assets, change payment cycles, use long time financing, optimum management of receivables and payables would increase their liquidity and hence financial performance. These findings agreed with (Kothari 2018) who established that, Liquidity enhances profitability in the sense that it may make an organization unable to meet the short-term liabilities and this may affect its operations and its reputation too. Besides, insufficient cash or liquid assets can also make an organization to miss those enticements given by the suppliers of credit, services and goods. The loss of such enticements may be hazardous in the sense that it may bring on board higher cost of goods which in turn affect the profitability of the business.

4.1.3 Leverage

The study described leverage of Deposit taking SACCOs in Kenya. The study findings were presented below in table 4.3.

Table 4.3

Leverage

	N	Minimum	Maximum	Mean	Std. Deviation
Acumen SACCO Society Ltd	5	.04	.17	.0937	.05044
Afya SACCO SOCIET LTD	5	.01	.02	.0182	.00275
Airport SACCO Society Ltd	5	.09	.20	.1588	.04682
Ardhi SACCO Society Ltd	5	.02	.05	.0029	.00052
Bandari SACCO society ltd	5	.01	.07	.0196	.01062
Baraton University SACCO	5	.02	.04	.0131	.00683

Society Ltd					
Biashara SACCO Society Ltd	5	.01	.08	.0339	.02885
Breameg SACCO Society Ltd	5	.03	.12	.0731	.03211
Capital SACCO Society Ltd	5	.02	.04	.0350	.00840
Chuna SACCO Society ltd	5	.03	.08	.0589	.02221
Daima SACCO Society Ltd	5	.11	.15	.1376	.01763
Elgon Teacher SACCO Society Ltd	5	.01	.41	.1776	.18346
Elimu SACCO Society Ltd	5	.03	.28	.1100	.10072
Faridi SACCO Society Ltd	5	.02	.09	.0294	.03500
Fortitude SACCO Society Ltd	5	.07	.33	.1985	.10096
Good Faith SACCO Society Ltd	5	.02	.03	.0266	.00539
Harambee SACCO Society Ltd	5	.01	.06	.0029	.00213
Imarika SACCO Society Ltd	5	.10	.15	.1272	.02035
Imarisha SACCO Society Ltd	5	.02	.02	.0103	.00827
Jamii SACCO Society Ltd	5	.10	.38	.2602	.11646
Kathera Rural SACCO Society Ltd	5	.02	.16	.0767	.05648
Kentours SACCO Society Ltd	5	.01	.01	.0088	.00106
Kenya Achievas Kenya SACCO	5	.02	.04	.0266	.00709
Kenya Police SACCO Society Ltd	5	.03	.23	.1270	.08428

Kenpipe SACCO Society Ltd	5	.02	.24	.0988	.08626
Kimisitu SACCO Society Ltd	5	.11	.18	.1376	.02838
Kingdom SACCO Society Ltd	5	.10	.20	.1457	.04325
Kolenge Tea SACCO Society Ltd	5	.01	.09	.0552	.03727
Koru SACCO Society Ltd	5	.02	.11	.0626	.04085
Lontels SACCO Society Ltd	5	.02	.14	.0613	.05156
Maisha Bora SACCO Society Ltd	5	.03	.20	.1065	.07696
Metropolitan SACCO Society Ltd	5	.03	.11	.0801	.03051
Mombasa Port SACCO Society Ltd	5	.01	.05	.0305	.01595
Muki SACCO Society Ltd	5	.02	.15	.0670	.06140
Miliki SACCO Society Ltd	5	.47	.73	.5783	.11787
Mwalimu SACCO Society Ltd	5	.01	.02	.0134	.00233
Mwito SACCO Society Ltd	5	.00	.03	.0118	.00854
Mzima SACCO Society Ltd	5	.12	.51	.2823	.15234
Nafaka SACCO Society Ltd	5	.02	.16	.0939	.05128
Nacico SACCO Society Ltd	5	.01	.12	.0721	.05941
Nandi Farmer SACCO Society Ltd	5	.04	.20	.1063	.06292
Ollin SACCO Society Ltd	5	.04	.14	.0846	.04230
Safaricom SACCO Society Ltd	5	.02	.15	.0618	.06765

Sheria SACCO Society Ltd	5	.01	.15	.0733	.05999
Shirika SACCO Society Ltd	5	.03	.19	.1167	.06656
Simba SACCO Society Ltd	5	.03	.29	.1485	.09484
Siraji SACCO Society Ltd	5	.05	.15	.0962	.03761
Stima Investment SACCO society ldt	5	.01	.08	.0244	.03366
Tai SACCO Society Ltd	5	.03	.19	.0985	.06885
Torch SACCO Society Ltd	5	.01	.10	.0293	.04081
Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd	5	.02	.13	.0342	.05653
Un SACCO Society Ltd	5	.04	.13	.0914	.03490
Unisa SACCO Society Ltd	5	.01	.13	.0827	.04581
Unison SACCO Society Ltd	5	.0	.10	.0326	.04094
Ushuru County Farmer SACCO Society Ltd	5	.02	.06	.0346	.01655
United Nationas SACCO Society Ltd	5	.03	.91	.2458	.37253
Vihiga County Farmers SACCO Society	5	.07	.10	.0774	.01201
Vision Point SACCO Society Ltd	5	.03	.14	.0684	.04698
Wakenya Pamoja SACCO Society Ltd	5	.03	.05	.0438	.00847
Wipo SACCO Society Ltd	5	.05	.21	.0885	.07912

Yetu SACCO Society Ltd	5	.04	.10	.0293	.03766
Valid N (listwise)	5				
Average mean				0.0884	

Source: Field data 2022

According to the SACCOO society (DT-SACCO business) regulations 2010 35(1), SACCOs shall not obtain external borrowing that is more than 25% of its total assets. The study found out that, most of the SACCOS complied with the statutory requirements on leverage. For instance, the leverage for Acumen SACCO Society Ltd was 9.37%, Afya SACCO society ltd 1.182%, Airport SACCO Society Ltd15.88%, Ardhi SACCO Society Ltd 0.29%, Bandari SACCO society ltd 19.6%, Baraton University SACCO Society Ltd 1.31%, Biashara SACCO Society Ltd 3.39%, Breameg SACCO Society Ltd 7.31%, Capital SACCO Society Ltd 3.50%, Chuna SACCO Society ltd 5.89%, Daima SACCO Society Ltd 13.76%, Elgon Teacher SACCO Society Ltd 17.76, Elimu SACCO Society Ltd 11.00%, Faridi SACCO Society Ltd 2.94 %, Fortitude SACCO Society Ltd 19.85%, Good Faith SACCO Society Ltd 2.26%, Harambee SACCO Society Ltd 0.29%, Imarika SACCO Society Ltd 127.2%, Imarisha SACCO Society Ltd 1.03%, Kathera Rural SACCO Society Ltd 7.67%, Kentours SACCO Society Ltd 0.88%, Kenya Achievas Kenya SACCO 2.66%, Kenya Police SACCO Society Ltd 12.70%, Kenpipe SACCO Society Ltd 9.88% Kimisitu SACCO Society Ltd,13.76% Kingdom SACCO Society Ltd 14.57%, Kolenge Tea SACCO Society Ltd 5.52% Koru SACCO Society Ltd 6.26%, Lontels SACCO Society Ltd 6.13%, Maisha Bora SACCO Society Ltd 10.65%, Metropolitan SACCO Society Ltd 8.01%, Mombasa Port SACCO Society Ltd 3.05%, Muki SACCO Society Ltd 6.70%, Mwalimu SACCO Society Ltd 1.34%, Mwito SACCO Society Ltd 1.18%, Nafaka SACCO Society Ltd 9.39%, Nafaka SACCO Society Ltd 7.21%, Nandi Farmer SACCO Society Ltd 10.62%, Ollin SACCO Society Ltd 8.46%, Safaricom SACCO Society Ltd 6.18%, Sheria SACCO Society Ltd 7.33%, Shirika SACCO Society Ltd 11.67%, Simba SACCO Society Ltd 14.85%, Siraji SACCO Society Ltd 9.62, Stima Investment

SACCO society ldt 2.44%, Tai SACCO Society Ltd 9.86% Torch SACCO Society Ltd 2.93%, Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd 3.42% Un SACCO Society Ltd9.14% , Unisa SACCO Society Ltd 8.27%, Unison SACCO Society Ltd 3.26%, Ushuru County Farmer SACCO Society Ltd 3.46%, Vihiga County Farmers SACCO Society 7.74%, Vihiga County Farmers SACCO Society 6.84%, Wakenya Pamoja SACCO Society Ltd 4.38%, Wipo SACCO Society Ltd 8.85%, United Nationas SACCO Society Ltd 24.58% and Yetu SACCO Society Ltd 2.93%. These, SACCOs had low leverage thus, less finance charges in form interests hence higher financial performance.

On the other hand, the study established a few Sacco were not complied with the statutory requirement by SASRA on leverage. For instance, the leverage level for Mzima SACCO Society Ltd was above the ideal level by 3.32%, Miliki SACCO Society Ltd 32.83%, Jamii SACCO Society Ltd 1.02%. With higher leverage, these SACCOs use a lot of their income to service loans in form of interest rates. Thus, their financial performance declined. These finding were in harmony with (Idada, Atu, Atu E & and Kingsley, 2018, who stated that, leverage has been adopted by many SACCOs in Nigeria. However, SACCOs should be careful when using debt because it comes with a cost in form of interest which must be paid periodically. Moreover, too much use of debt also makes the SACCOs to be vulnerable to financial distress costs and this might negatively affectthe SACCOs' financial performance.

4.1.4 Capital Adequacy

The study sought to determine capital adequacy of Deposit taking SACCOs in Kenya. The findings of the study were presented below in table 4.4.

According to the SACCOO society (DT-SACCO business) regulations 2010 9(b), SACCOs must maintain core capital of not less than 10% of total assets. The study found out that capital adequacy for most SACCOs was above the minimum statutory requirement of 10% by SASRA. For instance Acumen SACCO Society Ltd 13.56%, Afya SACCO Society ltd 23.46%, Ardhi

SACCO Society Ltd 31.66, Bandari SACCO society ltd 19.53%, Baraton University SACCO Society Ltd 13.71%, Breameg SACCO Society Ltd 15.23%,

Table 4.4

Capital

	N	Minimum	Maximum	Mean	Std. Deviation
Acumen SACCO Society Ltd	5	.11	.15	.1356	.01695
Afya SACCO SOCIET LTD	5	.05	.33	.2346	.13306
Airport SACCO Society Ltd	5	.06	.28	.1390	.08528
Ardhi SACCO Society Ltd	5	.03	.42	.3166	.15916
Bandari SACCO society ltd	5	.16	.23	.1953	.02881
Baraton University SACCO Society Ltd	5	.11	.17	.1371	.03241
Biashara SACCO Society Ltd	5	.01	.07	.0314	.02668
Breameg SACCO Society Ltd	5	.09	.21	.1523	.04661
Capital SACCO Society Ltd	5	.07	.14	.1000	.03179
Chuna SACCO Society ltd	5	.03	.17	.0893	.05442
Daima SACCO Society Ltd	5	.02	.10	.0592	.02839
Elgon Teacher SACCO Society Ltd	5	.07	.31	.2244	.09678
Elimu SACCO Society Ltd	5	.01	.05	.0242	.01678
Faridi SACCO Society Ltd	5	.04	.09	.0721	.01773
Fortitude SACCO Society Ltd	5	.01	.10	.0447	.03465
Good Faith SACCO Society Ltd	5	4.42	5.80	4.9990	.67011
Harambee SACCO Society Ltd	5	.16	.38	.3143	.09023
Imarika SACCO Society Ltd	5	.04	.12	.0832	.03122
Imarisha SACCO Society Ltd	5	1.36	6.96	4.0980	2.38956

Jamii SACCO Society Ltd	5	.02	.04	.0276	.00581
Kathera Rural SACCO Society Ltd	5	.01	.14	.0813	.05937
Kentours SACCO Society Ltd	5	1.75	3.92	2.2793	.92284
Kenya Achievas Kenya SACCO	5	.05	.13	.0903	.03870
Kenya Police SACCO Society Ltd	5	.01	.12	.0643	.04766
Kenpipe SACCO Society Ltd	5	.12	3.82	.8800	1.64487
Kimisitu SACCO Society Ltd	5	.06	.18	.0989	.04681
Kingdom SACCO Society Ltd	5	.02	.20	.0955	.06952
KolengeTea SACCO Society Ltd	5	.04	.16	.1022	.04782
Koru SACCO Society Ltd	5	.02	.12	.0693	.04449
Lontels SACCO Society Ltd	5	.11	.14	.1220	.01504
Maisha Bora SACCO Society Ltd	5	.04	.12	.0805	.03400
Metropolitan SACCO Society Ltd	5	.09	.22	.1633	.05850
Mombasa Port SACCO Society Ltd	5	.07	.16	.1214	.03429
Muki SACCO Society Ltd	5	.08	.14	.0938	.02540
Miliki SACCO Society Ltd	5	.02	.10	.0411	.03743
Mwalimu SACCO Society Ltd	5	.16	.30	.2381	.05660
Mwito SACCO Society Ltd	5	.12	.35	.2249	.08391
Mzima SACCO Society Ltd	5	.05	.20	.1330	.06185
Nafaka SACCO Society Ltd	5	.07	.20	.1224	.05246
Nacico SACCO Society Ltd	5	.10	.20	.1382	.03914
Nandi Farmer SACCO Society Ltd	5	.05	.17	.0953	.04440
Ollin SACCO Society Ltd	5	.02	.18	.1011	.07096
Safaricom SACCO Society Ltd	5	.05	.14	.0863	.03498
Sheria SACCO Society Ltd	5	.02	.21	.0985	.08045
Shirika SACCO Society Ltd	5	.03	.16	.1035	.05059
Simba SACCO Society Ltd	5	.05	.13	.0795	.03259
Siraji SACCO Society Ltd	5	.02	.12	.0628	.03473

Stima Investment SACCO society ldt	5	.01	.10	.0481	.04111
Tai SACCO Society Ltd	5	.03	.10	.0604	.02393
Torch SACCO Society Ltd	5	.01	.08	.0495	.02728
Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd	5	.05	.08	.0677	.01368
Un SACCO Society Ltd	5	.03	.16	.0367	.06758
Unisa SACCO Society Ltd	5	.02	.08	.0382	.02551
Unison SACCO Society Ltd	5	.01	.13	.0604	.05129
Ushuru County Farmer SACCO Society Ltd	5	.05	.20	.1084	.06004
United National SACCO Society Ltd	5	.04	.26	.1840	.08915
Vihiga County Farmers SACCO Society	5	.02	.20	.0930	.06694
Vision Point SACCO Society Ltd	5	.03	.10	.0365	.04237
Wakenya Pamoja SACCO Society Ltd	5	.11	1.76	.4729	.72229
Wipo SACCO Society Ltd	5	.05	.15	.1039	.04095
Yetu SACCO Society Ltd	5	.04	.12	.0885	.03632
Valid N (listwise)	5				
Average mean				0.30808	

Source: Field data 2022

Capital SACCO Society Ltd 10.00%, Elgon Teacher SACCO Society Ltd 22.44%, Good Faith SACCO Society Ltd, Good Faith SACCO Society Ltd 49.99%, Harambee SACCO Society Ltd 31.43, Imarisha SACCO Society Ltd 40.98, Kentours SACCO Society Ltd 22.793% , Kenpipe SACCO Society Ltd 88%, KolengeTea SACCO Society Ltd 10.22%, Lontels SACCO Society Ltd 12.20%, Metropolitan SACCO Society Ltd 16.33%, Mombasa Port SACCO Society Ltd

12.14%, Mwalimu SACCO Society Ltd 23.81%, Mwito SACCO Society Ltd 22.49%, Mzima SACCO Society Ltd13.30%, Nafaka SACCO Society Ltd12.24%, Nacico SACCO Society Ltd 13.82%, Ollin SACCO Society Ltd 10.11%, Shirika SACCO Society Ltd 10.35%, Ushuru County Farmer SACCO Society Ltd10.84% and United National SACCO Society Ltd 18.40%. consequently, Higher capital adequacy increases financial performance.

On the other hand, the study noted capital adequacy for some SACCOs was below statutory requirements. For instance, capital adequacy for Biashara SACCO Society Ltd was 3.14%, Chuna SACCO Society ltd, Daima SACCO Society Ltd 5.92%, Elimu SACCO Society Ltd 2.42%, Faridi SACCO Society Ltd 7.21%, Fortitude SACCO Society Ltd 4.47%, Imarika SACCO Society Ltd 8.32%, Jamii SACCO Society Ltd 2.76% Kathera Rural SACCO Society Ltd 8.13%,Kenya Achievas Kenya SACCO 9.03%, Kenya Police SACCO Society Ltd 6.43%, Kimisitu SACCO Society Ltd 9.89%, Kingdom SACCO Society Ltd 9.55% Koru SACCO Society Ltd 6.93% Maisha Bora SACCO Society Ltd 8.05%, Muki SACCO Society Ltd 9.38%, Miliki SACCO Society Ltd 4.11%, Nandi Farmer SACCO Society Ltd 9.53% Safaricom SACCO Society Ltd 8.63%, Sheria SACCO Society Ltd9.85%, Simba SACCO Society Ltd 7.95 %, Siraji SACCO Society Ltd 6.28%, Stima Investment SACCO society ldt 4.81% Tai SACCO Society Ltd 6.04% , Torch SACCO Society Ltd 4.95, Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd 6.77%, Un SACCO Society Ltd 3.67% Unisa SACCO Society Ltd3.82% Unison SACCO Society Ltd 6.04% , Vihiga County Farmers SACCO Society 9.30%, Vision Point SACCO Society Ltd 3.65% and Yetu SACCO Society Ltd 8.85%. Accordingly, low capital adequacy leads to declined financial performance. Thus, these SACCOs can increase their capital adequacy through increasing their capital base, selling assets like shares and minimizing balance sheet risks. This would increase capital adequacy and hence financial performance. According to (Sambasivan and Biruk (2013), Capital adequacy is vital in any financial institution in Ethiopia because it acts as a measurement of the institution’s strength or ability in terms of financial matters, shows the SACCO’s willingness

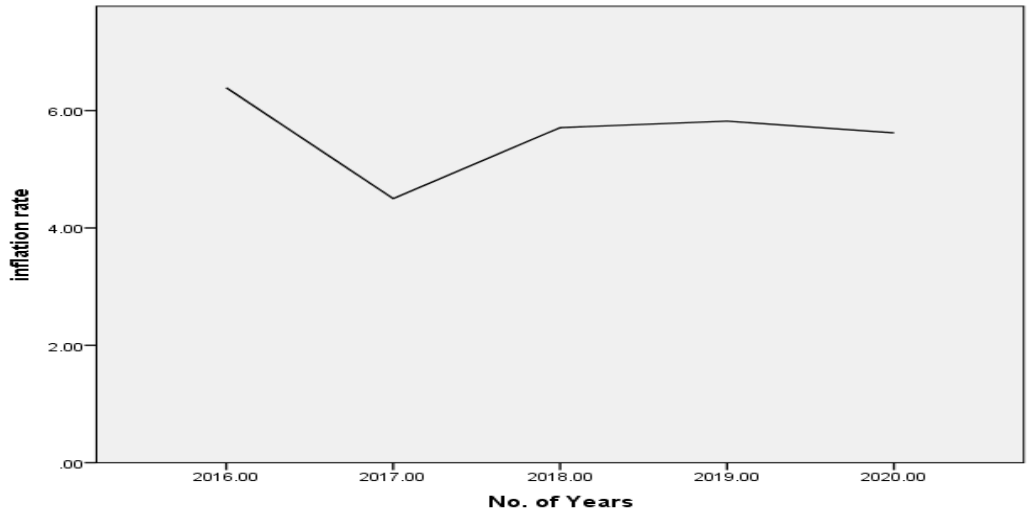
and capacity to endure irregular and operational misfortunes. Further, a financial institution in the Philippines can also use capital adequacy demonstrates the company's capability to embrace extra or additional businesses and also because it gauges the SACCOs' capacity to adequately adapt to risks and liquidation.

4.1.5 Inflation rate

The study determined the inflation rates of in Kenya for five years. The findings of the study were presented in the table below in figure below:

Figure 4.1

annual Inflation rates



Source: field data 2022

The ideal inflation rate is 2 % when measured by CPI. The study noted that annual inflation rates for the five years was well above the ideal level. Additionally, the study identified inflation rate was highest in 2016 6.39% while in 2017 was lowest at 4.50%. Further, the study noted from 2018-2020, annual inflation rates was relatively stable. Higher inflation rates reduce purchasing power, increases loan costs thus, reducing loan demand leading low

economic growth. On the other hand, low inflation rates increase purchasing, increase laon uptake and hence spur economic growth.

4.1.6 Financial performance

The study determined the financial performance of deposit taking SACCOs. It was measured using return on Assets. The findings of the study were presented in table 4.5 below:

Generally financial performance (in terms of ROA) of more than 5% is assumed to be good while ROA of more than 20% is considered excellent. The study discovered that, the financial performance of most of the SACCOs studied was above 5% for instance, financial performance of Acumen SACCO Society Ltd financial 5.98%, Afya SACCO society ltd 7.09 %, Ardhi SACCO Society Ltd had 13.05%. Baraton University SACCO Society Ltd 8.39%. Breameg SACCO Society Ltd 9.42%, Daima SACCO Society Ltd 8.08%,

Table 4.5

Financial Performance

	N	Minimum	Maximum	Mean	Std. Deviation
Acumen SACCO Society Ltd	5	.04	.08	.0598	.01558
Afya SACCO SOCIET LTD	5	.01	.10	.0709	.03622
Airport SACCO Society Ltd	5	.02	.03	.0133	.01160
Ardhi SACCO Society Ltd	5	.11	.14	.1305	.01170
Bandari SACCO society ltd	5	.33	.41	.3663	.02759
Baraton University SACCO Society Ltd	5	.08	.09	.0839	.00509
Biashara SACCO Society Ltd	5	.17	.20	.1855	.01275
Breameg SACCO Society Ltd	5	.06	.13	.0933	.02883
Capital SACCO Society Ltd	5	.02	.07	.0384	.01960
Chuna SACCO Society ltd	5	.16	.35	.2352	.07141
Daima SACCO Society Ltd	5	.05	.09	.0808	.01928
Elgon Teacher SACCO Society	5	.05	.08	.0638	.01130

Ltd					
Elimu SACCO Society Ltd	5	.09	.14	.1203	.02251
Faridi SACCO Society Ltd	5	.04	.09	.0673	.01874
Fortitude SACCO Society Ltd	5	.02	.70	.2499	.26326
Good Faith SACCO Society Ltd	5	.08	.09	.0833	.00423
Harambee SACCO Society Ltd	5	.04	.05	.0470	.00505
Imarika SACCO Society Ltd	5	.41	.86	.6077	.18732
Imarisha SACCO Society Ltd	5	.04	.06	.0525	.00862
Jamii SACCO Society Ltd	5	.17	.25	.1995	.03472
Kathera Rural SACCO Society Ltd	5	.86	1.53	1.1297	.24582
Kentours SACCO Society Ltd	5	.08	.13	.1094	.02025
Kenya Achievas Kenya SACCO	5	.10	.21	.1415	.04179
Kenya Police SACCO Society Ltd	5	.37	.63	.4854	.11668
Kenpipe SACCO Society Ltd	5	.09	.25	.1770	.06453
Kimisitu SACCO Society Ltd	5	.05	.22	.1231	.07248
Kingdom SACCO Society Ltd	5	.02	.20	.1221	.07307
Kolenge Tea SACCO Society Ltd	5	.07	.29	.1619	.08219
Koru SACCO Society Ltd	5	.11	.91	.3246	.33457
Lontels SACCO Society Ltd	5	.14	.22	.1871	.03137
Maisha Bora SACCO Society Ltd	5	.07	.18	.1292	.04643
Metropolitan SACCO Society Ltd	5	.11	.22	.1685	.03955
Mombasa Port SACCO Society Ltd	5	.10	.22	.1655	.04633
Muki SACCO Society Ltd	5	.10	.25	.1697	.05734
Miliki SACCO Society Ltd	5	.38	.55	.4743	.07589
Mwalimu SACCO Society Ltd	5	.10	.14	.1213	.01436
Mwito SACCO Society Ltd	5	.13	.30	.2065	.06955
Mzima SACCO Society Ltd	5	.07	.28	.1261	.08631

Nafaka SACCO Society Ltd	5	.10	.20	.1508	.04186
Nacico SACCO Society Ltd	5	.09	.22	.1443	.05403
Nandi Farmer SACCO Society Ltd	5	.05	.11	.0866	.02314
Ollin SACCO Society Ltd	5	.08	.24	.1601	.06663
Safaricom SACCO Society Ltd	5	.01	.14	.0652	.05736
Sheria SACCO Society Ltd	5	.01	.07	.0482	.02539
Shirika SACCO Society Ltd	5	.02	.11	.0562	.03577
Simba SACCO Society Ltd	5	.02	.16	.0925	.05403
Siraji SACCO Society Ltd	5	.06	.16	.1014	.04266
Stima Investment SACCO society ldt	5	.01	.21	.0660	.08335
Tai SACCO Society Ltd	5	.05	.23	.1294	.07932
Torch SACCO Society Ltd	5	.01	.16	.0683	.06586
Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd	5	.03	.04	.0240	.01622
Un SACCO Society Ltd	5	.02	.12	.0580	.04403
Unisa SACCO Society Ltd	5	.02	.13	.0745	.04635
Unison SACCO Society Ltd	5	.03	.23	.1163	.07280
Ushuru County Farmer SACCO Society Ltd	5	.08	.29	.1681	.08469
United National SACCO Society Ltd	5	.11	.30	.2106	.07806
Vihiga County Farmers SACCO Society	5	.05	.07	.0558	.01114
Vision Point SACCO Society Ltd	5	.11	.28	.2026	.07840
Wakenya Pamoja SACCO Society Ltd	5	.03	.04	.0343	.00666
Wipo SACCO Society Ltd	5	.02	.13	.0792	.04028
Yetu SACCO Society Ltd	5	.09	.20	.1368	.04387
Valid N (listwise)	5				
Average mean				.15904	

Source: Filed data 2022

Elgon Teacher SACCO Society Ltd 6.38%, Elimu SACCO Society Ltd 12.03%. Faridi SACCO Society Ltd 6.73%. Good Faith SACCO Society Ltd 8.33%, Imarisha SACCO Society Ltd 5.25%. Jamii SACCO Society Ltd 19.95%. Kathera Rural SACCO Society Ltd 12.97%, Kentours SACCO Society Ltd 10.94%. Kenya Achievas Kenya SACCO 14.15%. Kenpipe SACCO Society Ltd 17.70%, Kimisitu SACCO Society Ltd 12.31%, Kingdom SACCO Society Ltd 12.21%. Kolenge Tea SACCO Society Ltd 16.19%, Lontels SACCO Society Ltd 18.71%. Maisha Bora SACCO Society Ltd 12.92%, Metropolitan SACCO Society Ltd 16.85%. Mombasa Port SACCO Society Ltd, 16.55%, Muki SACCO Society Ltd 16.97%. Mzima SACCO Society Ltd 12.61%, Nafaka SACCO Society Ltd 15.08%, Nacico SACCO Society Ltd, 14.43%, Nandi Farmer SACCO Society Ltd 8.66%. Ollin SACCO Society Ltd 16.01%, Safaricom SACCO Society Ltd 6.52%, Sheria SACCO Society Ltd 4.82%. Shirika SACCO Society Ltd 5.62 %. Simba SACCO Society Ltd 9.25%, Siraji SACCO Society Ltd 10.14%, Stima Investment SACCO society ltd 6.60%. Tai SACCO Society Ltd 12.94%. Torch SACCO Society Ltd 6.83%, Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd 8.02%, Un SACCO Society Ltd 2.40%. Unisa SACCO Society Ltd 5.80%, Unison SACCO Society Ltd 7.45%. Ushuru County Farmer SACCO Society Ltd 16.81%, Vihiga County Farmers SACCO Society 5.58%, Wipo SACCO Society Ltd 7.92 % and Yetu SACCO Society Ltd 13.68%.

Further, the study noted some SACCOs recorded excellent financial performance of more than 20%. For instance, Bandari SACCO society ltd 36.63%, Chuna SACCO Society ltd 23.52%, Fortitude SACCO Society Ltd 24.99%, Koru SACCO Society Ltd 32.46%, Kenya Police SACCO Society Ltd 48.54%, Imarika SACCO Society Ltd 60.77%, Mwito SACCO Society Ltd 20.65%, Miliki SACCO Society Ltd. 47.43%. Mwalimu SACCO Society Ltd 123.93%, Vision Point SACCO Society Ltd 20.26% and United Nationas SACCO Society Ltd 21.06%.

Additionally, the study noted that, financial performance of a few SACCOs was less than 5%. For instance, Airport SACCO Society Ltd 1.33%, Biashara SACCO Society,12.75%, Capital

SACCO Society Ltd 3.84%, Harambee SACCO Society Ltd 4.70% and Wakenya Pamoja SACCO Society Ltd 3.43%. According to Brealey, Myers, and Allen (2016), a SACCO's financial success is a subjective indicator of how effectively it can employ resources from its main line of business to create income in USA. Financial performance is a crucial component of managing financial risk and refers to the extent to which financial objectives are being or have been achieved. It is the process of evaluating the financial impact of a SACCO's activities and policies. It may be used to aggregate comparable SACCOs in the same industries and assess the overall financial health of SACCOs over a specific time period.

4.2 Correlation analysis

The study wanted to find out the nature of relationship that existed between independent variables (solvency, liquidity, leverage and capital adequacy and financial performance. The findings of the study were presented below.

The study identified that; solvency had strong, positive and significant correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. r=.604 (**) P=.000<0.01. These findings disagreed with Bourke (2013) who found that ROA and performance management, had a negligible negative relationship with short-term debt and long term -debt. In contrast to its unfavorable and negative association with performance management, the TDE was discovered to have a good link with ROE. Thus, the study's conclusion that solvency was not a significant factor in determining the firm's success was reached.

Table 4.6

Correlations analysis

	solvency	Liquidity	Leverage	Capital Adequacy	Financial performance

Solvency	Pearson Correlation	1	-.221	.005	-.152	.604**
	Sig. (2-tailed)		.000	.936	.008	.000
	N	305	305	305	305	305
Liquidity	Pearson Correlation	-.221	1	.118	-.465	.410**
	Sig. (2-tailed)	.000		.039	.000	.000
	N	305	305	305	305	305
Leverage	Pearson Correlation	.005	.118	1	-.098	.117*
	Sig. (2-tailed)	.936	.039		.089	.040
	N	305	305	305	305	305
Capital Adequacy	Pearson Correlation	-.152	-.465	-.098	1	-.538**
	Sig. (2-tailed)	.008	.000	.089		.000
	N	305	305	305	305	305
Financial performance	Pearson Correlation	.604	.410	.117	-.538	1
	Sig. (2-tailed)	.000	.000	.040	.000	
	N	305	305	305	305	305

Source: field data 2022

** Correlation is significant at the 0.01 level (2-tailed).

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

In addition, the study found out that, liquidity had weak, positive and significant correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya r= .410 (**) P=.000<0.01. These findings agreed with David and Samuel Adebayo (2013) who noted that, there is a significant link between Credit Cooperative Societies' profitability and liquidity. This was ascribed to the fact that when the debt to equity ratio is lower, the liquidity of Credit Cooperative Societies (SACCOs in Kenya) indicates that there is a favorable trade-off between liquidity and profitability.

similarly, the study found out that, leverage had a weak, positive and significant relationship with financial performance of deposit taking savings and credit cooperative societies

(SACCOS) in Kenya r= .117 (*) P=.000<0.05. According to Rajkumar in (2014) leverage ratio has a significant impact on the financial success of the organization under study.

Finally, the study found out that, capital adequacy had strong, negative and highly significant correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya r= -.538 (**) P=.000<0.01. These findings agreed with Rahman (2017) who established that, capital adequacy had strong and significant positive influence on financial performance of the said SACCOs.

4.3 Assumptions of Panel data

4.3.1 Test of Autocorrelation

Data must have little to no autocorrelation in order to do regression analysis. The used Durbin-Watson statistics, to test autocorrelation. The Durbin-Watson statistics value ranges from 0 to 4, with 2 being the best value for non-autocorrelation. A score closer to 4 suggests a negative autocorrelation, whereas 0 denotes a positive autocorrelation (Srivastava et al., 2005). Accordingly, coefficient values between 1.5 and 2.5 indicate the absence of autocorrelation, but coefficient values between 2.5 and 4 indicate the existence of autocorrelation. As shown in the table 4.7 below

Table 4.7

autocorrelation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.985(a)	.970	.969	.00573	2.000

Source; field data 2022

a. Predictors: (Constant), Capital Adequacy, solvency , Liquidity, Leverage

b Dependent Variable: Financial performance

The study established that, the Durbin-Watson value was 2.000. Therefore, there was no autocorrelation.

4.3.2 Multi-collinearity Test

The study used a VIF to test for multi-collinearity in a regression model of the predictors. A variance inflation factor (VIF) of more than 10 or a tolerance of less than 0.1 both suggest the presence of multi-collinearity. As shown in table 4.8 below

Table 4.8

Multi-collinearity Test

Model		Sig.	Collinearity Statistics	
			Tolerance	VIF
1	(Constant)	.000		
	Solvency	.000	.353	2.836
	Liquidity	.000	.347	2.883
	Leverage	.000	.129	7.736
	Capital Adequacy	.000	.220	4.541

Source: Field data 2022

a. Dependent Variable: Financial performance

The study established that, the VIF value for solvency was 2.836, liquidity was 2.883, leverage was 7.736 and capital adequacy was 4.541. The VIF values for the variables was <10. Thus, Multi-collinearity was not present.

4.3.4 Homoscedasticity Test

Homoscedasticity is the property that all levels of the independent variables have the same error variance. Heteroscedasticity is demonstrated when the variance of errors varies at various values of the independent variables. Homoscedasticity was examined using Levene's test. The alpha value for the study was 0.05. If the P value were more than 0.05 Homogeneity existed. The findings were presented in table 4.9 below.

Table 4.9

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Liquidity	2.845	4	300	.024
Solvency	4.859	4	300	.001
Leverage	4.137	4	300	.003
Capital Adequacy	2.406	4	300	.050

Source; Filed data 2022

The study established that liquidity had its p Value .024<0.05, the p Value for solvency was .001 <.05, the P value for leverage had its P value .003 while capital adequacy was .050. Thus, the null hypothesis was rejected and hence, data was not homogenous.

4.4 Panel data

4.4.1 Solvency and financial performance

The study sought to find out how solvency affected financial performance. The carried out a panel regression and findings were presented in tables 4.10 below

Table 4.10

(a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.604[a] (a)	.364	.362	.02818

Source: field data 2022

a. Predictors: (Constant), solvency

The results of the study revealed that, R was =.604. Hence, solvency had a positive correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Furthermore, the study established that, the model had an R square of .364. Thereby, change in solvency led to 36.4% change in financial performance of deposit

taking savings and credit cooperative societies (SACCOS) in Kenya. According to Abera (2014), bank solvency is one of the key factors influencing directly profitability of banks in Ethiopia.

Table 4.10

(b) ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.138	1	.138	173.753	.000[b]
	Residual	.241	303	.001		
	Total	.379	304			

Source: field data 2022

a. Predictors: (Constant), solvency

b. Dependent Variable: Financial performance

The study identified that, F test was 173.753, P=.000<0.05. Therefore, the overall regression model was fit for the study. Further, the results revealed that, solvency had a significant effect on financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

Table 4.10

(c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.070	.007		9.911	.000
	solvency	.555	.042	.604	13.182	.000

Source: Filed data 2022

a. Dependent Variable: Financial performance

The study revealed that solvency had a positive and significant effect of deposit taking savings

and credit cooperative societies (SACCOS) in Kenya. B= .555, t=13.182, P=.000< 0.05. Taking other factors to be constant at zero, solvency led to 7% change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Additionally, the study noted that, a change in solvency led to 60.4% change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Thus, variation in solvency led to significant increase in of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. These findings agreed with Omari, Warrad, and Al-Nimer (2015) who established that, solvency and a firm's financial success were significantly related

$Y = \beta_0+\beta_1X_1 +\varepsilon$

$Y=.070+ .555X_1$

4.4.2 Liquidity and financial performance

The study carried out a panel regression to determine how liquidity influence financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Findings were presented in tables 4.11 below

Table 4.11

(a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.410[a] (a)	.168	.165	.03224

Source: field data 2022

a. Predictors: (Constant), Liquidity

The results of the study revealed that, R was =.410. Hence, liquidity had a direct correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Furthermore, the study established that, the model had an R square of .168. To this end, variation in liquidity led to 16.8% change on financial performance of deposit

taking savings and credit cooperative societies (SACCOS) in Kenya.

Table 4.11

(b) ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.064	1	.064	64.00	.000[b]
	Residual	.315	303	.0010		
	Total	.379	304			

Source: Filed data 2022

a. Predictors: (Constant), Liquidity

b. Dependent Variable: Financial performance

The study identified that, F test was 64.00, P=.000<0.05. Therefore, the overall regression model was fit for the study. Further, the results revealed that, liquidity had a significant effect on financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. According to Khidmat and Rehman (2014) having effective and efficient liquidity management in order to succeed in their operations and survive, and that both illiquidity and lack of liquidity are "financial diseases" that can quickly erode a SACCO's profit base as they interfere with their efforts to achieve high profitability-levels.

Table 4.11

(c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.135	.004		36.443	.000
	Liquidity	.217	.028	.410	7.825	.000

Source: Filed data 2022

a. Dependent Variable: Financial performance

The study revealed that liquidity had a direct and significant effect of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .217, t=7.825, P=.000< 0.05. Taking other factors to be constant at zero, liquidity led to 13.5 % change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Additionally, the study established that, a change in liquidity led to 41.0 % change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Consequently, variation in liquidity led to significant increase in of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. These findings agreed with Khidmat *et al.,* (2014) who found that there was a substantial positive connection between liquidity and profitability.

$Y = \beta_0+\beta_2X_2+\varepsilon$

$Y=.135+.217X_2$

4.4.3 Leverage and financial performance

The study carried out a panel regression between leverage and financial performance deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Findings were as shown in the tables 4.12 below;

Table 4.12

(a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.517[a]	.267.	.237	.03510

Source: Field data 2022

a. Predictors: (Constant), Leverage

The results of the study revealed that, R was =.517. This indicated that, leverage had a direct correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. In addition, the study found out that, the model had an R square of .267. Accordingly, a unit change in leverage led to 26.7% change in financial performance

of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

Table 4.12

(b) ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.005	1	.005	4.167	.040[b]
	Residual	.373	303	.0012		
	Total	.379	304			

Source: Field data 2022

a. Predictors: (Constant), Leverage

b. Dependent Variable: Financial performance

The study identified that, F test was 4.240, P=.040<0.05. The overall regression model therefore was suitable for the study. Moreover, the results revealed that, leverage had a significant effect on financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. According to Haron and Ahmed (2018) liquidity had a substantial inverse relationship between leverage and firm performance.

Table 4.12

(c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.155	.003		48.361	.000
	Leverage	.053	.026	.517	2.059	.040

Source: Field data 2022

a. Dependent Variable: Financial performance

It was revealed that leverage had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .053, t=.2.059,

P=.040< 0.05. Taking other factors to be constant at zero, leverage led to 15.5 % change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Hence, a change in leverage led to 51.7 % change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Then, change in leverage led to significant increase in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. These findings agreed with Al Nimer et al., (2015) who noted that, profitability and financial leverage did indeed have a favorable link. The results demonstrated a substantial positive connection between ROA and financial leverage.

$Y = \beta_0 + \beta_3 X_3 + \varepsilon$

$Y = .155 + .053 X_3$

4.4.4 Capital adequacy and financial performance

The study sought to determine how capital adequacy affected financial performance. The study carried out panel data and results were presented below in tables 4.13

Table 4.13

(a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.845(a)	.713	.712	.01747

Source: field data 2022

a. Predictors: (Constant), Capital Adequacy

The results of the study revealed that, R was =.845. Consequently, Capital Adequacy had a direct correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. In addition, it was identified that, the model had an R square of .713. To this end, a unit change in capital adequacy led to 71.3 % change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. These studies disagreed with findings of Mugwang'a (2019) which failed to gather sufficient evidence to proof the existence of a significant relationship between capital adequacy and the

following: credit risk, liquidity risk, ROA, interest rate risk, return on equity ratio and revenue power ratio.

Table 4.13

(b) ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.230	1	.230	756.579	.000(a)
	Residual	.092	303	.000304		
	Total	.323	304			

Source: filed data 2022

a. Predictors: (Constant), Capital Adequacy

b. Dependent Variable: Financial performance

The study identified that, F test was 756.579, P=.000<0.05. The overall regression model therefore was suitable for the study. Then, the results revealed that, capital adequacy had significant effect on financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. According to Bhowmick & Srivastava (2017), Total Shareholders' Fund, Return on Capital Employed, Return on Assets, Return on Equity, Dividends per Share, and Dividend Payout Ratio all have a positive, significant impact on capital adequacy.

Table 4.13

(c) Coefficients

		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
Model		B	Std. Error	Beta	B	Std. Error
1	(Constant)	.335	.007		51.526	.000
	Capital Adequacy	-.573	.021	.845	-27.461	.000

Source: Filed data:2022

a. Dependent Variable: Financial performance

The study found out that, capital adequacy had an inverse and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= -.573, t=-27.461, P=.000< 0.05. Taking other factors to be constant at zero, capital adequacy led to 33.5 % change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Consequently, a unit change in capital adequacy led to 57.3 % decline in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Therefore, change capital adequacy led to significant decrease in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. According to Mendoza and Rivera (2015), capital adequacy had no significant influence on profitability. Thus, these findings contradicted the finding of the current study. Simple regression model was as shown below.

$Y = \beta_0+\beta_4X_4+\varepsilon$

$Y=.335+ -.573X_4$

4.5 Multiple Panel Data

The study carried out panel data regression between independent variables (solvency, liquidity, leverage and capital adequacy and financial performance. The findings were presented below in tables 4.14 below.

Table 4.14 (a)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985(a)	.970	.969	.00573

Source: field data 2022

a. Predictors: (Constant), Capital Adequacy, solvency, Liquidity, Leverage

The study established that, R was =.985. Consequently, independent variables (solvency, Liquidity, Leverage and Capital Adequacy) had a positive correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. In addition, the study noted that, the model had an R square of .970. This end, a unit change in credit management led to 97.0 % change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

Tables 4.14

(b) ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.313	4	.078	234.234	.000(a)
	Residual	.010	300	.000333		
	Total	.323	304			

Source: Field 2022

a. Predictors: (Constant), Capital Adequacy, solvency, Liquidity, Leverage

b. Dependent Variable: Financial performance

The study identified that, F test was 234.234, P=.000<0.05. The overall regression model therefore, was suitable for the study. Then, the results revealed that, capital adequacy, solvency, liquidity and leverage had significant effects on financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

Table 4.14 (c)

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	.123	.007		16.548	.000

Solvency	.384	.014	.453	26.707	.000
Liquidity	.081	.008	.166	9.685	.000
Leverage	.528	.053	.280	9.990	.000
Capital Adequacy	-.269	.015	-.397	-18.470	.000

Source: field data 2022

a. Dependent Variable: Financial performance

The study found out that, taking other factors to be constant at zero, solvency, liquidity, leverage and capital adequacy contributed to 12.3% change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

The study further, found out that, solvency had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .384, t=26.707, P=.000< 0.05. To this end, change in solvency led to a change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya by 45.3 %. Thus, unit increase in solvency led to a significant increase in financial performance. According to Ongore and Kusa (2017), bank-specific factors significantly influenced the performance of commercial banks in Kenya. ROA, ROE, and NIM were all positively correlated with solvency management, although the relationship was quite feeble.

In addition, the study found out that, liquidity had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .081, t=9.685, P=.000< 0.05. Thus, unit increase in liquidity led to a significant increase in financial performance deposit taking savings and credit cooperative societies (SACCOS) in Kenya by 16.6%. These findings were similar to the findings of Roy, Misra, Padhan and Rahman (2016) which indicated that, there was a positive significant relationship between liquidity and profitability of SACCOs. It was concluded that as liquidity of SACCOs has significant importance on financial system of the county, it may affect economic growth of the country alongside profitability.

In addition, the study discovered out that, leverage, had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .528, t=9.990, P=.000< 0.05. Change in leverage led to a change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya by 28.0 %. Thus, unit increase in leverage led to a significant increase in financial performance deposit taking savings and credit cooperative societies (SACCOS) in Kenya. These findings contradicted Gudeta (2013 who found out that, a substantive negative link exists between leverage ratio ad financial performance. When ROE and leverage ratio were tested, a negative associated was noticeable.

Finally, the study identified that; capital adequacy had a negative and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= -.269, t=-18.470, P=.000< 0.05. Then, change in capital adequacy led to a decline in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya by 26.9%. Thus, unit change in capital adequacy led to a significant decline in financial performance deposit taking savings and credit cooperative societies (SACCOS) in Kenya 39.7%. These findings disagreed with Umoru and Osemwegie (2016) who found out that, that there was significant positive effect of capital adequacy on SACCOs profitability. The multiple regression models were shown as follows

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it}$$

$$Y_{it} = .123 + .384X_1 + .081X_2 + .528X_3 - .269X_4$$

4.5.1 Overall moderating effect of inflation

The study wanted to determine the level to which inflation moderated the relationship between credit risk management practices and financial performance of deposit taking savings and credit cooperative societies (saccos) in Kenya. Regression analysis was conducted to determine

whether or not inflation and credit risk management practices were significantly related. The findings were presented in the tables below:

Table 4.15 (a)

Model summary for overall moderating effect of inflation

					Change statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R square change	F Change	df1	df2	Sig. F change
1	.985(a)	.970	.969	.00573	.970	234.234	4	300	.000[b]
2	.851(a)	.725	.720	.01866	.245	76.635	4	304	.000[c]

a. Predictors: (Constant), Capital Adequacy, solvency, Liquidity, Leverage

b. Predictors: (Constant), inflation rate, Capital Adequacy, solvency, Liquidity, Leverage X_1M, X_2M, X_3M, X_4M

Source: Filed data 2022

The study established that, the moderating variable (inflation) explained 72.5% change in the relationship between credit risk management practices studied and financial performance of deposit taking savings and credit cooperative societies (saccos) in Kenya. Further, the study noted that, credit risk management practices under study contributed to 97.0% change in financial performance of deposit taking savings and credit cooperative societies (saccos) in Kenya. However, when combined with inflation, they only contribute to 72.5% change in financial performance. Accordingly, the moderating effect of inflation on the relationship between credit risk management practices studied and financial performance of deposit taking savings and credit cooperative societies (saccos) in Kenya is (24.5).

Table 4.15 (b)

ANOVA for overall moderating variable effect of inflation

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.313	4	.078	234.234	.000(a)
	Residual	.010	300	.000333		
	Total	.323	304			
2	Regression	.274	5	.055	157.599	.000[b]
	Residual	.104	299	.000		
	Total	.379	304			

Source: Field 2022

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Capital Adequacy, solvency, Liquidity, Leverage

c. Predictors: (Constant), inflation rate, Capital Adequacy, solvency, Liquidity, Leverage X_1M, X_2M, X_3M, X_4M

Source: Filed data 2022

The study identified that, F test was 157.599, P=.000<0.05. The overall regression model therefore was suitable for the study. Further, the results revealed that, inflation rate had significant effect on the relationship between capital adequacy, solvency, liquidity, leverage as and financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya

Table 4.15 (c)

coefficient overall moderating variable effect of inflation

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	.123	.007		16.548	.000
	Solvency	.384	.014	.453	26.707	.000
	Liquidity	.081	.008	.166	9.685	.000
	Leverage	.528	.053	.280	9.990	.000
	Capital Adequacy	-.269	.015	-.397	-18.470	.000
2	(Constant)	.900	.012		7.577	.000
	Solvency	.610	.030	.664	20.390	.000
	Liquidity	.288	.024	.544	12.092	.000
	Leverage	.020	.014	.044	1.436	.152
	Capital Adequacy	-.094	.022	-.170	-4.389	.000
	X_1M	.582	.043	.633	13.557	.000
	X_2M	.306	.031	.576	9.897	.000
	X_3M	.054	.026	.120	2.100	.037
	X_4M	-.299	.027	-.539	-11.086	.000

a. Dependent Variable: Financial performance

Source: Filed data 2022

The study identified that the product of solvency and inflation had significant and positive effect on financial performance of deposit taking savings and credit cooperative societies (saccos) in Kenya B= .633, P<0.05, Additionally, the study found out that, liquidity and inflation rates had a positive and significant on financial performance of deposit taking savings

and credit cooperative societies (saccos) B= .576,P<0.05. Further, the study noted that, leverage and inflation likewise had significant effect on financial performance of deposit taking savings and credit cooperative societies B=.120,P<0.05 .

Finally, the study revealed that capital adequacy and inflation rats had and negative and significant effect on financial performance of deposit taking savings and credit cooperative societies (saccos) in Kenya B= -.094 P< 0.05. The following regression model was derived:

$Y=.900+.610X1+.288X2+.020X3-.094X4+.582\ X_1M+.306\ X_2M+.054\ X_3M-.299_{X4M}$

4.5.3 Hypothesis testing

The study carried out hypotheses testing based on table 4.14 (c) above

$H0_1$: Solvency has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya.

The study established that, solvency had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .384, t=26.707, P=.000< 0.05. Thus, the null hypothesis was rejected.

$H0_2$: Liquidity has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya

The study found out that, liquidity had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .081, t=9.685, P=.000< 0.05. Then, the null hypothesis was rejected.

$H0_3$: Leverage has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya

In addition, the study discovered out that, leverage had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .528, t=9.990, P=.000< 0.05. Accordingly, the null hypothesis was rejected.

$H0_4$: Capital adequacy has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya.

Finally, the study identified that; capital adequacy had a negative and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= -.269, t=-18.470, P=.000< 0.05

Similarly, the study tested hypotheses **H_{05}** and, hypotheses **H_{05a}- H_{05d}** were tested based on the findings in table 4.15 (c) above .

H_{05}: Inflation rate has no statistically significant moderating effect on the relationship between risk management practices and financial performance of Deposit Taking SACCOs in Kenya.

The study inflation had direct and insignificant effect on financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya B= -.006, t= -3.616, P=.000<0.05. Thus, the null was rejected.

$H0_{5a}$: Inflation rate has no statistically significant moderating effect on the relationship between Solvency and financial performance of Deposit Taking SACCOs in Kenya

The study further, found out that, inflation rate had a positive and significant moderating effect on the relationship between solvency and financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .610, t=20.390=.000< 0.05. The null hypothesis was rejected.

$H0_{5b}$: Inflation rate has no statistically significant moderating effect on the relationship between liquidity and financial performance of Deposit Taking SACCOs in Kenya.

Similarly, the study found out that, inflation rate had a positive and significant moderating effect on the relationship between liquidity and financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .288, t=12.092=.000< 0.05. The null hypothesis was rejected.

$H0_{5c}$: Inflation rate has no statistically significant moderating effect on the relationship between leverage and financial performance of Deposit Taking SACCOs in Kenya.

In addition, the study discovered out that, inflation rate had a positive and significant moderating effect on the relationship between leverage and financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= .020, t=1.436=.152> 0.05. The null hypothesis failed to reject.

H_{05d}: Inflation rate has no statistically significant moderating effect on the relationship between capital adequacy and financial performance of Deposit Taking SACCOs in Kenya.

Finally, the study identified that; inflation rate had a negative and significant effect on the relationship between capital adequacy and financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. B= -.094, t=-3.616, P=.000< 0.05. The null hypothesis was rejected.

Table 4.16

Summary of hypotheses testing

	Hypothesis	**Result**	**conclusion**
H_{01}:	Solvency has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya.	P=.000<0.05.	The null hypothesis was rejected.
H_{02}:	Liquidity has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya	P=.000<0.05	The null hypothesis was rejected
H_{03}:	Leverage has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya	P=.000< 0.05	The null hypothesis was rejected
H_{04}:	Capital adequacy has no statistically significant effect on financial performance of Deposit Taking SACCOs in Kenya	P=.000< 0.05	The null hypothesis was rejected

H_{05}:	Inflation rate has no moderating effect on the relationship between credit risk practices on financial performance of Deposit Taking SACCOs in Kenya	P=.000<0.05.	The null hypothesis was rejected
H_{05a}:	Inflation rate has no statistically significant moderating effect on the relationship between Solvency and financial performance of Deposit Taking SACCOs in Kenya	P=.000< 0.05	The null hypothesis was rejected
H_{05b}:	Inflation rate has no statistically significant moderating effect on the relationship between liquidity and financial performance of Deposit Taking SACCOs in Kenya	P=.000< 0.05	The null hypothesis was rejected
H_{05c}	Inflation rate has no statistically significant moderating effect on the relationship between leverage and financial performance of Deposit Taking SACCOs in Kenya	P=.000< 0.05	The null hypothesis failed to reject
H_{05d}:	Inflation rate has no statistically significant moderating effect on the relationship between capital adequacy and financial performance of Deposit Taking SACCOs in Kenya.	P=.000< 0.05	The null hypothesis was rejected

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

5.1.1 Solvency and financial performance

The study noted that, solvency for the majority of SACCOs was less than the generally acceptable level of 30%. For instance, the solvency ratio of Acumen SACCO Society Ltd Afya SACCO society ltd Airport SACCO Society Ltd, Ardhi SACCO Society Ltd, Bandari SACCO society ltd and Baraton University SACCO Society Ltd among others. Further, the study established that, the solvency of a few SACCOs such as Capital SACCO Society Ltd was Chuna SACCO Society ltd, Imarisha SACCO Society Ltd, Mwito SACCO Society Ltd and Safaricom SACCO Society Ltd was above the generally recommended levels. Additionally, the study identified that; solvency had strong, positive and highly significant relationship with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. The study further, found out that, solvency had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

5.1.2 Liquidity and financial performance

The study was to establish the effect of liquidity on financial performance of Deposit taking SACCOs in Kenya. The study found out that, Airport SACCO Society Ltd had the highest liquidity while Imarisha SACCO Society Ltd had the lowest liquidity. In addition, the study found out that, liquidity had weak, positive and highly significant correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya as measured by current ratio.

Further, the study found out that, liquidity had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya when measured by current ratio. Thus, unit increase in liquidity led to a significant increase in

financial performance deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

5.1.3 Leverage and financial performance

The study found out that, most of the SACCOS complied with the statutory requirements on leverage by SASRA. For instance, the leverage for Acumen SACCO Society Ltd, Afya SACCO society ltd, Airport SACCO Society Ltd was less than the statutory requirements of 25%. On the other hand, the study established a few Sacco were not complied with the statutory requirement by SASRA on leverage. For instance, the leverage level for Mzima SACCO Society Ltd, Miliki SACCO Society Ltd, Jamii SACCO Society Ltd was above the ideal level of less than 25%.

Additionally, the study found out that, leverage had a weak, positive and highly significant relationship with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. The study discovered further that, leverage had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Thus, unit increase in leverage when measured by debt to asset ratio and debt to capital ratio led to a significant increase in financial performance deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

5.1.4 Capital adequacy and financial performance

The study found out that, capital adequacy for most SACCOs was above the minimum statutory requirement of 10% by SASRA. For instance, Acumen SACCO Society Ltd, Afya SACCO Society ltd, Ardhi SACCO Society Ltd, Bandari SACCO society ltd and Baraton University SACCO Society Ltd. On the other hand, the study noted capital adequacy for some SACCOs was below statutory requirements. For instance, capital adequacy for Biashara SACCO Society Ltd, Chuna SACCO Society ltd, Daima SACCO Society Ltd, Elimu SACCO Society Ltd, Faridi SACCO Society Ltd. Further, the study found out that, capital adequacy had weak,

negative and highly significant correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

In addition, the study identified that; capital adequacy had a negative and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Hence, a change in capital adequacy led to a decline in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

5.1.5 Inflation rates and financial performance

The study established that, inflation was highest in 2016 while in 2017 inflation was the lowest for the five years studied. In addition, the study identified that, inflation had direct and insignificant effect on financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Thus, a unit increase in inflation rate led to an insignificant change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

5.2 Conclusions

5.2.1 Solvency and financial performance

The study concluded that; solvency for the majority of SACCOs was less than the generally acceptable level of 30%. Additionally, the it was concluded that, solvency had strong positive and highly significant correlation with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. As result, SACCOs are encouraged to be solvent so that can significantly increase their financial performance.

The study further, concluded that, solvency had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Thus, unit increase in solvency led to a significant increase in financial performance as measured by return on assets.

5.2.2 Liquidity and financial performance

The study concluded that, liquidity had strong positive and highly significant relationship with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Additionally, the study concluded that, liquidity had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Further, it was concluded that liquidity contributed a significant change in financial performance of deposit taking savings and credit cooperative societies when measured by current ratio and when measured by quick ratio.

5.2.3 Leverage and financial performance

The study concluded that, most of the SACCOS complied with the statutory requirements on leverage by SASRA. Additionally, it was concluded that, leverage had a strong, positive and highly significant relationship with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. On other, the study concluded that, leverage had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Thus, unit increase in leverage led to a significant increase in financial performance deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

5.2.4 Capital adequacy and financial performance

The study concluded that, capital adequacy for most SACCOs was above the minimum statutory requirement of 10% by SASRA. Further, the concluded that, capital adequacy had weak, negative and highly significant relationship with financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Thus, change in capital adequacy led to a significant decrease in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya SACCOs. Finally, the study concluded that; capital

adequacy had a negative and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

5.2.5 Inflation rates and financial performance

The study concluded that, inflation had direct and insignificant effect on financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Thus, a unit increase in inflation rate led to an insignificant change in financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya.

5.3 Recommendations of the study

5.3.1 Solvency and financial performance

The study recommended that, SACCO whose solvency was above the generally accepted level, ought to reduce their debt, costs, restructure debts through for instance combining different loans into one, lowering interest rates paid on loans, and re-negotiating terms or extending payment period, increase members, prices and reduce frequency of borrowing. This would make them increase their solvency and hence, financial performance.

Further, the study recommended that, deposit taking savings and credit cooperative societies (SACCOS) in Kenya should be more vigilant on solvency levels as it directly and significantly affects their financial performance.

5.3.2 Liquidity and financial performance

The study recommended that, SACCO, should cut overhead expenses, dispose unnecessary assets change payment cycles, use long time financing, optimum management of receivables and payables would increase their liquidity and hence financial performance

In addition, the study recommended that, deposit taking savings and credit cooperative societies (SACCOS) in Kenya must put in place proper strategies such as developing accurate

cash flow forecasts, examining counterpart insolvency risk, analyzing external risks, avoiding operational risks, proper receivables management, centralizing all financial data to ensure effective and efficient management liquidity so as to increase significantly financial performance.

5.3.3 Leverage and financial performance

The study recommended that, SACCO whose leverage was above the ideal level of less than 25%, should reduce use of very expensive debt as a source of funding. Additionally, it can increase and new customers, cut some unnecessary cost, reduce staff. This would reduce significantly the overdependence on borrowing for investment and instead use retained earning which is cheaper to financial its operation. To this, end, financial performance would increase.

Additionally, the study recommended that, deposit taking savings and credit cooperative societies (SACCOS) in Kenya should use more retained earnings and long-term debt when its absolutely necessary. Using retained earnings as source of finance would increase their financial performance, as it's cheap. On the other long-term debt allows them time pay debt more conveniently. This would increase their financial performance significantly.

5.3.4 Capital adequacy and financial performance

The study recommended that, SACCO, whose capital adequacy was below statutory requirements should sale more equity to new shareholders, convert debtors into equity holders. This would increase available capital for investments, which in return would enhance their financial performance. Further, the study recommended that, Deposit taking SACCOs in Kenya to reduce holding too much capital idle as this would reduce their profitability significantly.

5.3.5 Inflation rate and financial performance

The study recommended that, Deposit taking SACCOs in Kenya should in collaboration with other state agencies like Central bank continue monitoring inflation rates. This would ensure

that, they are able detect any an slighted changes in inflation rates so that they can curb its effect whether significant or insignificant on financial performance. Thus, their profitability would be assured.

5.4 Theoretical Implication of the study

The study found out that, liquidity had a positive and significant effect financial performance of deposit taking savings and credit cooperative societies (SACCOS) in Kenya. Thus, unit increase in liquidity led to a significant increase in financial performance deposit taking savings and credit cooperative societies (SACCOS) in Kenya when measured by Current Ratio and quick ratio. These findings, agreed with shift ability theory which holds the view that, liquidity of an institution is preserved only if the institution holds those assets which can easily be sold or those assets which could easily be converted to other investments in exchange for cash. Deposit taking SACCOS' maintain a high level of liquidity through holding assets which are easily convertible into cash and hence, increasing their financial performance.

5.5 Suggestions for further study

The study suggests that mores study to be done on effect of credit risk management practices on financial performance of listed non-financial firms in Kenya.

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APPENDICES

APPENDIX I

SUMMARY OF RESEARCH GAPS

Author and Year	**Specific Objective**	**Methodology**	**Research findings**	**Research Gaps**	**Gaps to be filled by the study**
Bourke (2013)	The relationship solvency and banks profitability for 90 banks in Europe.	Used a multiple regression model to investigate performance.	Found to have a positive relationship with ROE and negative and negative relationship with PM.	The failed to apply descriptive and correlation analysis which is good for measuring relationship of variables.	The current study addresses the gaps by using up to date data and adopting descriptive and correlation analysis.
Graham and Brodeleau (2013)	The impact of solvency on financial performance of financial institutions in Canada.	The study used target population of 19 financial institutions in the Canada securities exchange for period covering 2010 to 2014.	The results indicated that solvency was a significant predictor of financial performance.	The study used a smaller sample size of 19 to analysis data and hence the findings cannot be reliable.	The current study uses sample size of 61 which inferences to the larger population.
Abera (2014)	Affecting solvency on profitability of banking industry in Ethiopia.	Mixed methods research approach by combing documentary analysis and in-depth interviews eight commercial	The impact of Ethiopian banks' solvency on their performance remains ambiguous	The study incorporated inferential analysis tools such as (correlation, simple and multiple regression) in the current study to enhance generalizatio	The study came to the conclusion that further research is needed to clarify the effect of Ethiopian banks' solvency on their performance.

		banks in Ethiopia		ns and conclusions.	
Kamoyo (2016)	The determinants of solvency on financial performance of deposit taking SACCOs in Kenya	The study used a multiple regression model to investigate financial performance	There is significant positive relationship between solvency and financial performance	The study failed to use correlation analysis and panel regression model limit generalization ability	The current study applies correlation and panel regression model as well which allow inferences to the larger population
Ongore and Kusa (2017)	The determinants of solvency on financial performance of commercial banks in Kenya.	Explanatory research design, sample 37 multiple regression model and generalized Least Square on panel data	The findings showed that banks specific factors significant affect the performance of commercial banks in Kenya, except for solvency variable	The study did not include correlation analysis which deals with association of independent variables and dependent variables.	The current study addresses the correlation analysis from local perspectives to address the gaps.
Macharia (2017)	Examine the relationship between the profitability and solvency of Savings and Credit Co-operative Societies in Kenya.	The population of the study was comprised all 43 Savings and Credit Co-operative Societies in Kenya operating in the years 2008 to 2012	There is positive relationship between profitability and solvency of Savings and Credit Co-operative Societies in Kenya	The study used a smaller sample size of 43 to analysis data and hence the findings cannot be reliable.	The current study try to fill the gaps in the research.
Ibe (2011)	Determine the impact of liquidity on the profitabilit	A sample size of 43 banks was used for the study in US.	That commercial banks increase loan loss provision to	The study used a smaller sample size 43 to analysis data	Current study targets sample size of 61

	y of banks in US.		improve profitability	and hence the findings cannot be reliable.	which larger enough.
Al Nimer, Warrad and Al Omari (2015)	Effect of liquidity on financial performance of SACCOs in Jordanian as evident on ROA.	A sample of forty listed SACCOs	There existed a positive relationship between liquidity and profitability.	The study used a smaller sample size 40 to analysis data and hence the findings cannot be reliable.	The current study fills the gaps by considering annual statement documents from the SACCOs.
Mishra and Pradhan (2015)	Impact of liquidity management on profitability among the private sector SACCOs of India.	The study used inferential statistics to analysis the data	From the findings the study found out that liquidity had a significant negative on financial performance of SACCOs in India	The study failed used both inferential statistics and descriptive statistics to analysis data in the research	The current study filled the gaps by considering both inferential statistics and descriptive statistics to analysis data in the research.
Moussa and boubaker (2017)	Impact of liquidity on SACCOs profitability suing data for eighteen SACCOs in Tunisia.	Used 2 models of penal statistics	Had positive significant influence on return on assets while the ratio current assets, current liabilities had no significant effect on ROA.	The study failed to use correlation statistics which is good measuring association of variables.	The current study included correction analysis in the research to fill the gaps.

Vaita (2019)	The role of liquidity on financial performance of Tier One Listed SACCOs in Kenya.	Used a descriptive research design to SACCOs in Kenya	There exists a positive significant relationship between management efficiency and both ROEand ROA.	The study failed to use cross sectional research design	The current student used cross sectional research to fill the gaps.
Rajkumar(2014)	Effect of leverage ratio on financial performance of deposit taking SACCOs in Sri Lanka.	study used target population of 60 of DTS, regression and correlation analysi	Showed that leverage ratio has a great effect on the financial performance of the company studied.	The study failed to used descriptive statistical analysis is used to describe variables.	The study was conducted in Sri Lanka thus presenting a scope gap. The current study was conducted in Kenya.
Bhardwaj (2017)	Examined of leverage on financial performance of deposit taking SACCOs in India.	The sampled of 40 SACCOs registered by SASRA operating in Kenya from the period of 2006 t0 2010	The study had a insignificant negative relationship between leverage and financial performance	The study used a smaller sample size of 40 which is not wider enough to give a good result for research	This current study use sample size of 61which was wider enough to give a good result for research.
Zahoor et al. (2015)	The effect of leverage ratio on financial performance of Pakistan firms.	Used Panel da from 154,descriptive analysis and inferential analysis of textile firms quoted at the Karachi Stock Exchange KSE)	Showed a negative link amid leverage the performance of firms.	The study failed to use panel regression analysis	The study focused on textile companies thus presenting a scope gap. The current study focused on Deposit Taking SACCOs in Kenya to fill the gaps.

Gudeta (2013)	The impact of leverage ratio on the financial performance of commercial banks in Ethiopia.	Used sample size of 44 banks over a 5 years term 2008 to 2012, descriptive and multiple regression was used.	Negative relationship exists amid growth in assets and profitability.	The study failed to use correlation statistics which good measuring association of variables.	The current study used correction statistics in the research to the gaps.
Abubakar (2015)	The link between leverage ratio and financial performance of banks in Nigeria.	Regression analysis was used	There exists a considerable relationship amid debt to equity and return on equity.	The study failed to use correlation statistics and descriptive statistics.	The current study employed both statistics in research to fill the gaps.
Khalifa Tailab (2012)	To evaluate of capital on financial performance of SACCOs in America.	The study employed quasi experimental research design in the research.	The study had a significant positive relationship between capital adequacy and financial performance	The study failed to used cross sectional research design	The current study applied cross sectional research design on SACCO
Haris, Tan, Malik and Ain (2014)	The influence of capital adequacy on the profitability of Pakistani SACCOs,	The study used primary data from the questionnaire and interview	The study had a insignificant negative relationship between capital adequacy and financial performance	The study failed to used secondary data from the published annual financial statement which is easy to understand	The current study used secondary data to fill gaps
Rahman (2017)	The effect of capital adequacy	The data using descriptive	Capital adequacy had strong	The study failed to use research	The current study used a larger sample

	ratio on the performance of mid-tier SACCOs in Bangladesh.	and inferential statistics	and significant positive influence on financial performance of the said SACCOs.	design such as cross sectional research design.	size which is good to give out different outcome.
Zerfeshewa (2017).	Influence of capital adequacy on banks' profitability in Ethiopia.	The study used Employed descriptive research design, secondary data	Established that holding adequate capital is not enough and banks must be ready to point out various risk which might	The study failed to use cross sectional research design.	The current study used cross sectional research design to fill gaps.
Aymen (2018).	The relationship between profitability and capital adequacy of Credit Cooperative Societies (SACCOs in Tunisia,	The study ran a regression model	Observed the existence of significant negative relationship between capital adequacy and ROA	The study failed to use correlation statistics and descriptive statistics.	The current study used both statistics to fill gaps.
Suka (2019).	Influence of capital adequacy on financial performance of financial institution quoted at the Nairobi stock exchange.	Descriptive research design was employed	There was capital adequacy has a positive effect on banks' performance	The study failed to use cross sectional research design.	The current study was carried on SACCOs to fill the gaps.
Zulfiqar and Din (2015)	Effect of inflation	The study used a	The study had a	The study failed to	The current study ad

	rate on financial performance of SACCOs of Pakistan textile industry.	multiple regression model to investigate financial performance	significant negative relationship between inflation rate and financial performance	applied descriptive and correlation analysis which is good for measuring relationship of variables	dressed the gaps by applies descriptive and correlation analysis which is good for measuring relationship of variables.
Baba and Nasieku (2016)	Effect of Inflation rate on the performance of Nigerian banks.	23 licensed banks in Nigeria participated in this study	Indicated that exchange rate, unemployment rate, and interest rate are adversely and significantly related with the FP of banks while inflation rate has an insignificant relationship.	The study focused only on the smaller sample size of 23 of licensed banks in Nigeria.	The study also failed to use a larger sample size which is being used in the current study.
Obeng-Krampah (2020)	Effect of inflation rate variables and performance of firms quoted on the Ghana Stock Exchange.	Panel data were used of the period 2007 to 2015	The study also discovered that while interest rates have a negative impact on ROE, inflation has a negative impact on ROA.	The study failed to use correlation statistics and descriptive statistics.	The current study used both correctional and descriptive statistics in the research to fill gaps.

Source: Researcher 2020

APPENDIX II

OPERATIONALIZATION AND MEASUREMENT OF VARIABLES

Type of Variable	Variable	Measurement	Scale
Independent Variables	Solvency	Total Debt to Equity ratio = Long Term Debt / Total Equity	Ratio
	Liquidity	Current ratio = Current asset / Current Liabilities	Ratio
	Leverage	Debt to Asset ratio = Total Debt / Total Asset	Ratio
	Capital adequacy	Total capital to total Asset ratio = Total Capital / Total Asset	Ratio
Dependent Variables	Financial performance	Return on asset = Net Income / Average total Asset	Ratio
Moderating variables	Inflation rate	Consumers Price Index = Value of Current Market Basket x 100 / Value of Basket in the base year	Percentage

Source: Researcher (2020)

APPENDIX III

DATA COLLECTION SHEET

Deposit taking SACCOs 2016-2022

			Solvency	**Liquidity**	**Leverage**	**Capital Adequacy**	**Return on Asset**
No.	DT SACCOs' NAME	Years	Long Term Debt to equity ratio	Current Ratio	Debt to Asset ratio	Total Capital Ratio to total Asset ratio	Net income /average total assets divided by 2 (%)
1	Acumen SACCO Society Ltd	2016	0.0523	0.1805	0.1177	0.1396	0.083
		2017	0.0614	0.1717	0.0689	0.1453	0.067
		2018	0.055	0.1177	0.0689	0.1502	0.0560
		2019	0.0615	0.056	0.1700	0.1063	0.049
		2020	0.0408	0.0342	0.0432	0.1423	0.044
2	Afya SACCO Society Ltd	2016	0.1198	0.0114	0.0207	0.2604	0.0089
		2017	0.1071	0.0117	0.0208	0.2712	0.0764
		2018	0.0792	0.0118	0.0181	0.0023	0.094
		2019	0.0759	0.17	0.0171	0.305	0.0995
		2020	0.0988	0.0116	0.0142	0.3341	0.0756
3	Airport SACCO Society Ltd	2016	0.1024	10.24	0.133	0.058	0.005
		2017	0.094	0.1057	0.20	0.102	0.0024
		2018	0.021	0.031	0.17	0.28	0.032
		2019	0.032	0.016	0.0911	0.15	0.014
		2020	0.008	0.015	0.20	0.105	0.01.3
4	Ardhi SACCO Society Ltd	2016	0.1079	0.0121	0.0028	0.3586	0.1307
		2017	0.1078	0.0121	0.0023	0.3831	0.1432
		2018	0.1077	0.0122	0.0026	0.4182	0.1368
		2019	0.1045	0.0122	0.0029	0.3886	0.1298
		2020	0.1046	0.012	0.0037	0.0344	0.1119
5	Bandari SACCO Society Ltd	2016	0.133	0.0213	0.0342	0.2301	0.3321
		2017	0.1108	0.0310	0.0273	0.205	0.3506
		2018	0.1005	0.018	0.0151	0.21	0.3686
		2019	0.0942	0.13	0.0108	0.1712	0.4058
		2020	0.0897	0.10	0.0106	0.1604	0.3743
6	Baraton University SACCO Society Ltd	2016	0.0115	0.0115	0.0022	0.1732	0.0771
		2017	0.0116	0.0116	0.0148	0.1717	0.0854
		2018	0.0116	0.116	0.0121	0.1166	0.0827
		2019	0.0119	0.0119	0.0207	0.1160	0.0833
		2020	0.0118	0.0118	0.0156	0.1082	0.0912

7	Biashara SACCO Society Ltd	2016	0.123	0.0921	0.0807	0.0703	0.1993
		2017	0.1419	0.0721	0.0420	0.0459	0.1947
		2018	0.1312	0.052	0.0226	0.024	0.1845
		2019	0.103	0.0412	0.0123	0.0102	0.1664
		2020	0.0826	0.022	0.012	0.0065	0.1825
8	Breameg SACCO Society Ltd	2016	0.0318	0.0502	0.1156	0.1203	0.1301
		2017	0.021	0.0452	0.0907	0.2076	0.1154
		2018	0.0123	0.032	0.0721	0.1597	0.0870
		2019	0.0116	0.0217	0.0548	0.1820	0.0730
		2020	0.0150	0.0166	0.0322	0.0917	0.0612
9	Capital SACCO Society Ltd	2016	0.0779	0.0117	0.0404	0.0730	0.0711
		2017	1.477	0.0118	0.0418	0.1191	0.0344
		2018	0.0803	0.0114	0.0390	0.0683	0.0391
		2019	0.0277	0.111	0.0321	0.1439	0.0211
		2020	0.0320	0.0109	0.0215	0.0958	-0.0261
10	Chuna SACCO Society Ltd	2016	0.4370	0.04197	0.0275	0.1669	0.3454
		2017	0.465	0.0319	0.0661	0.1060	0.1635
		2018	0.3305	0.0120	0.0466	0.0985	0.2561
		2019	0.2895	0.15	0.0847	0.044	0.1841
		2020	0.1902	0.20	0.0698	0.0309	0.227
11	Daima SACCO Society Ltd	2016	0.2356	0.0115	0.1085	0.0401	0.0914
		2017	0.0592	0.116	0.1370	0.0701	0.0468
		2018	0.064	0.0119	0.1544	0.0983	0.0908
		2019	0.0116	0.018	0.1480	0.0631	0.0912
		2020	0.1386	0.0117	0.1401	0.0246	0.0840
12	Elgon Teacher SACCO Society Ltd	2016	0.4023	0.022	0.4083	0.3071	0.0774
		2017	0.3404	0.033	0.3327	0.2202	0.0739
		2018	0.01832	0.021	0.0137	0.2242	0.0594
		2019	0.1523	0.003	0.1211	0.2171	0.0576
		2020	0.13	0.0012	0.0124	0.0704	0.0509
13	Elimu SACCO Society Ltd	2016	0.0591	0.012	0.065	0.0071	0.1440
		2017	0.0669	0.01190	0.0563	0.0493	0.1408
		2018	0.0369	0.0115	0.027	0.0300	0.1177
		2019	0.0144	0.01204	0.2792	0.0112	0.1088
		2020	0.0285	0.0117	0.1223	0.0233	0.0902
14	Faridi SACCO Society Ltd	2016	0.0729	0.0114	0.0291	0.0889	0.0372
		2017	0.0602	0.12	0.0242	0.0704	0.0636
		2018	0.0511	0.0121	0.0024	0.0856	0.08
		2019	0.0483	0.025	0.0882	0.0714	0.0850

		2020	0.0404	0.0122	0.0032	0.044	0.0706
15	Fortitude SACCO Society Ltd	2016	0.0170	0.0211	0.3320	0.0982	0.02262
		2017	0.1902	0.0134	0.2583	0.0583	0.7029
		2018	0.1542	0.012	0.1882	0.0327	0.2091
		2019	0.071	0.20	0.1427	0.0103	0.1862
		2020	0.067	0.012	0.0714	0.024	0.1289
16	Good Faith SACCO Society Ltd	2016	1.6993	0.92	0.0203	4.421	0.0799
		2017	1.6914	0.0115	0.0284	4.5789	0.0889
		2018	1.5341	0.0116	0.0231	4.5393	0.0868
		2019	1.6143	0.0117	0.0344	5.6519	0.0805
		2020	1.5144	0.0116	0.0268	5.8040	0.0804
17	Harambee SACCO Society Ltd	2016	0.0826	0.0116	0.0002	0.1583	0.0458
		2017	0.2371	0.15	0.0013	0.3830	0.0396
		2018	0.0997	0.0120	0.0036	0.3553	0.0501
		2019	0.0154	0.0118	0.0055	0.3569	0.0466
		2020	0.1282	0.12	0.0039	0.3181	0.0530
18	Imarika SACCO Society Ltd	2016	0.0820	0.1108	0.1460	0.1208	0.7295
		2017	0.0720	0.1628	0.1320	0.1001	0.8616
		2018	0.0304	0.1407	0.1140	0.092	0.4094
		2019	0.021	0.0826	0.145	0.059	0.4643
		2020	0.0102	0.0626	0.0991	0.0440	0.5736
19	Imarisha SACCO Society Ltd	2016	0.1796	0.0117	0.0224	1.3619	0.0612
		2017	0.3314	0.0114	0.0044	2.2908	0.0443
		2018	0.6491	0.0114	0.0073	3.8222	0.0624
		2019	1.0342	0.0112	0.0024	6.9551	0.0459
		2020	0.6828	0.0117	0.0149	6.0598	0.0489
20	Jamii SACCO Society Ltd	2016	0.0323	0.022	0.3826	0.037	0.1899
		2017	0.046	0.032	0.3344	0.029	0.1766
		2018	0.037	0.22	0.3030	0.026	0.2526
		2019	0.033	0.51	0.1806	0.023	0.2135
		2020	0.0204	0.21	0.1002	0.023	0.1650
21		2016	0.16	0.03620	0.1585	0.1427	1.525
		2017	0.14	0.3050	0.1092	0.1208	1.0912

	Kathera Rural SACCO Society Ltd	2018	0.1235	0.1140	0.0581	0.1071	1.1502
		2019	0.0988	0.171	0.0345	0.0242	1.0197
		2020	0.0142	0.075	0.023	0.0117	0.8624
22	Kentours SACCO Society Ltd	2016	1.8917	0.0114	0.0104	1.7543	0.1006
		2017	1.3508	0.0118	0.0093	1.7727	0.1183
		2018	1.5605	0.0119	0.0082	1.9561	0.1211
		2019	0.1479	0.01226	0.0082	1.9944	0.1289
		2020	0.2340	0.012	0.0078	3.9190	0.0783
23	Kenya Achievas Kenya SACCO SACCO Society Ltd	2016	0.0323	0.0420	0.037	0.1344	0.208
		2017	0.0350	0.0331	0.029	0.126	0.1450
		2018	0.022	0.0121	0.026	0.082	0.1120
		2019	0.0112	0.62	0.023	0.0631	0.1420
		2020	0.0035	0.5	0.018	0.046	0.1005
24	Kenya Police SACCO Society Ltd	2016	0.2510	0.0542	0.2340	0.062	0.6254
		2017	0.1692	0.0349	0.1579	0.1226	0.5968
		2018	0.1236	0.0504	0.1605	0.1010	0.4222
		2019	0.1144	0.029	0.0508	0.0218	0.4109
		2020	0.0935	0.028	0.0317	0.014	0.3718
25	Kenpipe SACCO Society Ltd	2016	0.0002	0.1011	0.1149	0.1698	0.2489
		2017	0.0301	0.022	0.24	0.1551	0.2350
		2018	0.0002	0.059	0.073	3.8222	0.1624
		2019	0.0101	0.0354	0.044	0.1208	0.1443
		2020	0.10	0.1519	0.022	0.1319	0.0943
26	Kimisitu SACCO Society Ltd	2016	0.2159	0.11	0.1419	0.175	0.2207
		2017	0.1886	0.2042	0.1831	0.1079	0.1660
		2018	0.1339	0.1726	0.132	0.088	0.1204
		2019	0.1298	0.1277	0.123	0.065	0.0628
		2020	0.1006	0.1142	0.1078	0.0586	0.0456
27	Kingdom SACCO Society Ltd	2016	0.1045	0.1842	0.1993	0.2019	0.02390
		2017	0.0959	0.1586	0.1771	0.1119	0.2021
		2018	0.0722	0.1119	0.1455	0.0939	0.1840
		2019	0.0223	0.082	0.1082	0.0492	0.1166
		2020	0.017	0.0444	0.0986	0.0207	0.0840
28	KolengeTea SACCO Society Ltd	2016	0.1418	0.0302	0.0897	0.1110	0.2926
		2017	0.1116	0.0833	0.0615	0.1598	0.1779
		2018	0.0916	0.0601	0.0915	0.1321	0.1404
		2019	0.0716	0.082	0.0219	0.0640	0.1256
		2020	0.0416	0.0912	0.0116	0.0439	0.0730

29	Koru SACCO Society Ltd	2016	0.1689	0.2017	0.1112	0.1217	0.2542
		2017	0.1429	0.1917	0.0940	0.1110	0.2117
		2018	0.1341	0.1318	0.0626	0.042	0.1317
		2019	0.0910	0.0759	0.0300	0.051	0.1114
		2020	0.042	0.0571	0.015	0.0208	0.914
30	Lontels SACCO Society Ltd	2016	0.2897	0.085	0.1419	0.142	0.1918
		2017	0.1198	0.0570	0.0831	0.1077	0.2087
		2018	0.0907	0.032	0.032	0.1142	0.2227
		2019	0.0630	0.0160	0.0323	0.134	0.1673
		2020	0.0504	0.86	0.0170	0.1122	0.1448
31	Maisha Bora SACCO Society Ltd	2016	0.1339	0.1002	0.1993	0.1219	0.1845
		2017	0.0886	0.0518	0.1747	0.1016	0.1664
		2018	0.059	0.0418	0.0854	0.086	0.1233
		2019	0.0329	0.0323	0.0473	0.0538	0.1002
		2020	0.0145	0.0116	0.0260	0.0390	0.0717
32	Metropolitan SACCO Society Ltd	2016	0.0926	0.0217	0.1110	0.22	0.2151
		2017	0.1105	0.0214	0.1009	0.2168	0.192
		2018	0.1277	0.09	0.0809	0.1732	0.1720
		2019	0.1520	0.1010	0.0755	0.1152	0.1517
		2020	0.0470	0.1118	0.0320	0.0912	0.1116
33	Mombasa Port SACCO Society Ltd	2016	0.1009	0.1841	0.0514	0.1635	0.2217
		2017	0.0902	0.0211	0.0314	0.1344	0.195
		2018	0.0755	0.0335	0.0205	0.1212	0.1626
		2019	0.0320	0.039	0.0103	0.1191	0.1479
		2020	0.0215	0.0240	0.0390	0.0689	0.1004
34	Muki SACCO Society Ltd	2016	0.1370	0.0471	0.1480	0.1372	0.2451
		2017	0.152	0.0583	0.1016	0.0946	0.1958
		2018	0.0592	0.0360	0.0716	0.0756	0.1807
		2019	0.0314	0.0908	0.0118	0.0840	0.1261
		2020	0.021	0.069	0.0018	0.0774	0.1007
35	Miliki SACCO Society Ltd	2016	0.070	16.60	0.4779	0.00100	0.5524
		2017	0.707	23.80	0.4740	0.0418	0.5473
		2018	0.1501	20.08	0.6803	0.0410	0.4674
		2019	0.1321	0.3000	0.7270	0.1010	0.4263
		2020	0.0910	0.1401	0.5325	0.0209	0.3781
36		2016	0.0303	0.0502	0.0165	0.2300	0.1402
		2017	0.0130	0.0122	0.0102	0.2806	0.1208

	Mwalimu SACCO Society Ltd						
		2018	0.122	0.0122	0.0112	0.2182	0.1268
		2019	0.122	0.14	0.0140	0.3031	0.1178
		2020	0.105	0.03	0.0123	0.1586	0.1007
37	Mwito SACCO Society Ltd	2016	0.7120	0.0218	0.0256	0.345	0.3001
		2017	0.6430	0.0109	0.0107	0.2473	0.2506
		2018	0.3408	0.14	0.0101	0.2266	0.1982
		2019	0.2916	0.15	0.0108	0.1902	0.1526
		2020	0.0807	0.11	0.002	0.1152	0.1312
38	Mzima SACCO Society Ltd	2016	0.0760	0.0210	0.5123	0.2032	0.2771
		2017	0.1020	0.2	0.3439	0.1817	0.1154
		2018	0.0540	0.12	0.2438	0.1260	0.0917
		2019	0.0293	0.17	0.1917	0.1060	0.0804
		2020	0.0980	0.11	0.1197	0.0480	0.0660
39	Nafaka SACCO Society Ltd	2016	0.2016	0.032	0.1018	0.1104	0.2025
		2017	0.1116	0.076	0.1118	0.085	0.1802
		2018	0.1235	0.053	0.1585	0.1277	0.1507
		2019	0.0988	0.032	0.0792	0.0712	0.1198
		2020	0.042	0.035	0.0181	0.1427	0.1007
40	Nacico SACCO Society Ltd	2016	0.1666	0.032	0.122	0.2026	0.2200
		2017	0.2604	0.119	0.0122	0.131	0.1802
		2018	0.1628	0.082	0.119	0.1122	0.1078
		2019	0.0756	0.034	0.1045	0.142	0.1223
		2020	0.0461	0.0320	0.0029	0.103	0.0910
41	Nandi Farmer SACCO Society Ltd	2016	0.180	0.1045	0.195	0.1664	0.1015
		2017	0.162	0.082	0.1016	0.0833	0.1120
		2018	0.0823	0.066	0.0538	0.0502	0.0897
		2019	0.1516	0.1120	0.1390	0.0717	0.0776
		2020	0.156	0.0710	0.0421	0.1051	0.0522
42	Ollin SACCO Society Ltd	2016	0.2017	0.1635	0.1402	0.1841	0.2405
		2017	0.0110	0.0344	0.113	0.0211	0.2109
		2018	0.0926	0.0512	0.0505	0.0335	0.0755
		2019	0.149	0.0291	0.0803	0.143	0.1520
		2020	0.504	0.0689	0.0390	0.1240	0.1215
43	Safaricom SACCO Society Ltd	2016	0.2451	0.0372	0.1480	0.0471	0.1370
		2017	0.0958	0.044	0.01016	0.0983	0.1092
		2018	3.380	0.075	0.0416	0.1360	0.0592
		2019	0.0261	0.0850	0.028	0.0908	0.0116
		2020	0.227	0.067	0.002	0.0594	0.0090
44		2016	0.052	0.019	0.1209	0.209	0.009
		2017	0.015	0.022	0.1088	0.115	0.071

	Sheria SACCO Society Ltd	2018	0.0826	0.028	0.1450	0.0369	0.0669
		2019	0.035	0.122	0.0901	0.127	0.0563
		2020	0.1085	0.038	0.0112	0.0047	0.0379
45	Shirika SACCO Society Ltd	2016	0.0493	0.0312	0.1523	0.0882	0.1089
		2017	0.0847	0.0591	0.1444	0.1583	0.0756
		2018	0.1495	0.0108	0.1500	0.1327	0.0437
		2019	0.1208	0.015	0.0706	0.1125	0.0300
		2020	0.0968	0.0212	0.1918	0.0256	0.0227
46	Simba SACCO Society Ltd	2016	0.1673	0.0291	0.0268	0.0460	0.16
		2017	0.0636	0.072	0.1544	0.0519	0.116
		2018	0.1296	0.031	0.2883	0.0927	0.1091
		2019	0.0704	0.021	0.111	0.0805	0.0541
		2020	0.0371	0.14	0.162	0.1263	0.0231
47	Siraji SACCO Society Ltd	2016	0.0593	0.0284	0.0805	0.05736	0.1569
		2017	0.0831	0.0914	0.0524	0.0530	0.1346
		2018	0.068	0.0502	0.0799	0.0631	0.085
		2019	0.0474	0.016	0.1473	0.1181	0.0754
		2020	0.024	0.020	0.1210	0.0223	0.0550
48	Stima Investment SACCO Society Ltd	2016	0.0020	0.061	0.023	0.0302	0.2135
		2017	0.0120	0.039	0.0116	0.0117	0.0459
		2018	0.0290	0.0337	0.0046	0.1011	0.0331
		2019	0.0997	0.0830	0.0826	0.0828	0.0251
		2020	0.0036	0.96	0.0002	0.0149	0.0124
49	Tai SACCO Society Ltd	2016	0.0024	0.0592	0.1899	0.0492	0.231
		2017	0.0342	0.032	0.0612	0.0624	0.173
		2018	0.0224	0.043	0.0276	0.0592	0.1434
		2019	0.0112	0.0624	0.0619	0.098	0.0543
		2020	0.0001	0.0526	0.1519	0.0331	0.0451
50	Torch SACCO Society Ltd	2016	0.021	0.064	0.0020	0.0616	0.1632
		2017	0.0012	0.0466	0.0120	0.0396	0.106
		2018	0.0424	0.0373	0.0290	0.0537	0.046

		2019	0.1282	0.056	0.0997	0.0830	0.026
		2020	0.0039	0.034	0.0036	0.0096	0.0002
51	Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd	2016	0.0020	0.1011	0.0024	0.0592	0.044
		2017	0.1583	0.0598	0.1342	0.0822	0.0314
		2018	0.1445	0.1506	0.0224	0.0834	0.0254
		2019	0.0458	0.0489	0.0112	0.0624	0.019
		2020	0.0795	0.0650	0.001	0.0526	0.0001
52	Un SACCO Society Ltd	2016	0.0009	0.21	0.1197	0.0019	0.1183
		2017	0.0117	0.012	0.1289	0.00124	0.0912
		2018	0.1519	0.071	0.0692	0.1572	0.0344
		2019	0.1796	0.0340	0.0944	0.01505	0.027
		2020	0.0224	0.78	0.0449	0.0082	0.0193
53	Unisa SACCO Society Ltd	2016	0.0093	0.082	0.0991	0.0171	0.1145
		2017	0.0508	0.054	0.1341	0.0759	0.1300
		2018	0.1724	0.043	0.0829	0.01518	0.0626
		2019	0.018	0.1006	0.0089	0.051	0.0440
		2020	0.0012	0.550	0.0887	0.0317	0.0212
54	Unison SACCO Society Ltd	2016	0.1104	0.6	0.0202	0.0506	0.225
		2017	0.0995	0.012	0.0120	0.01298	0.142
		2018	0.1177	0.0897	0.0223	0.1339	0.1077
		2019	0.0712	0.098	0.1046	0.0886	0.0726
		2020	0.1427	0.0207	0.0037	0.0159	0.0342
55	Ushuru County Farmer SACCO Society Ltd	2016	0.0182	0.23	0.0165	0.0455	0.2917
		2017	0.1312	0.1078	0.0586	0.0771	0.2020
		2018	0.0968	0.0132	0.0430	0.1993	0.1648
		2019	0.0686	0.103	0.0307	0.1347	0.1051
		2020	0.1077	0.21	0.0243	0.0854	0.0771
56	United NationasSACCO Society Ltd	2016	0.0986	0.041	0.0321	0.2511	0.296
		2017	0.1082	0.095	0.0777	0.0391	0.2779
		2018	0.1455	0.0307	0.098	0.2561	0.2104
		2019	0.0771	0.0261	0.1110	0.1635	0.1556
		2020	0.1993	0.037	0.910	0.210	0.1130
57	Vihiga County FarmersSACCO Society Ltd	2016	0.1011	0.0113	0.0808	0.0211	0.0721
		2017	0.100	0.10	0.0702	0.2005	0.0623
		2018	0.0914	0.0108	0.0692	0.1008	0.0512
		2019	0.0800	0.14	0.0971	0.0812	0.0480
		2020	0.0712	0.16	0.0698	0.0614	0.0455

58	Vision Point SACCO Society Ltd	2016	0.0512	0.122	0.1408	0.0968	0.2832
		2017	0.0620	0.064	0.0895	0.0654	0.2404
		2018	0.0826	0.0108	0.0347	0.0071	0.2523
		2019	0.126	0.051	0.0493	0.0012	0.1122
		2020	0.1085	0.012	0.0279	0.012	0.125
59	Wakenya Pamoja SACCO Society Ltd	2016	0.115	0.033	0.044	0.162	0.044
		2017	0.120	0.042	0.045	0.153	0.036
		2018	0.103	0.041	0.047	1.764259	0.034
		2019	0.211	0.053	0.053	0.173	0.0321
		2020	0.032	0.041	0.030	0.112	0.0256
60	Wipo SACCO Society Ltd	2016	0.031	0.0 65	0.209	0.0968	0.128
		2017	0.1130	0.0409	0.115	0.1408	0.102
		2018	0.0285	0.0350	0.0369	0.148	0.084
		2019	0.1223	0.021	0.077	0.0847	0.059
		2020	0.0038	0.0112	0.0047	0.0493	0.023
61	Yetu SACCO Society Ltd	2016	0.0071	0.0706	0.0956	0.0902	0.196
		2017	0.018	0.1500	0.0137	0.1242	0.1643
		2018	0.2087	0.044	0.0024	0.0371	0.1321
		2019	0.0850	0.1523	0.0211	0.0704	0.1014
		2020	0.2227	0.832	0.0137	0.1206	0.0903

Source: SASRA, 2020

DEPOSIT TAKING SACCOs IN KENYA

			Solvency	**Liquidity**	**Leverage**	**Capital Adequacy**	Return on Asset
No	DT SACCOs' NAME	YEAR	Long Term Debt to equity ratio 100%	Current Ratio	Debt to Asset ratio	Total Capital Ratio to total Asset ratio	Net income /average total assets divided by 2 (%)
1	AcumenSACCO Society Ltd	2016	613319678.51x100%/117269537 =5.23%	126989421.25/7035425 =18.05	1463069402.74x100%/124304962 =11.77%	1487082.02x100/10652450=0.1396%	571947903.38x100%/137818772/2 =8.3%
		2017	47147825.86x100%/7678799 =6.14%	131844978.83/7678799 =17.17	496153957.56x100%/81737708=6.07%	917553153.75x100%/63148875 =14.53%	416421689.7x100%/124304982/2 =6.7%
		2018	44093434x100%/8016988 = 5.55%	1320401286.4/235785944 =5.6	48208361048X100%/2835785944 =17.00%	123411557.46X100%/11609742 =10.63%	659959470.037x100%/2693712122.26/2 =4.9%
		2019	206549400.783x100%/33585268.42 =6.15%	1320401286.4/235785944 =5.6	48208361048X100%/2835785944 =17.00%	123411557.46X100%/11609742 =10.63%	659959470.037x100%/2693712122.26/2 =4.9%
		2020	143776266.48x100%/35239281 = 4.08%	882764921.16/258118398 =3.42	1267538448.96x100%/293411678 =4.32%	232278381.81X100%/16323147 =14.23%	645505691.6x100%/293,411,678/2 =4.4%
2	Afya SACCO Society Ltd	2016	1395826.938x 100%/ 11651310 = 11.98%	167990400/147360000 = 1.14	34840625.4 x 100%/ 168312000 = 2.07%	1396421.5608x 100%/ 5362602 = 26.04%	748988.4x100%/168312000/2=0.89%
		2017	2094725.7387x100%/19558597 =10.71%	200328570x/171221000= 1.17	4172230.4x100%/200588000= 2.08%	2094710.2896x100%/7723858= 27.12%	100292500x100%/200588000/2= 7.64%
		2018	165844.11666244x100%/26439285=7.92%	229665013.06x/194631367=1.18	4184997.9979x100%/231215359=1.81%	2094882.78x100%/9108186=23%	10867121.873x100%/231215359/2=9.4%
		2019	2444484.9627x100%/32206653 =7.59%	41228221.16x242518948 =0.17	4880272.7457x100%/285396067=1.71%	2444574.085x100%/8014997 =3.05%	14198454.33325x100%/285396067/2=9.95%
		2020	390995.566x100%/39574445=9.88%	394525287.0992x293196557=1.16	4863497.2878x100%/342499809=1.42%	3910827.2619x100%/11705559 =33.41%	12946492.7802x100%/342499809/2=7.56%
3	Airport SACCO Society Ltd	2016	631772190.72X100%/61696503 =10.24%	97388449792x/951059550 =10.24	13827561630.4X100%/1039666288 =13.3%	6030064470.4X100%/1039666288/ =5.8	259916572x/100%/1039666288/2 =0.5%
		2017	732351894.4Bx100%/77909776 =9.40%	1230699923 9.22/1164332946 =10.57	25474393140x100%/1273719657 =20%	12991940501.4x100%/1273719657/=10.2%	318429914.25x100%/1273719657/2 =0.5%
		2018	13212000711x100%/629142891 =21%	21230341072100x/684849712 =31	13975697654x100%/822099862 =17%	644526291808x100%/822099862 =28%	13153597792x100%/822099862/2 =3.2%
		2019	24963627654.4x100%/780113642 =3.2%	10739099200/671193700 =16	7489329733.71x100%/822099861 =9.11%	2203592415x100/146906161 =15%	575469902.7x100%/822099861/2 =1.4%
		2020	768675552x100%/960844440/100% =0.8%	11701704630/780113642 =15	19016888800x100%/950844440 =20%	1792673379x100%/170730798 =10.5%	618048886x100%/950844440/2 =1.3%
4	Ardhi SACCO	2016	3699410.5213x100%/34285547 = 10.79%	196030102.29x162008349= 1.21	549622.9088x100%/196293896= 0.28%	3702545x100%/10325000= 35.86%	1282780610.36x100%/196293896/2 = 13.07%

	Society Ltd	2017	4626386.6264x100%/42916388=10.78%	242307424.7x200254070 = 1.21	559292.0534x100%/243170458= 0.23%	4627945.6905x100%/12080255 = 38.31%	1741100479.28x100%/243170458/2 = 14.32%
		2018	6664632.2546x100%/51555771 = 10.77%	275931117.34x226173047= 1.22	72209.49268x100%/277728818= 0.26%	5552859.6x100%/13278000= 41.82%	1899665115.12x100%/277728818/2 = 13.68%
		2019	6664632.546x100%/63776388= 10.45%	342571062.66x280795953= 1.22	999257.7821x100%/344571649= 0.29%	6664878.6x100%/17151000= 38.86%	2236270002.01x100%/344571649/2= 12.98%
		2020	7545516.9158x100%/72136873 = 10.46%	427111318.8x355926099 = 1.2	1583831.3018x100%/428062514=0.37%	7526848.8x100%/17327000= 43.44%	2395009765.83x100%/428062514/2 = 11.19%
5	Bandari SACCO Society Ltd	2016	5263401.185x100%/39574445= 13.3%	624508666.41x293196557=2.13	11713493.4678x100%/342499809=3.42%	2693449.1259x100%/11705559 =23.01%	12645593.8369x100%/72136873/2= 33.21%
		2017	5263401.185x100%/32206653= 11.08%	75180873.88x242518948 =3.1	7791312.6291x100%/285396067=2.73%	1642971.885x100%/8014997=20.5%	11180000.8164x100%63776388/2= 35.06%
		2018	2657148.1425x100%/26439285 =10.05%	350336460.6x194631367 =1.8	1744107.2x100%/231215359= 1.51%	1912719.06x100%/9108186=21%	9501728.5953x100%/51555771/2= 36.86%
		2019	1842419.8374x100%/19558597 =9.42%	22258730/171221000=0.13	21663504x100%/200588000= 1.08%	1322324.4896x100%/7723858= 17.12%	8707735.1252x100%/42916388/= 40.58%
		2020	1045122.507x100%/11651310= 8.97%	14736000/147360000=0.1	1784107.2x100%/168312000= 1.06%	860161.3608x100%/5362602=16.04%	6416540.12105x100%/34285547/2= 37.43%
6	Baraton University SACCO Society Ltd	2016	78730209.8x100%/68461052 = =1.15%	78730209.8/68461052 = =1.15	173764.811x100%/78984005= 0.22%	468876.1284x100%/2707137=17.32%	6391137.7314x100%/165788268/2=7.71%
		2017	102153668.1x100%/92866971= 1.16%	120052846.28/103493833 =1.16	1464859.1419x100%/121062739=1.21%	377469.2966x100%/3237301=11.66%	5005944.25765x100%/121062739/2=8.27%
		2018	145691452.48x100%/122429792=1.19%	120052846.28/103493833 =1.16	3017656.4535x100%/145780505=2.07%	377469.2966x100%/3237301=11.66%	5005944.25765x100%/121062739/2=8.27%
		2019	145691452.48x100%/122429792=1.19%	145691452.48/122429792 =1.19	3017656.4535x100%/145780505=2.07%	47753418.4x100%/4116674 =11.6%	4512718.89845x100%/108348593/2=8.33%
		2020	164541708.68x100%/139442126=1.18%	164541708.68/139442126 =1.18	2586296.9808x100%/165788268=1.56%	485290.525x100%/4485125=10.82%	3601670.628x100%/78984005/2= 9.12%
7	Biashara SACCO Society Ltd	2016	1269975x100%/10325000= 12.3%	1492096894.29/162008349= 9.21	34544644.8798x100%/428062514=8.07%	5071189.9745x100%/72136415 = 7.03%	318852.8952x100%/3199728/2=19.93%
		2017	1714188.1845x100%/12080255 = 14.19%	1443831844.7/200254070 = 7.21	14472009.258x100%/344571649= 4.2%	2927304.4464x100%/63775696 = 4.59%	311493.5208x100%/3199728/2=19.47%
		2018	1742073.6x100%/13278000= 13.12%	1176099844.4/226173047 = 5.2	6276671.2868x100%/277728818= 2.26%	1237338.504x100%/51555771= 2.4%	250451.46225x100%/2714921/2= 18.45%
		2019	1766553x100%/17151000= 10.3%	1156879326.36/280795953= 4.12	299099663.34x100%/243170458= 1.23%	437747.1576x100%/42916388= 1.02%	225881.4272x100%/2714921/2=16.64%
		2020	1431210.2x100%/17327000= 8.26%	783037417.8/355926099 = 2.2	2355526.752x100%/196293896= 1.2%	222856.0555x100%/34285547= 0.65%	180172.03x100%/1974488/2=18.25%
8	Breameg SAC	2016	4434259.6068x%/139442126=3.18%	7435488.46/1481173=5.02	19165123.7808x100%/165788268=11.56%	2809090.7739x100%/23350713 =12.03%	10784526.8334x100%/165788268/2=13.01%

	CO Society Ltd	2017	292828464.6/139442126=2.1	4058105.72/897811=4.52	13222291.8035x100%/145780505=9.07%	409903.7088x100%/1974488=20.76%	8411535.1385x100%/145780505/2=11.54%
		2018	39356.6544x100%/3199728=1.23%	8662838.4x/2707137=3.2	8728623.4819x100%/121062739=7.21%	315325.7336x100%/1974488=15.97%	526622914.65x100%/121062739/2=8.7%
		2019	37116.8448x100%/3199728	6589842.98x/3036794=2.17	5937502.8964x100%/108348593=5.48%	494115.622x100%/2714921=18.2%	3954723.6445x100%/108348593/2=7.3%
		2020	2486824.02x100%/165788268=1.5%	5373919.66/3237301=1.66	2543284.961x100%/78984005=3.22%	248958.2557x100%/2714921=9.17%	2416910.553x100%/78984005/2=6.12%
9	Capital SAC CO Society Ltd	2016	1045614250x100%/707500014=7.79%	68103409.14/58208042=1.17	277404.6204x100%/68664516=4.04%	112866.249xx100%/1546113==0.073%	2441023.5438x100%/68664516/2 = 7.11%
		2017	10449775x100%/7075000=147.7%	66911698.22/56704829=1.18	2807070.849x100%/67154805 = 4.18%	1044976.9906x100%/736366=141.91%	1155062.646x100%/67154805/2=3.44%
		2018	11888122.5x100%/7075000=168.03%	91960742.52/80667318=1.14	3609672.963x100%/92555717=3.9%	1188807.4449x100%/1112803=106.83%	1809464.26735x100%/92555717/2= 3.91%
		2019	12223477.5x100%/7075000=172.77%	123063446.7/11086797=11.1	3951253.0716x100%/123091996=3.21%	1222378.5378x100%/870702=140.39%	12986.205578x100%/123091996/2=2.11%%
		2020	11053343.232x100%/7214976=153.2%	124681576.03/114386767=1.09	2696966.794x100%/125440316=2.15%	1105030.0966x100%/-1153477=(9.58%)	1636996.1238x100%/125440316/2= (2.61%)
10	Chuna SAC CO Society Ltd	2016	3671.237x100%/8401=43.7%	844272.717/201161=4.197	6111.7275x100%/8401=72.75%	3640.5897x100%21813=16.69%	1221852.5x100%/7075000/2=34.54%
		2017	3899.955x100%/8387=46.5%	643111.717/201161==3,197	5083.3607x100%/8387=60.61%	2795.008x100%/26368=10.6%	578381.25x100%/7075000/2=16.35%
		2018	2519.4015x100%/7623=33.05%	224983.2/18 7486=1.2	3404.4318x100%/7623=44.66%	3197.9995x100%/32467=9.85%	90275.25x100%/7075000/2=25.61%
		2019	253051.95x100%/8741=28.95%	28122.9/187486=0.15	3362.6627x100%/8741=38.47%	1316.26x100%/29915=4.4%	651253.75x100%/7075000/2=18.41%
		2020	1535.4846x100%/8073=19.02%	34873.4/174367=0.2	5003.6454x100%/8073=61.98%	814.7712x100%/26368=3.09%	818899.776x100%/7214976/2=22.7%
11	Daima SAC CO Society Ltd	2016	44363107.1956x100%/35904101=123.56%	329303801.8/286351132 = 1.15	35882703.2515x100%/330716159=10.85%	44364523.9446x100%/10981046=404.01%	15113728.4663x100%/330716159/2=9.14%
		2017	53336366.5952x100%/50355331=105.92%	364286082.16/314039726 = 1.16	50330962.045x100%/367379285=13.7%	53330650.8231x100%/12203531=437.01%	8596675.269x100%/367379285/2=4.68%
		2018	63353053.5066x100%/60370739=104.94%	389720968.28/327496612 = 1.19	60347483.7976x100%/390851579=15.44%	63354912.0542x100%/12426674=09.83%	17744661.6866x100%/390851579/2=9.08%
		2019	75628851.1104x100%/72608344=104.16%	489351625.06/414704767 = 1.18	72570071.952x100%/490338324=14.8%	75633160.1118x100%/15878978=0.06.31%	22359427.5744x100%/490338324/2=9.12%
		2020	81248010.0084x100%/78228394= 13.86%	557903439.99/476840547 = 1.17	78188990.9754x100%/558094154=14.01%	81252979.7122x100%/16499407=2.46%	23439954.468x100%/558094154/2=8.4%
12	Elgon Teacher	2016	13059387.7916x100%/38364829=40.23%	374191589.2/170087086=2.2	15064307.3019x	8365676.7048x100%/27240888=30.71%	117075.7431x100%/3025213/2=7.74%

	SAC CO Society Ltd				100%/36895193= 40.83%		
		2017	13059387.7916x100%/38364829= 34.04%	360259480/144103792=2.5	12275030.7111x100%/36895193= 33.27%	8722532.3376x100%/27240888 = 22.02%	111781.62035x100%/3025213/2=7.39%
		2018	38188390.828x100%/208451915= 18.32%	310980612.6/148086006=2.1	6929391.5367x100%/32425791=21.37%	3210816.403x100%/14321215=22.42%	8863157.16x100%/2984228/2=5.94%
		2019	5842963.4567x100%/38364829 = 15.23%	34791380.1/115971267 = 0.3	3926763.2901x100%/32425791= 12.11%	5913996.7848x%/27240888=21.71%	8594576.64x100%/2984228/25.76%
		2020	637745.42x100%/4905734=13%	15701026.56/130841888=0.12	2238346.2828x100%/180511797=1.24%	1997718.9264x100%/2979891=7.04%	75554.5857x100%/2968746/2=5.09%
12	Elgon Teacher SAC CO Society Ltd	2016	13059387.7916x100%/38364829=40.23%	374191589.2/170087086=2.2	15064307.3019x 100%/36895193= 40.83%	8365676.7048x100%/27240888=30.71%	117075.7431x100%/3025213/2=7.74%
		2017	13059387.7916x100%/38364829= 34.04%	360259480/144103792=2.5	12275030.7111x100%/36895193= 33.27%	8722532.3376x100%/27240888 = 32.02%	111781.62035x100%/3025213/2=7.39%
		2018	38188390.828x100%/208451915= 18.32%	310980612.6/148086006=2.1	6929391.5367x100%/32425791=21.37%	3210816.403x100%/14321215=22.42%	8863157.16x100%/2984228/2=5.94%
		2019	5842963.4567x100%/38364829 = 15.23%	34791380.1/115971267 = 0.3	3926763.2901x100%/32425791= 12.11%	5913996.7848x100%/27240888=21.71%	8594576.64x100%/2984228/25.76%
		2020	637745.42x100%/4905734=13%	15701026.56/130841888=0.12	2238346.2828x100%/180511797=1.24%	1997718.9264x100%/2979891=7.04%	75554.5857x100%/2968746/2=5.09%
13	Elimu SAC CO Society Ltd	2016	29222.9267x100%/19237=5.91%	167020.872/137,806.00=0.012	1250.405x100%/19237=6.5%%	207.4833x100%/29223=0.71%	1202608.8x100%/167,029/2 = 14.40%
		2017	1459.2897x100%21813=6.69%	184734.41/155239=1.19	1228.0719x100%/21813=5.63%	1458.5898x100%/29586=4.93%	1301175.04x100%/184,826/2 = 14.08%
		2018	972.9792x100%/26368=3.69%	206624.895/174367=1.185	711.936x100%/26368=2.7%	971.16x100%/32372=3%	1113289.515x100%/206,739/2 = 10.77%
		2019	430.776x100%/29915=1.44%	225733.144/187486=1.204	8352.268x100%/29915=27.92%	429.576x100%/38355=1.12%	1228575.04x100%/225,841/2 = 10.88%
		2020	925.3095x100%/32467=2.85 %	240789.717/201161=1,17	3970.7141x100%/32467=12.23%	925.3828x100%/39716=2.33%	261670393.8849x100%/240,877/2 =9.02%
14	Faridi SAC CO Society Ltd	2016	13586443.3683x100%19329127= 7.29%	149159752.32/130841888=1.14	4369976.5365x100%/150171015=2.91%	145721.0573x100%/1639157=8.89%	2793180.879x100%/150171015/2 = 3.72%
		2017	1639901.4576x100%/27240888 = 6.02%	13916552.04/115971267 = 0.12	346573.403x100%/14321215=2.42%	209784.3264x100%/2979891=7.04%	455414652.9x100%/143212155/2=6.36%
		2018	165695.7869x100%/3242579=5.11%	179184067.26/148086006=1.21	433228.3128x100%/180511797=0.24%	438884.5536x100%/5127156=8.56%	7220471.88x100%/180511797/2=8%
		2019	1782037.8219x100%/36895193 = 4.83%	180129740/144103792=1.25	15964110.477x100%/180998985= 8.82%	406027.5954x100%/5686661=7.14%	7692456.8625x100%/180998985/2= 8.5%
		2020	1549939.0916x100%/38364829 = 4.04%	207506244.92/170087086 = 1.22	667046.128x100%/208451915 = 0.32%	215852.296x100%/4905734=4.4%	7358352.5995x100%/208451915/2= 7.06%

15	Fortitude SAC CO Society Ltd	2016	463095.096x100%/27240888=1.7%	68418419.01/32425791=2.11	1224920407.6x100%/36895193= 33.2	17774100.327x100%/180998985= 9.82%	2186124.2637x100%/19329127/2=22.62%
		2017	5181216.8976x100%/27240888 = 19.02%	43450559.94/32425791=1.34	9530028.3519x100%/36895193= 25.83%	215098975.19x100%/36895193 = 5.83	6793221.68415x19329127/2= 70.29%
		2018	2208331.353x100%/14321215=15.42%	1777032072/148086006=1.2	34064008.977x100%/180998985= 18.82%	120647281.11x100%/36895193 = 3.27	15700379.61825x100%/150171015/2=20.91%
		2019	1934103.048x%27240888/=7.1%	29617201.2/148086006=0.2	5264944.0411x100%/36895193= 14.27%	1484269.0576x100%/144103792= 1.03%	1799541.7237x100%/19329127/2 = 18.62%
		2020	19965269.7x100%/2979891=6.7.%	177703207.2/148086006=1.2	406027.5954x100%/5686661 = 7.14%	3458491.008x%/144103792=2.4%	105643.66865x100%/1639157/2=12.89%
16	Good Faith SAC CO Society Ltd	2016	1324881505.83x100%7796631 = 1.6993%	107487731.72/116834491 = 0.92	2187630.7992x100%/107765064= 2.03%	13248525.646x100%/2996726=44.21%	4305214.3068x100%/107765064/2= 7.99%
		2017	1862635982.88x100%11012392= 1.6914%	134359664.65/116834491 = 1.15	3847104.1008x100%/135461412= 2.84%	18626864.4642x100%/4067978 = 4.5789%	6021263.27495x100%/135461491/2= 8.89%
		2018	23744169.2849x100%15477589= 1.5341%	165620214.52/142776047 = 1.16	3846620.1081x100%/166520351= 2.31%	23743961.6322x100%/5230754 = 4.5393%	7226983.2334x100%/166520351/2= 8.68%
		2019	32263464.372x100%19986040 = 1.6143%	209752749.18/179275854 = 1.17	7276955.7728x100%/211539412= 3.44%	32263475.517x100%/5708430=5.6519%	8514461.333x100%/211539412/2 = 8.05%
		2020	38305120.02x100%25293925=1.5144%	270631722.44/233303209 =1.16	7279110.3996x100%/271608597= 2.68%	38305274.024x100%/6599806=5.804%	10918665.5994x100%/271608597/2= 8.04%
17	Harambee SAC CO Society Ltd	2016	549577.6132x100%/6653482=8.26%	107760568.72/92897042 =1.16	21612.7424x100%/108063712 =0.02%	549732.2092x100%/3472724=15.83%	2474659.0048x100%/108063712/2=4.58%
		2017	1577540.5822x100%/6653482=23.71%	18796347.45/125308983 =0.15	188142.5936x100%/144725072=0.13%	1577790.714100%/4119558=38.3%	2865556.4256x100%/144725072/2=3.96%
		2018	1767070.0384x100%/17723872 =9.97%	141027106.8/117522589 = 1.2	508321.962x100%/141200545 =0.36%	168751.8668x100%/4974956=35.53%	3537073.65225x100%/141200545/2=5.01%
		2019	272947.6288x100%/17723872=1.54%	175062804.62/148358309 = 1.18	970554.4805x100%/176464451=0.55%	2046469.2397x100%/5734013=35.69%	4111621.7083x100%/176464451/2=4.66%
		2020	2272200.3904x100%/17723872 =12.82%	18960269.16/158002243 = 0.12	747721.8138x100%/191723542=0.39%	2272637.1391x100%/7144411=31.81%	5080673.863x100%/191723542/2 =5.3%
18	Imarika SAC CO Society Ltd	2016	2404211767.4x%/293196557=8.2%	129096514.8/11651310=11.08	3058992x100%/=14.6%	1407478.248x100%/11651310=12.08%	2426857.5595x100%/6653482/2=72.95%
		2017	1746136425.6x100/242518948 =7.2%	162793.488/999960=16.28	3876444x100%/29367000=13.2%	1957815.5597x100%/19558597 =10.01%	2866320.0456x100%/6653482/2=86.16%
		2018	591679355.68x100%/194631367=3.04%	317969.8998/2259914=14.07	4887991.566x100%/42877119 =11.4%	2432414.22x100%/26439285=9.2%	3628076.5984x100%/17723872/2 =40.94%
		2019	464100x100%/221000=2.1%	145727.7934/1764259=8.26	5304678.84x100%/36583992= 14.5%	1900192.527x100%/32206653= 5.9%	4114596.8848100%/17723872/2= 46.43%
		2020	150307200x100%/147360000=1.02%	18161599.64/2901214=6.26	4885952.2732x100%/49303252=9.91%	1741275.58x100%/39574445=4.4%	5083206.4896x100%/17723872/2 =57.36%

19	Imarisha SACCO Society Ltd	2016	847238.5744x100%4717364=17.96%	31769655.84/27153552=1.17	713908.5184x100%/31870916=2.24%	847480.4082x100%/622278=1.3619%	975250.0296x100%/31870916/2=6.12%
		2017	1702482.6616x100%5137244=33.14%	40834039.62/35819333=1.14	180208.9388x100%/40956577=0.44%	1702829.5272x100%/743334=22.908%	9071881.8055x100%/40956577/2=4.43%
		2018	3803405.9937x100%5859507=64.91%	47344051.8/41529870=1.14	319662.4521x100%/47389377=0.73%	3803838.1512x100%/995196=38.222%	1478548.5624x100%/47389377/2= 6.24%
		2019	6783195.7644x100%/6558882=1.0342%	60931128.16/54402793=1.12	146308.032x100%/60961680=0.24%	6783559.4136x100%/975336=6.9551%	1399070.556x100%/60961680/2=4.59%
		2020	725313927.48x100%/1062264168.28%	71413047.81/61036793=1.17	1067725.5666x100%/71659434=1.49%	725339274.62x100%/1196969 = 60.598%	175292.6613x100%/71659434/2=4.89%
20	Jamii SACCO Society Ltd	2016	2330020.9979x100%/72136873 = 3.23%	617751096.6/280795953 = 2.2	6629310.2x100%/17327000=38.26%	15838313.018x100%/428062514=3.7%	487781.3178x100%/5137244/2=18.99%
		2017	3318296.158x100%/72136873=4.6%	898547049.6/280795953 = 3.2	5794148.8x100%/17327000=33.44%	9992577.821x100%/344571649 = 2.9%	453618.6452x100%/5137244/2=17.66%
		2018	15838313.018x100%/428062514=3.7%	49758070.34/226173047 = 0.22	5196753 x100%/17151000= 30.3%	7220949.268x100%/277728818 = 2.6%	740055.7341x100%/5859507/2=25.26%
		2019	2380501.695x100%/72136415=3.3%	102129575.7/200254070 = 0.51	3097470.6x100%/17151000=18.06%	5592920.534x100%/243170458 = 2.3%	700154035x100%/6558882/2=21.35%
		2020	353470x100%/17327000=2.04%	34021753.29/162008349 = 0.21	1330455.6x100%/13278000=10.02%	4514759.608x100%/196293896 = 2.3%	876367.8825x100%/10622641/2=16.5%
21	Kathera Rural SACCO Society Ltd	2016	46911449.12x100%/293196557=16%	105023946.8/2901214=36.2	4190626.6725x100%/26439285=15.85%	4190670.9x100%/29367000=14.27%	41275228.3375x100%5413147/2=15.25%
		2017	41047517.98x100%293196557=14%	244457408.5/8014997=30.5	2887169.922x100%/26439285=10.92%	24231030.4x100%/200588000=12.08%	5777658.48x100%/10589550/2=10.912%
		2018	4887443.9575x100%/39574445=12.35%	488799156.6/42877119=11.4	13433612.3579x100%231215359=5.81%	2094725.7387x100%/19558597=10.71%	6677227.8801x100%11610551/2=11.502%
		2019	3909955.166x100%/39574445=9.88%	4880272745.7/285396067=17.1	1262147.724x100%/36583992=3.45%	473318.0474x100%19558597=2.42%	7172948.61855x100%14068743/2=10.197%
		2020	4870583.0878x100%342499809=1.42%	241549897.5/32206653=7.5	208488.278x100%9108186=2.3%	2003285.7x100%171221000=1.17%	457963161.04x100%/10620667/286.24%
22	Kentours SACCO Society Ltd	2016	10240050.1799x100%/5413147=18.917%	163421471.52/143352168=1.14	1706084.8896x100%164046624=1.04%	10239535.0803x100%/5836821=17.543%	8251545.1872x100%164046624/2=10.06%
		2017	14304364.14x100%/10589550=13.508%	194227931.56/164599942=1.18	1816780.6308x100%195352756=0.93%	14304861.1491x100%/8069533=17.727%	11555115.5174x100%195352756/2=11.83%
		2018	1811827123355x100%/11610551=15.605%	219179887.01/184184779=1.19	1807207.676x100%/220391180=0.82%	18119199.7681x100%/9262921=19.561%	13344685.949x100%220391180/2=12.11%
		2019	2080767.0897x100%/14068743=14.79%	2229329589/181837650=12.26	1824465.7568x100%/222495824=0.82%	2081391739.2x100%/10436180=19.944%	14339855.8568x100%222495824/2=12.89%
		2020	2485236.078x100%/10620667=23.4%	231256394.4/192713662=1.2	1824930.4866x100%/233965447=0.78%	24855971.413x100%/6342427=39.19%	9159747.25005x100%/233965447/2=7.83%

23	Kenya Achievas Kenya SACCO SACCO Society Ltd	2016	2330020.9979x100%/72136873 = 3.23%	949926797.4/226173047 = 4.2	15838313.018x100%/428062514=3.7%	2328748.8x100%/17327000= 13.44%	3583545149.6x100%/344571649/2= 20.8%
		32017	2232173.58x100%/63776388= 3.5%	662840971.7/200254070 = 3.31	9992577.821x100%/344571649= 2.9%	901026x100%/17151000= 12.6%	1762985820.5x100%/243170458/2 = 14.50%
		2018	1134226.962x100%/51555771= 2.2%	196030102.29/162008349 = 1.21	7220949.268x100%/277728818= 2.6%	1088796x100%/13278000= 8.2%	237714798.4x100%/428062514/2 = 11.20%
		2019	480663.5456x100%/42916388= 1.12%	220674181.38/355926099 = 0.62	5592920.534x100%/243170458= 2.3%	762264.0905x100%/12080255= 6.31%	1971874607.8x100%/277728818/2 = 14.20%
		2020	119999.4145x100%/34285547= 0.35%	140397976.5/280795953 = 0.5	3533290.128x100%/196293896= 1.8%	464625x100%/10325000= 4.6%	986376827.4x100%/196293896/2 = 10.05%
24	Kenya Police SACCO SACCO Society Ltd	2016	707193.755x100%/2817505=25.1%	223584674.7/41251785= 5.42	2485236.078x100%/10620667 =23.4%	11948247.044x100%/192713662=6.2%	6015.4099xx100%/19237/2= 62.54%
		2017	661538.3292x100%/3909801=16.92%	141897027.26/40658174 =3.49	2221454.5197x100%/14068743=15.79%	22293295.89x100%/181837650 =12.26%	6508.9992x100%/21813/2= 59.68%
		2018	505776.6384x100%/4092044=12.36%	182480261.04/36206401 =5.04	1863493.4355x100%/11610551=16.05%	18602662.679x100%/184184779=10.1%	5566.2848x100%/26368/2= 42.22%
		2019	398873.6752x100%/3486658=11.44%	89183160.6/30752814=2.9	537949.14x100%/10589550=5.08%	358827873.56x100%/164599942=2.18%	6146.03675x100%/29915/2= 41.09%
		2020	22611235.9x100%/2418314 =9.35%	57944476.8/20694456=2.8	171596.7599x100%/5413147= 3.17%	2006930.352x100%/143352168 =1.4%	6035.6153x100%/32467/2= 37.18%
25	Kenpipe SACCO SACCO Society Ltd	2016	12207.3586x100%61036793= 0.02%	107394900.51/10622641 = 10.11	8233668.9666x100%/71659434=11.49%	203324533.62x100%/1196969 =16.98%	8918016.5613x100%/71659434/2 =24.89%
		2017	1637524.0693x100%54402793 = 3.01%	1442940.4/6558882= 2.2	14630803.2x100%/60961680= 24%	151274.6136x100%/975336=15.51%	7127747.4x100%60961680/2= 23.5%
		2018	8305.974x100%41529870= 0.02%	34571091.3/5859507= 5.9	3459424.521x100%/47389377 =7.3%	3803838.1512x100%/995196=38.222%	3848017.4124x100%/47389377/2 = 16.24%
		2019	36177526.33x100%/35819333= 1.01%	18185843.76/5137244= 3.54	1784489.388x100%/40956577 =4.4%	89794.7472x100%/743334=12.08%	2955017.03055x100%/40956577/2=14.43%
		2020	2715355.2x100%/27153552= 0.1%	6339759.16/4717364 =15.19	701160.152x100%/31870916= 2.2%	82078.4682x100%/622278=13.19%	1931102.60555x100%/40956577/2=9.43%
26	Kimisitu SACCO SACCO Society Ltd	2016	13769172.7664x100%63775696/= 21.59%	9802419/891129 = 11	171418818.45x100%12080255 = 14.19%	599997.475x100%/34285547= 17.5%	18573229.2x100%168312000/2= 22.07%
		2017	3234678.6x100%/17151000= 18.86%	1052768843.82/51555771 = 20.42	2211894.6905x100%/12080255= 18.31%	3699410.5213x100%/34285547 = 10.79%	1739.016x100%20952000/2=16.6%
		2018	2296518.9x100%17151000= 13.39%	4793599398.68/277728818= 17.26	5664963.216x100%/42916388 = 13.2%	17273862.848x100%/196293896= 8.8%	322828.6404x100%5362602/2=12.04%
		2019	4472540004.02x100%344571649= 12.98%	658367195.67/51555771 = 12.77	29909966.334x100%/243170458= 12.3%	2228560.555x100%/34285547= 6.5%	31398.744x100%999960/2=6.28%
		2020	6415904.6328x100%63776388 = 10.06%	588766904.82/51555771 = 11.42	4626386.6264x100%/42916388=10.78%	605045x100%10325000/= 5.86%	3837513.6x100%168312000/2= 4.56%

27	Kingdom SAC CO Society Ltd	2016	6406338.1746x100%/63776388 = 10.45%	949657301.82/51555771 = 18.42	637705.7904x100%/3199728= 19.93%	247185750048x100%/122429792=20.19%	324433.0595x100%/2714921/2=23.9%
		2017	6116155.6092x100%/63776388 = 9.59%	163754500/10325000= 15.86	2936110226.28x100%/165788268=17.71	13699893.7248x100%122429792=11.19%	12233389.77595x100%121062739/2=20.21%
		2018	2027346780.66x100%/280795953= 7.22%	4790019531.66/428062514 = 11.19	278217.825x100%1912150=14.55%	300454.4592x100%/3199728=9.39%	1616339.352x100%17568906/2=18.4%
		2019	1608642.0545x100%/72136415 = 2.23%	142081400/17327000= 8.2	485290.525x100%/4485125=10.82%	15730.6176x100%3199728=4.92%	188734.6483x100%3237301/2=11.66%
		2020	7277062.738x100%428062514 =1.7%	76931880/17327000= 4.44	2597729.6012x100%/26346142=9.86%	3017656.4535x100%145780505=2.07%	747894.052x100%17568906/2=8.4%
28	KolengeTea SAC CO Society Ltd	2016	384975.7978x100%/2714921=14.18%	4514473142.46/1481173 =3.02	177111.5736x100%/1974488=8.97%	1230634.467x100%11086797=11.1%	1035072.5x100%/7075000/2=29.26%
		217	1154371.7628x100%/103493833=11.16%	902543779.69/108348593 =8.33	4210354.698x100%/68461052 =6.15%	1130585x100%7075000=15.98%	62932125x100%7075000/217.79%
		2018	9480035.1028x100%103493833=9.16%	16316675/2714921=6.01	6264186.258x100%/68461052 =9.15%	16260452.6716x100%/123091996=13.21%	4820249.0232x100%/68664516/2=14.04%
		2019	6649275.1236x100%/92866971 =7.16%	16190801.6/1974488=8.2	2681212.4448x100%/122429792=2.19%	782337.472x100%/12224023=6.4%	656666.5672x100%10456474/2=12.56%
		2020	38632659.936x100%/92866971 =4.16%	720334125.6/78984005= 9.12	37116.8448x100%3199728=1.16%	38223.8178x100%870702=4.39%	112866.249x100%/1546113=7.3%
29	Koru SAC CO Society Ltd	2016	57848217.7401x100%342499809=16.89%	489161791.16/242518948 =20.17	2940048.492x100%/26439285 =11.12%	20837595.7x100%/171221000= 12.17%	2485897.6787x100%/19558597= 25.42%
		2017	525519.4657x100%/3677533=14.29%	4649088233.16/242518948=19.17	21734243.746x100%/231215359=9.4%	19005531x100%/171221000=11.1%	18123742.85x100%171221000/2=21.17%
		2018	1569715.4619x100%11705559 =13.41%	424483686.54/32206653 =13.18	110442.6134x100%1764259=6.26%	821461.074x100%19558597=4.2%	11274902.85x100%171221000/2=13.17%
		2019	4486595.932x100%49303252= 9.1%	244448496.27/32206653 =7.59	273245.58x100%9108186=3%	997488.447x100%19558597=5.1%	8207952x100%147360000/2=11.14%
		2020	143849919.78x100%/342499809=4.2%	1629611542.57/285396067=5.71	548759.88x100%/36583992=1.5%	4172230.4x100%200588000=2.08%	6734352x100%147360000/2=9.14%
30	Lontels SAC CO Society Ltd	2016	3375384.507x100%/11651310= 28.97%	291427149.5/34285547= 8.5	1714188.1845x100%/12080255= 14.19%	7320919.482x100%/51555771= 14.2%	3679187.1011x100%/38364829/2 = 19.18%
		2017	1395826.938x100%/11651310= 11.98%	195427617.9/34285547= 5.7	1003869.1905x100%/12080255= 8.31%	555276.5367x100%/51555771= 10.77%	4037843.38955x100%36895193/2= 20.87%
		2018	15265898.4x100%/168312000= 9.07%	628140467.2/196293896 = 3.2	1373324.416x100%/42916388 = 3.2%	5887669.0482x100%/51555771 = 11.42%	3610611.82785x100%/32425791/2= 22.27%
		2019	1319976x100%/20952000=6.3%	54856875.2/34285547= 1.6	7854405.7934x100%/243170458= 3.23%	30307188.298x100%/226173047= 13.4%	2278700.2812x100%27240888/2 = 16.73%
		2020	270275.1408x100%5362602=5.04%	8879500/10325000= 0.86	729578.596x100%/42916388= 1.7%	25376615.8734x100%/226173047= 11.22%	1399428.7948x100%/19329127/2 = 14.48%

31	Maisha Bora SACCO Society Ltd	2016	2296518.9x100%17151000=13.39%	3566379511.98/355926099= 10.02	637705.7904x100%/3199728=19.93%	14924191.6448x100%/122429792=12.19%	250451.46225x100%/2714921/2=18.45%
		2017	1519578.6x100%/17151000=8.86%	722310212.68/139442126=5.18	558992.4816x100%3199728=17.47%	10514973.4328x100%/103493833=10.16%	255881.4272x100%2714921/2=16.64%
		2018	3762766.064x100%/63775696=5.9%	582868086.68/139442126=4.18	12449655.127x100%145780505=8.54%	8900469.638x100%103493833=8.6%	6679690.75845x100%108348593/2=12.33%
		2019	11336407.2521x100%/344571649= 3.29%	10335121.44/3199728=3.23	99991.0648x100%2113976=4.73%	146062.7498x100%/2714921=5.38%	745546.7673x100%1481173/2=10.02%
		2020	924757.626x100%/63776388=1.45%	10703352.4/3199728=1.16	10703352.4x100%4116674=2.6%	105881.919x100%2714921=3.9%	108869.0649x100%3036794/2=7.17%
32	Metropolitan SACCO Society Ltd	2016	655145x100%7075000=9.26%	126311451.14/58208042=2.17	1230634.467x100%11086797=11.1%	17376481.1x100%78984005=22%	1643538.4461x100%15281622/2=21.51%
		2017	781787.5x100%7075000=11.05%	172628060.52/80667318=2.14	11541624.7903x100%114386767=10.09%	2281376.2104x100%/10522953=21.68%	1040145.888x100%/108348593/2=19.2%
		2018	903477.5x100%/7075000=12.77%	10294809.03/114386767=0.09	9253889.4503x100%114386767=8.09%	468876.1284x100%2707137=17.32%	233483.206x100%/2714921/2=17.2%
		2019	1096676.352x100%7214976=15.2%	111976649.7/11086797=10.1	544730.688x100%/7214976=7.55%	103427.8272x100%897811=11.52%	205926.75785x100%/2714921/2=15.17%
		2020	332525x100%7075000=4.7%	633959988.22/56704829=11.18	2308792.32x100%7214976=3.2%	7203341.256x100%78984005=9.12%	518197.3578x100%92866971/2=11.16%
33	Mombasa Port SACCO Society Ltd	2016	11541624.7903x100%=10.09%	130250750/7075000=18.41	4146300.1452x100%80667318=5.14%	1156762.5x100%/7075000=16.35%	6452361.14557x100%58208042/2=22.17%
		2017	10322368638.34x100%114386767=9.02%	259724111.56/123091996=2.11	2532953.7852x100%80667318=3.14%	9025605.792x100%/67154805=13.44%	5694784.095x100%58208042/2=19.5%
		2018	544730.688x100%/7214976=7.55%	1448637.15/432429=3.35	145037.5x100%7075000=2.05%	509633880x100%/420490=12.12%	575197.5x100%7075000/2=16.26%
		2019	230879.232x100%/7214976=3.2%	3395737.8/870702=3.9	72872.5x100%7075000=1.03%	87701.1906x100%736366=11.91%	53319625x100%/7075000/2=14.79%
		2020	2696966.794x100%/125440316=2.15%	2937655.2/12224023=2.4	3609672.963x100%/92555717=3.9%	87701.1906x100%/10449976=6.89%	3446958.7032x100%/68664516/2=10.04%
34	Muki SACCO Society Ltd	2016	50330962.045x100%/367379285=13.7%	298401894.57/63354967=4.71	72570071.952x100%/490338324=14.8%	11147994.8804x100%81253607=13.72%	13546124299.5x100%11053549/2=24.51%
		2017	7654010.312x100%50355331=15.2%	72447509.42/12426674 = 5.83	7377007.7504x100%/72608344=10.16%	1560843.9022x100%/16499407=9.46%	112925.3983 x100%/1153477/2=19.58%
		2018	2981035.5952x100%50355331 = 5.92%	19150261.2/5319517=3.6	5198757.4304x100%/72608344= 7.16%	525057.8004x100%6945209=7.56%	43775.2978x100%/484508/2=18.07%
		2019	9860847.3964x100%/314039726= 3.14%	3548932337.32/390851579=9.08	4893516.2506x100%/414704767= 1.18%	46879908.936x100%/558094154=8.4%	7909011.9238x100%/125440316/2= 12.61%
		2020	6594834.246x100%/314039726 = 2.1%	20591173.22984228/=6.9	746468.5806x100%414704767 = 0.18%	234151.4862x100%/3025213=7.74%	363274.0416x100%/7214976/2=10.07%

35	Miliki SAC CO Society Ltd	2016	33915056x100%484508=7.0%	173577468.4/10456474=16.6	33691950x100%7075000=47.79%	582080.42x100%/58208042=1%	2153429.4822x100%/7796631/2=55.24%
		2017	305727.303x100%/432429=70.7%	248709428.8/10449976=23.8	3353550x100%/7075000=47.4%	2370261.8522x100%/56704829=4.18%	3013541.0708x100%/11012392/2 = 54.73%
		2018	1049746865x100%/699365=15.01%	238719051.92/11888399=20.08	481100000x100%/7075000=68.03	3307360.038x100%/80667318=4.1%	361711254.93x100%/15477589/2 = 46.74%
		2019	5554672.9x100%420490=13.21%	366720690/12224023=30	5143525x100%/7075000=72.7%	1119766.497x100%/11086797=10.1%	4260024.426x100%/19986040/2=42.63%
		2020	8169406.7x100%/897737=9.10%	154860221.49/11053549=14.01	38445222x100%7214976=53.25	2390683.4303x100%/114386767=2.09%	478181652125x100%/25293925/2 = 37.81%
36	Mwalimu SAC CO Society Ltd	2016	2185733.3745x100%/72136415 = 3.03%	1786749016.98/355926099= 5.02	565711.5255x100%/34285547 = 1.65%	3985210x100%/17327000= 23%	3000718223.14x100%/428062514/2 = 14.02%
		2017	829084.048x100%/63775696=1.3%	3425702.66/280795953=1.22	437747.1576x100%/42916388 = 1.02%	48125706000x100%/17151000=28.06%	2081212759.96x100%/344571649/2= 12.08%
		2018	628980.4062x100%/51555771=1.22%	275931117.34/226173047 = 1.22	577424.6352x100%/51555771 = 1.12%	2897259.6x100%/13278000=21.82%	1760800706.12x100%/277728818/2 = 12.68%
		2019	523579.9336x100%/42916388=1.22%	4860250.47/162008349=0.03	892869.432x100%/63776388=1.4%	36615163.4905x100%/12080255= 30.31%	1432273997.62x100%/243170458/2 = 11.78%
		2020	359998.2435x100%/34285547=1.05%	4860250.47/162008349=0.03	887283.5379x100%/72136873 = 1.23%	1637545x100%/10325000=15.86%	988339766.36x100%/196293896/2 = 10.07%
37	Mwito SAC CO Society Ltd	2016	227820633.6x100%3199728=71.2%	303983834.68/139442126=2.18	4320979.6608x100%/165788268=2.56%	659691.75x100%/1912150=34.5%	10824137.79365x100%/7213687 3/2= 30.01%
		2017	2057425.104x100%3199728=64.3%	133448473.28/122429792=1.09	1559851.4035x100%/145780505=1.07%	522786.2648X100%/2113976=24.73%	11722048500x100%/63776388/2= 25.06%
		2018	9252456.0768x100%/2714921=34.08%	14489136.62/103493833=0.14	1222733.6639x100%/121062739=1.01%	401596.382x100%/1772270=22.66%	5109176.9061x100%/51555771/2 = 19.82%
		2019	791670.90636x100%/2714921=29.16%	13930045.65/92866971=0.15	1170164.8044x100%108348593=1.08%	26851.1046x100%1481173=19.02%	3274520.4044x100%42916388/2 = 15.26%
		2020	159341.1816x100%1974488=8.07%	7530715.72/68461052=0.11	157968.01X100%78984005=0.2%	281719.1046x100%/897811=11.52	2249131.8032x100%/34285547/2 = 13.12%
38	Mzima SAC CO Society Ltd	2016	799744.428x100%/10522953=7.6%	292828464.6/139442126=2.1	1639220.6544x100%/3199728=51.23%	550090.2384x100%/2707137=20.32%	2326014.5314x100%/165788268/2=27.71%
		2017	155872544x100%15281622=10.2%	24485958.4/122429792=0.2	11003846.7092x100%/3199728=34.39%	551785.4698x100%/3036794=18.17%	841295.1385x100%/145780505/2=11.54%
		2018	948720.924x100%/17568906=5.4%	12419259.96/103493833=0.12	661897.7398x100%/2714921=24.38%	407899.926x100%/3237301=12.6%	5550726.58315x100%/121062739/2=9.17%
		2019	684175.8909x100%/23350713=2.93%	15787385.07/92866971=0.17	520450.3557x100%2714921=19.17%	43636744.4x100%/4116674=10.6%	5860376.301x100%145780505/2=8.04%
		2020	2581921.916x100%/26346142=9.8%	7134715.72/68461052=0.11	20886.2136x100%/1974488=11.97%	215286x100%4485125=4.8%	5471012.844x100%165788268/2=6.6%

39	Nafaka SACCO Society Ltd	2016	591084258912x100%2931965 57=20.16%	126638224/39574445=3.2	1998473.1606x100%/194631367=10.18%	2159269.1088x100%/19558597=11.04%	14920200x100%147360000/2=20.25%
		2017	32720735.7612x100%/293196557=11.16%	2169010109.2/285396067=7.6	21759786.8306x100%/194631367=11.18%	17049980x100%200588000=8.5%	13277136x100%147360000/2=18.02%
		2018	4887744.9575x100%/39574445=12.35%	170695260.9/32206653=5.3	419062.66725x100%/26439285=15.85%	288591.0178x100%/2259914=12.77%	877926.2085x100%11651310/2=15.07%
		2019	390995516.6x100%/39574445=9.88%	9283884.8/2901214=3.2	2093991.372x100%/26439285=7.92%	549938.6896x100%/7723858=7.12%	6687913.469x100%11651310/2=11.98%
		2020	14384991.978x100%/342499809=4.2%	28052489.5/8014997=3.5	4184997.9979x100%/231215359=1.81%	4190670.9x100%/29367000=14.27%	8474509.2x100%168312000/2=10.07%
40	Nacico SACCO Society Ltd	2016	34906032x100%/20952000=16.66%	230837993.6/72136873=3.2	34257106.266x100%/280795953= 12.2%	56267858.5268x100%/277728818= 20.26%	22027947.7x100%/200254070/2=22%
		2017	1396421.5608x100%/5362602=26.04%	5093943916.6/428062514 = 11.9	3425710.6266x100%280795953= 1.22%	29628669.157x100%/226173047= 13.1%	3866766.5588x100%/42916388/2 = 18.02%
		2018	162793.488x100%/999960=16.28%	142081400/17327000=8.2	714295545.6x100%/63776388=1 1.9%	2537661587.354x100%/226173047=1 1.22%	2313193.3132x100%/42916388/2=10.78%
		2019	12724387.2x100%/168312000=7.56%	58911800/17327000= 3.4	6664632.546x100%/63776388 = 10.45%	7320919.482x100%/51555771=14.2%	14869873.5067x100%/243170458/2= 12.23%
		2020	537125.391x100%11651310=4.61%	1138963516.8/355926099 = 3.2	9992578.7821x100%/344571649= 0.29%	5310244.413x100%/51555771=10.3%	549651.6025x100%/12080255/2=9.1%
41	Nandi Farmer SACCO Society Ltd	2016	25099582.68x100%/139442126=18%	28370924.45/2714921=10.45	20181297.435x100%103493833=19.5%	451762.8544x100%/2714921=16.64%	3474398.389x100%/68461052/2=10.15%
		2017	22589624.412x100%/139442126=16.2%	992714459.8/121062739=8.2	10514973.4328x100%/103493833=10.16%	9025437.7969x100%/108348593=8.33%	3833818.912x100%/68461052/2=11.2%
		2018	263337.6144x100%/3199728=8.23%	11696982/1772270=6.6	146062.7498x100%2714921=5.38%	74354.8846x100%1481173=5.02%	88555.7868x100%/1974488/2=8.97%
		2019	485078.7648x100%/3199728=15.16%	16257771.2/3237301=11.2	377374.019x100%/2714921=13.9%	217738.1298x100%/3036794=7.17%	76610.1344x100%1974488/2=7.76%
		2020	2586296.9808x100%/165788268=1.56%	124739232.6/17568906=7.1	5096741.3119x100%/121062739=4.21%	1606098.4722x100%/15281622=10.51%	2061482.5305x100%/78984005/2=5.22%
42	Ollin SACCO Society Ltd	2016	11740562.0714x100%/582080420=20.17%	115676250/7075000=16.35	11309557.9836x100%/80667318=14.02%	997575x100%/7075000=18.41%	13755008.73175x100%114386767/2=24.05%
		2017	640288.462x100%/58208042=1.1%	231012529.2/67154805=3.44	911540693.4x100%/80667318=11.3%	25972.411156x100%/123091996=2.11%%	12062084.58015x100%/114386767/2=21.09%
		2018	655145x100%7075000=9.26%	2152908.8/420490=5.12	357287.5x100%/7075000=5.05%	1448.607x100%/432429=3.35%	273365.344x100%/7214976/2=7.55%
		2019	105417500x100%/707500014.9%	2142825.06/736366=2.91	568122.5x100%7075000=8.03%	124510.386x100%/870702=14.3%	548338.176x100%/7214976/2=15.2%
		2020	3460691.6064x100%/68664516=5.04%	72000334.64/10449976=6.89	36096782.963x100%/92555717=3.9%	1515778.852x100%/12224023=12.4%	7620449.197x100%/125440316/2=12.15%

43	Safaricom SACCO Society Ltd	2016	2709224.8599x100%/11053549=24.51%	302263418.04/81253607=3.72	72570071.952x100%/490338324=14.8%	2984018.9457x100%/63354967=4.71%	25165481.0225x100%/367379285/2=13.7%
		2017	11050309.66x100%/1153477=9.58%	72597390.8/16499407=4.4	7377007.7504x100%/72608344=10.16%	1221542.0542x100%/12426674=9.83%	2749010.0726x100%50355331/2=10.92%
		2018	1637976.1956x100%/484508=33.80%	52089067.5/6945209=7.5	3020507.1104x100%/72608344= 4.16%	723454.312x100%/5319517=13.6%	1490517.7976x100%/50355331/2= 5.92%
		2019	3273992.2476x100%/125440316= 2.61%	4743800309/558094154=8.5	116116133.476x100%/414704767= 2.8%	35489323.3732x100%/390851579=9.08%	1821430.4108x100%/314039726/2= 1.16%
		2020	1637799.552x100%/7214976=22.7%	20268927.1/3025213=6.7	829409.534x100%/414704767= 0.2%	177263.1432x100%/2984228=5.94%	1413178.767x100%/314039726/2= 0.9%
44	Sheria SACCO Society Ltd	2016	14890258.864x100%/2863511132=5.2%	382205.9/201161=1.9	3616.7235x100%/29915=12.09%	36442.703x100%174367=20.9%	6985.755x100%/155,239.00/2=9%
		2017	4295266.98x100%/286351132=1.5%	442554.2/201161=2.2	2457150.08x100%/225,841 = 10.88%	20052.205x100%/174367=11.5%	5510.9845 x100%/155,239.00/2=7.1%
		2018	2965678.7426x100%/35904101 = 8.26%	90907.6/32467=2.8	1216.115x100%/8387=14.5%	972.9792x100%/26368=3.69%	72964485x100%/21813/2=6.69%
		2019	1256643.535x100%/35904101=3.5%	396097.4/32467=12.2	6808.574987x100%/755.6687=9.01%	3348.736x100%/26368=12.7%	614.03595x100%/21813/2=5.63%
		2020	35882703.2515x100%/330716159=10.85%	74190116/240877=3.8	971.6733x100%/38355=1.12%	971.6733x100%206739=0.47%	3502.4527x100%/184,826.00/2=3.79%
45	Shirika SACCO Society Ltd	2016	1458.585898x100%/29586=4.93%	521130.48/167029=3.12	5842963.4567x100%/38364829= 15.23%	15964110.477x100%/180998985= 8.82%	279173.6442x100%/5127156=10.89%
		2017	740.3627x100%/8741=8.47%	113690.67/19237=5.91	708387.9896x100%/4905734=14.44%	5840509.0519x100%/36895193 = 15.83%	193806.4968x100%/5127156/2=7.56%
		2018	130677.95x100%/8741=14.95-%	20775.96/19237=1.08	735860.1x100%/4905734=15%	4895992.111x100%/36895193=13.27%	708503.53335x100%/32425791/2=4.37%
		2019	2232698.08x100%/184,826 = 12.08%	206709/137,806=1.5	14716705.199x100%/208451915= 7.06%	16211676.6x100%/144103792=11.25%	2707676.955x100%/180511797/2= 3%
		2020	211.4984x100%/21813= 9.68%	292148.72/137806=2.12	7358374.2022x100%/38364829= 19.18%	368905707.52x100%/144103792=2.56%	368032.72785x100%/32425791/2= 2.27%
46		2016	5557400.5624x100%/27240888 = 16.73%	436997653.65/150171015=2.91	7279110.3996x100%/271608597= 2.68%	1484123.668x100%/32263558=4.6%	11422083.76x100%142776047/2= 16%
		2017	910829305.8x100%/143212155=6.36%	139169714.4/19329127=7.2	3905382.02x100%/25293925 = 15.44%	296267.517x100%/5708430=5.19%	8281043.032x100%/142776047/2= 11.6%
		2018	386193.8736x100%/2979891=12.96%	59920293.7/19329127=3.1	7292238.5775x100%/25293925= 28.83%	529171.461x100%/5708430=9.27%	844302.4995x100%/15477589/2=10.91%
		2019	209784.3264x100%/2979891=7.04%	274767964.8/130841888=2.1	2586656.199x100%/233303209 =11.1%	17028922.666x100%/211539412= 8.05%	837337.5649x100%/15477589/2=5.41%
		2020	1010636.9448x100%/27240888=3.71%	18317864.32/130841888=0.14	37795119.858x100%/233303209= 16.2%	2524236.852x100%/19986040=12.63%	1923310.05405x100%/166520351/2= 2.31%

47	Siraji SAC CO Society Ltd	2016	310183.7122x100%/5230754 = 5.93%	379291953.6135461412/ = 2.84	17018922.66x100%211539412 = 8.05%	10166412.9792x100%/17723872=57.36%	449833.31985x100%/5734013/2= 15.69%
		2017	434675.6574x100%/5230754 = 8.31%	100653262.88/11012392 = 9.14	408543.4644x100%/7796631= 5.24%	10161347.726x100%/191723542=5.3%	18915433566x100%/28106142/2= 13.46%
		2018	11323383.868x100%/166520351= 6.8%	55282207.84/11012392= 5.02	8610428.6136x100%/107765064= 7.99%	190767.075x100%/3023250=6.31%	7499739.1675x100%/176464451/2=8.5%
		2019	73363771.86x100%/15477589= 4.74%	1869351865.6/116834491 = 1.6	441417.7398x100%/2996726= 14.73%	84375.49391x7144411=11.81%	668189.9744x100%/17723872/2= 7.54%
		2020	569863.296x100%/23744304= 2.4%	233668982/116834491= 2	362603.846x100%/2996726=12.1%	751984.9677x100%/33721299= 2.23%	487406.48x100%/17723872/2=5.5%
48	Stima Investment SAC CO Society Ltd	2016	235045.178x100%117522589= 0.2%	40586240.2/6653482=6.1	2136631.966x100%/92897042 = 2.3%	1843311.1486x100%/61036793 = 3.02%	700160.6535x100%/6558882/2=21.35%
		2017	141027.468x100%/117522589= 1.2%	22012680.3/5644277=3.9	1077605.872x100%92897042= 1.16%	714130.4781x100%/61036793= 1.17%	1399070.556x100%/60961680/2= 4.59%
		2018	513992.288x100%/17723872=2.9%	5436211.03/1613119=3.37	30606.0172x100%/6653482=0.46%	1073949.0051x100%/10622641 = 10.11%	7038.99635x100%/425317/2=3.31%
		2019	1767070.0384x100%/17723872 =9.97%	34192331.4/4119558=8.3	54957761.32x100%/6653482= 8.26%	87955467.48x100%/106226418.28%	12240.4668x100%/975336/2=2.51%
		2020	508321.963x100%/141200545= 0.36%	18639445.44/19416089= 0.96	21612.7424x100%108063712= 0.02%	1067725.5666x100%/71659434 =1.49%	40665.0684x100%/6558882/2=1.24%
49	Tai SAC CO Society Ltd	2016	146308.032x100%/60961680=0.24%	34688281.44/5859507=5.92	975562.6356x100%/5137244= 18.99%	288287.7444x100%/5859507= 4.92%	12269177.0355x100%/10622641/2=23.1%
		2017	224313.7644x100%/6558882=3.42%	3184627.2/995196=3.2	1950500.0592x100%/31870916= 6.12%	38040080.832x100%/60961680 =6.24%	4099181.1105x100%/47389377/2 =17.3%
		2018	14691.7568x100%/6558882= 2.24%	1656188/385160=4.3	975707.6652x100%/35351727 =2.76%	346882.8144x100%/5859507=5.92%	27615.972x100%/385160/2=14.34%
		2019	609311.2816x100%54402793= 1.12%	295709712.4847389377= 6.24	38519.0082x100%/622278=6.19%	11730296.2x100%/1196969 =9.8%	11019484.53x100%/4058742/2=5.43%
		2020	5440.2793x100%/54402793= 0.01%	30821006.82/5859507=5.26	716567.5916x100%/4717364= 15.19%	14077.9927x100%/425317=3.31%	21993.268x100%/975336/2=4.51%
50	Torch SAC CO Society Ltd	2016	331804710.3x100%158002243 = 2.1%	113432780.8/17723872= 6.4	235045.178x100%117522589= 0.2%	409854.4912x100%/6653482=6.16%	7580398.6272x100%92897042/2 = 16.32%
		2017	189602.6916x100%158002243 = 0.12%	822324341.66/176464451 =4.66	1410271.068x100%/117522589= 1.2%	5731112.8512x100%/144725072/=3.96%	4923543.226x100%92897042/2= 10.6%
		2018	751492.1728x100%/17723872= 4.24%	9309636.13/2495881=3.73	513992.288x100%/17723872= 2.9%	86624.4903x100%/1613119=5.37%	153030.086x100%/6653482/2=4.6%
		2019	2272200.3904x100%/17723872 =12.82%	32110472.8/5734013=5.6	1767070.0384x100%/17723872=9.97%	341923.314x100%/4119558=8.3%	86495.266x100%/6653482/2=2.6%
		2020	747721.8138x100%/191723542 =0.39%	95560882.8/28106142=3.4	508321.962x100%/141200545 =0.36%	186394.4544x100%/19416089= 0.96%	10806.3712x100%/108063712/2= 0.02%

51	Ukristo Na Ufanisi Wa Angalican SACCO Society Ltd	2016	30333.34x100%/15166670=0.2%	107394900.51/10622641=10.11	146308.032x100%/60961680=0.24%	346882.8144x100%/5859507=5.92%	901044.694x100%/40956577/2=4.4%
		2017	549732.2092x100%/3472724=15.83%	7157874.62/1196969=5.98	88019.3644x100%/6558882=13.42%	78517.112x100%/995196=8.22%	80654.7308x100%5137244/2=3.14%
		2018	214028.9205x100%/1481169=14.45%	8381627.94/556549=15.06	14691.7568x100%/6558882=2.24%	32122.344x100%/385160=8.34%	65242.9988x100%/5137244/2=2.54%
		2019	4949318.0096x100%/108063712=4.58%	350414632.26/71659434 = 4.89	609311.2816x100%/54402793 = 1.12%	2957097.1248x100%/47389377 = 6.24%	340283.6635x100%/35819333/2=1.9%
		2020	528951.819x100%/6653482=7.95%	69047166.5/10622641=6.5	5440.2793x100%54402793=0.01%	308210.0682x100%/5859507=5.26%	1790.96665x100%35819333/2
52	Un SACCO Society Ltd	2016	24438.1968x100%/27153552=0.09%	40469869.02/192713662=0.21	1684028.5371x100%/140687743=11.97%	349951.0801x100%/184184779=0.19%	11555115.5174x100%/195352756/2=11.83%
		2017	317696.5584x100%/27153552=1.17%	231256394.4/192713662=1.2	28679711.7136x100%/222495824=12.89%	2283891.2596x100%/184184779=1.24%	482883.48x100%/10589550/2=9.12%
		2018	71656759.16x100%/4717364 = 15.19%	75406735.7/10620667=7.1	270558.2292x100%/3909801=6.92%	1825178.6172x100%/11610551=15.72%	59970.5176x100%3486658/2=3.44%
		2019	847238.5744x100%4717364=17.96%	36110267.8/10620667=3.4	98517539.2x100%/10436180=9.44%	1747387.9255x100%11610551=15.05%	108938.6955x100%8069533/2=2.7%
		2020	713908.5184x100%/31870916=2.24%	182493048.66/233965447=0.78	1825552.0126x100%/40658174=4.49%	1807207.676x100%220391180=0.82%	296764.6551x100%/30752814/2=1.93%
53	Unisa SACCO Society Ltd	2016	1816780.6308x100%/195352756=0.93%	169694539.2/20694456=8.2	4885952.2732x100%49303252=9.91%	4880272.7457x100%/285396067=1.71%	2094433.542x100%/36583992/2=11.45%
		2017	537949.14x100% 10589550=5.08%	31518833.4/5836821=5.4	15784315.4619x100%/11705559=13.41%	24444484.9627x100%/32206653=7.59%	592032.09x100%9108186/2=13%
		2018	1825638.42x100%/10589550=17.24%	10398750.2/2418314=4.3	304867.857x100%/3677533=8.29%	4888969.254x100%/32206653=15.18%	55221.3067x100%/1764259/2=6.26%
		2019	296278.956x100%/164599942=1.8%	1640466240/164046624=10.06	3048248.3001x100%/342499809=0.89%	12368466.348x100%/242518948=5.1%	5086737.898x100%231215359/2=4.4%
		2020	197519.9304x100%/164599942=0.12%	29772308.5/5413147=5.5	351025.3715x100%/39574445=8.87%	7687850.6516x100%/242518948=3.17%	280256.421x100%/26439285/2=2.12%
54	Unison SACCO Society Ltd	2016	2159269.1088x100%/19558597=11.04%	884166000/147360000=0.6	7189707.1998x100%/355926099= 2.02%	3227085.2328x100%/63776388= 5.06%	25444467.7875x100%/226173047/2= 22.5%
		2017	19958506x100%/200588000=9.95%	176832000/147360000=1.2	4271113.188x100%/355926099= 1.2%	447253988.72x100%/34457164 = 12.98%	3660459.741x100%/51555771/2=14.2%
		2018	265991.8778x100%/2259914=11.77%	1045122596.7/11651310=8.97	1608652.2679x100%/721368733= 2.23%	2296518.9x100%/17151000=13.39%	2776278.26835x100%/51555771/2= 10.77%
		2019	549938.6896x100%/7723858=7.12%	114182838/11651310=9.8%	7545516.9158x100%/721368733= 10.46%	1519578.6x100%/17151000=8.86%	10081556.0934x100%/277728818/2= 7.26%
		2020	4190670.9x100%/29367000=14.27%	348405840/168312000=2.07	1583313.3018x100%/428062514=0.37%	1014033.5664x100%/63775696 = 1.59%	881603.6841x100%51555771/2=3.42%

55	Ushuru County Farmer SACCO Society Ltd	2016	241659.6x100%/13278000= 1.82%	55929205.34/243170458 = 0.23	565711.5255x100%/34285547 = 1.65%	87002.825x100%/1912150=4.55%	395971.22785x%/2714921/2=29.17%
		2017	1742073.6x100%/13278000= 13.12%	462638662.64/42916388 =10.78	605045x100%/10325000= 5.86%	12782275.4628x100%/16578826 8=7.71%	274207.021x100%/2714921/2=20.2%
		2018	2688414958.24x100%/277728818/9.68%	56649632.16/42916388= 1.32	443975x100%10325000= 4.3%	637705.7904x100%/3199728=19.93%	8927924.0632x100%/108348593/2=16.48%
		2019	3536725.8906x100%/51555771= 6.86%	2062616921/200254070= 10.3	602622260.72x100%/196293896= 3.07%	431003.3616x100%/3199728=13.47%	803049.2361x100%/15281622/2
		2020	5552556.5367x100%/51555771 = 10.77%	42053354.7/200254070= 0.21	833138.7921x100%/34285547 = 2.43%	12449655.127x100%/145780505=8.54%	6391137.7314x100%/165788268 =7.71%
56	United NationasSACCO Society Ltd	2016	2597729.6012x100%/26346142 =9.86%	45319550.9/11053549=4.1	3951253.0716x100%/123091996=3.21%	175610.5515xx100%/699365=25.11%	1047100x100%/7075000/2=29.6%
		2017	485290.525x100%/4485125= 10.82%	10958031.5/1153477=9.5	549727.5x100%7075000=7.77%	141502.3270677x100%/92555717= 3.91%	98307125x100%7075000/2 =27.79%
		2018	485290.525x100%1912150=14.55%	1487439.56/484508=3.07	693350x100%7075000=9.8%	14447014.1664x100%/7075000 =25.61%	72235007.0832x100%/68664516/2=21.04%
		2019	1272275.4628x100%/165788268=7.71%	327399224.77/125440316 = 2.61	1230634.467x100%/11086797 =11.1%	1156762.25x100%/7075000=16.35%	813513.6772x100%/10456474/2=15.56%
		2020	637705.7904x100%/3199728=19.93%	266954112.2/7214976= 3.7	1008898.527x100%/11086797 =9.1%	16940136.78x100%/80667318= 21%	87355.3845x100%/1546113/2=11.3%
57	Vihiga County FarmersSACCO Society Ltd	2016	10109595.6x100%/999960 =10.11%	166516800/147360000=1.13	319761.556x100%/39574445= 8.08%	442087200x100%/20952000=21.1	142665874.225x100%39574445/2 =7.21%
		2017	22599140x100%/2259914 = 10.0%	17122100/171221000=0.1	2260907.0406x100%/32206653=7.02%	588808350x100%29367000 =20.05%	100323724.095x100%/32206653/2 =6.23%
		2018	16125327.26x100%/1764259 =9.14%	210201876.36/194631367 =1.08	1829598.522x100%/26439285 =6.92%	36876639.36x100%/36583992 =10.08	6768456.96x100% /26439285/2 =5.12%
		2019	23209712x100%2901214 =8.00%	33952652.72/242518948 =0.14	1899139.7687x100%/19558597=9.71%	395107113.6x100%42877119 =8.12%	46940632.8x100%/19558597/2 =4.80%
		2020	26184034.96x100%/3677533 =7.12%	56911449.12/293196557 =0.16	1396948x100%11651310=6.98%	302721967.28x100%49303252 =6.14	265067.3025x100%/11651310/2=4.55%
58	Vision Point SACCO Society Ltd	2016	1461177.9584x100%/286351132=5.12%	46911449.12/137806=12.2	2735424.8x100%/184,826 = 14.08%	211.4984x100%/21813= 9.68%	295168791.164x100%208451915/2= 28.32%
		2017	17753770.184x100%/286351132= 6.2%	881958.4/137,806.00=6.4	782.3195x100%/8741=8.95%	1258.0998x100%/19237= 6.54%	4611452.4458x100%38364829/2 = 24.04%
		2018	2965678.7426x100%/35904101 = 8.26%	20775.96/19237=1.08	303.3127x100%/8741=3.47%	207.4833x100%/29223 =0.71%	4839723.17835x100%/38364829/2=25.23%
		2019	4523916.726x100%/35904101= 12.6%	98108.7/19237=5.1	1458.5898x100%/29586=4.93%	200.4348x100%/167029=0.12%	9541885.5246x100%/170087086/2= 11.22%
		2020	35882703.2515x100%/330716159=10.85%	200434.48/167029=1.2	5156.6454x100%/184,826.00=2.79%	1653.672x100%/137,806.00=1.2%	9541885.5246x100%/170087086/2=12.5%

59	Wakenya Pamoja SACCO Society Ltd	2016	133990065x100%11651310=11.5%	967548638.1/293196557=3.3	740572800x100%168312000=4.4%	16199352x100%/999960=16.2%	7534995798x100%/342499809/2=4.4%
		2017	234703164x100%/19558597=12.0%	1018579581.6/242518948=4.2	902646000x100%200588000=4.5%	34576684.2x100%2259914=15.3%	513712920.6x100%285396067/2=3.6%
		2018	272324635.5x100%/26439285=10.3%	797988604.7/194631367=4.1	1086712187.3x100%/231215359 =4.7%	442643.761805x100%/250895=1.764259	393066110.3x100%/231215359/2=3.4%
		2019	679560378.3x100%32206653=21.1%	907471300/171221000=5.3	151559155.1x100%285396067=5.3%	50191002.2x100%/2901214=17.3%	321943740x100%200588000/2=3.21%
		2020	126638224x100%/39574445=3.2%	604176000/147360000=4.1	1027499418x100%342499809=3.0%	41188369.96x100%/3677533=11.2%	215439360x100%168312000/2=2.56%
60	Wipo SACCO Society Ltd	2016	6235.991x100%/201161=3.1%	1467966.5/225,841 = 6.5	36442.703x100%/174367=20.9%	2111.4984x100%/21813=9.68%	8819.584x100%/137,806.00/2=12.8%
		2017	261509.3x100%/201161=11.3%	1222352.35/29915= 4.09	20052.205x100%/174367=11.5%	2602350.08x100%/184,826 = 14.08%	7028.106x100%/137,806.00/2=10.2%
		2018	925.3095x100%/32467=2.85 %	29354/8387=3.5	972.9792x100%/26368=3.69%	740.3627x100%/8741=14.8%	8079.624x100%/19237/2=5.9%
		2019	3970.7141x100%/32467=12.23%	17612.7/8387=2.1	20230x100%/26368=7.7%	567.915x100%/8741=8.47%	567.4915x100%/19237/2=5.9%
		2020	915.3326x100%/240877=0.38%	42957.6/38355=1.12	971.6733x100%/206739=0.47%	1458.5898x100%/29586=4.93%	1920.8335x100%/167,029.00/2=2.3%
61	Yetu SACCO Society Ltd	2016	915.3326x100%/29223=0.71%	1471670519.9/208451915 = 7.06	4901560.7536x100%/5127156 = 9.56%	2457128.0976x100%/27240888 = 9.02%	2077895.93875x100%25293925/2= 19.6%
		2017	145.314100%/8073=1.8%	73586010/4905734 ==15	444233.3367x100%/32425791=1.37%	1778694.903x100%/14321215=12.42%	1641853.186x100%19986040/2=16.43%
		2018	7700026.7791x100%//36895193= 20.87%	21585229.6/4905734=4.4	433228.3128x100%/180511797=0.24%	1010636.9448x100%/27240888=3.71%	1022294.75345x100%/15477589/2= 13.21%
		2019	15384913.725x100%/180998985/2= 8.5%	584296345.67/38364829 = 15.23	684184.1901x100%/32425791 = 2.11%	209784.3264x100%/2979891=7.04%	55832827.44x100%11012392/2=10.14%
		2020	7221223.6557x100%/32425791 = 22.27%	1734319932.8/208451915 = 8.32	444233.3367x100%/32425791 =1.37%	359374.8546x100%/2979891=12.06%	352017.88965x100%7796631/2=9.03%

Source: SASRA 2020

INFLATION RATE

2016	2017	2018	2019	2020
6.39	4.50	5.71	5.82	5.62

Source. KNBS 2022

APPENDIX IV

TARGET POPULATION

List of T Deposit Taking SACCOS in Kenya

TEACHER BASED SACCOs

1. Mwalimu National SACCOs
2. Trans National SACCOs
3. Breameg SACCOs
4. Marsabit Teacher SACCOs
5. Kwale Teacher SACCOs
6. Kitui Teacher SACCOs
7. Narok Teacher SACCOs
8. Elgon Teacher SACCOs
9. Egerton Teacher SACCOs
10. Baraton University Teacher SACCOs
11. Lamu Teacher SACCOs
12. Gusii Teecher SACCOs
13. Cosmopolitan Teacher SACCOs
14. Mentor Teacher SACCOs
15. Metropolitan National SACCOs
16. Imarisha Teacher SACCOs
17. Kaimosi Teacher SACCOs
18. Elimu Teacher SACCOs
19. Suba Teacher SACCOs
20. Fortune Teacher SACCOs
21. Imarika Teacher SACCOs
22. Jumuika Teacher SACCOs
23. Murata Teacher SACCOs
24. Rachuonyo Teacher SACCOs
25. Shirika Teacher SACCOs
26. ASili Teacher SACCOs
27. Bandari Teacher SACCOs
28. Bingwa Teacher SACCOs
29. Dhabiti Teacher SACCOs
30. Fariji Teacher SACCOs
31. Kimisitu SACCOs
32. Lontels SACCOs
33. Nacico Saccos
34. Dumisha SACCos
35. Time U SACCOs
36. Uchongaji SACCOs

GOVERNMENT BASED SACCOs

1. County SACCOs
2. Sheria SACCOs

3. Safaricom SACCOs
4. Kenya Police SACCOs
5. Harambee SACCOs
6. Airport SACCOs
7. Enea SACCOs
8. Mombasa Port SACCOs
9. Kenpipe SACCOs
10. United National SACCOs
11. Un SACCOs
12. Ushuru SACCOs
13. Stima SACCOs
14. Unison SACCOs
15. Baraka SACCOs
16. Kingdom SACCO
17. Hazina SACCOs
18. Kenversity SACCOs
19. Kenya Canner SACCOs
20. Kenya Highlands SACCOs
21. Kenya Midland SACCOs
22. Mwietheri SACCOs
23. Nanyuki Equator SACCOs
24. Nation SACCOs
25. Nawiri SACCOs
26. Nyati SACCOS
27. Nyala Vision SACCOs
28. Prime Time SACCOs
29. Puan SACCOs
30. Stake Kenya SACCOs
31. Southern Star SACCOs
32. Taifa SACCOS
33. Trains Counties
34. Trains-Elite County SACCOs
35. Vision Point SACCOs
36. Vision Africa SACCOs
37. Wananchi SACCOs
38. Tower SACCOs

FARMERS BASED SACCOs

1. Chai Farmer SACCOs
2. K-Unity Farmer SACCOs
3. Kolenge Tea SACCOs
4. Maisha Bora SACCOs
5. Koru SACCOs
6. Vihiga County Farmer SACCOs
7. Ukulima SACCOs
8. Wipo Teacher SACCOs
9. Unisa SACCOs
10. Tai SACCOs

11. Simba Chai SACCOs
12. Nandi Farmer SACCOs
13. Nafaka SACCOs
14. Torch SACCOs
15. Siraji SACCOS
16. Ollin SACCOs
17. Ardhi SACCOs
18. Acumen SACCOs
19. Biashara SACCOs
20. Breameg SACCOs
21. Chuna SACCOs
22. Daima SACCOs
23. Faridi SACCOs
24. Jamii SACCOs
25. Nandi Farmer SACCOs
26. Wanandege SACCOs
27. Mmh SACCO
28. Wevrsity SACCOs
29. Winas SACCOs
30. Wakulima Commercial SACCOs
31. Tembo SACCOs
32. Tenhos SACCOs
33. Sukari SACCOS
34. Supa SACCOs
35. Ndege SACCOs
36. Ndosha SACCOs
37. Ng'arisha SACCOs
38. Noble SACCOs
39. Nufaika SACCOs
40. Nyahururu Umoja SACCOs
41. Nyambene Arimi SACCOs
42. Nassefu SACCOs
43. Smart Champions SACCOs
44. Smart Life SACCOs
45. Solution SACCOs
46. Sotico SACCOs
47. Shoppers SACCOs
48. Mudete Tea Growers SACCOs
49. Mafanikio SACCOs
50. Magadi SACCOs
51. Kite SACCOs
52. Joinas SACCOs
53. Jitegembee SACCOs
54. Jacaranda SACCOs
55. Fundilima SACCOs
56. Centenary SACCOs

PRIVATE INSTITUTIONS BASED SACCOs

1. Mzima SACCOs
2. Kentours SACCOs
3. Afya SACCOs
4. Milki SACCOs
5. Kathera Rural SACCOs
6. IIkisonko SACCO
7. Konoin SACCOs
8. Kwetu SACCOs
9. Kmfri SACCOs
10. Lainisha SACCOs
11. Lengo SACCOs
12. Magereza SACCOs
13. Patnas SACCOs
14. Waumini SACCOs

COMMUNITY BASED SACCOs

1. Githunguri Dairy & Community SACCOs
2. Gastameco SACCOs
3. 2NK SACCOs
4. Kenya Bankers SACCOs
5. Good faith SACCOs
6. Fortude SACCOs
7. Wakenya Pamoja SACCOs
8. Muki SACCOs
9. Yetu SACCO
10. Mwito SACCOs
11. Capital SACCOs
12. Ukristo Na Ufanisi Wa Angelican SACCOs
13. IG SACCOs
14. Qwetu SACCOs
15. Skyline SACCOs
16. Dimkes SACCOs
17. Imenti SACCOs
18. Torch SACCOs
19. Wanaanga SACCOs
20. Taraji SACCOs
21. Ufanisi SACCOs

Source: SASRA 2020

APPENDIX V

SIMPLE SIZE

Deposit Taking SACCOS 2016-2020

TEACHER BASED SACCOs

1. Mwalimu National SACCOs
2. Trans National SACCOs
3. Baraton University Teacher SACCOs
4. Metropolitan National SACCOs
5. Imarisha Teacher SACCOs
6. Imarika Teacher SACCOs
7. Shirika Teacher SACCOs
8. Bandari Teacher SACCOs
9. Dhabiti Teacher SACCOs
10. Fariji Teacher SACCOs
11. Kimisitu SACCOs
12. Lontels SACCOs
13. Nacico Saccos

GOVERNMENT BASED SACCOs

1. Sheria SACCOs
2. Safaricom SACCOs
3. Kenya Police SACCOs
4. Harambee SACCOs
5. Airport SACCOs
6. Mombasa Port SACCOs
7. Kenpipe SACCOs
8. United National SACCOs
9. Un SACCOs
10. Ushuru SACCOs
11. Stima SACCOs
12. Unison SACCOs
13. Baraka SACCOs
14. Kingdom SACCO

FARMERS BASED SACCOs

1. Kolenge Tea SACCOs
2. Maisha Bora SACCOs
3. Koru SACCOs
4. Vihiga County Farmer SACCOs
5. Wipo Teacher SACCOs
6. Unisa SACCOs
7. Tai SACCOs
8. Simba Chai SACCOs
9. Nandi Farmer SACCOs
10. Nafaka SACCOs

11. Torch SACCOs
12. Siraji SACCOS
13. Ollin SACCOs
14. Ardhi SACCOs
15. Acumen SACCOs
16. Biashara SACCOs
17. Breameg SACCOs
18. Chuna SACCOs
19. Daima SACCOs
20. Faridi SACCOs
21. Jamii SACCOs

PRIVATE INSTITUTIONS BASED SACCOs

1. Mzima SACCOs
2. Kentours SACCOs
3. Afya SACCOs
4. Milki SACCOs
5. Kathera Rural SACCOs

COMMUNITY BASED SACCOs

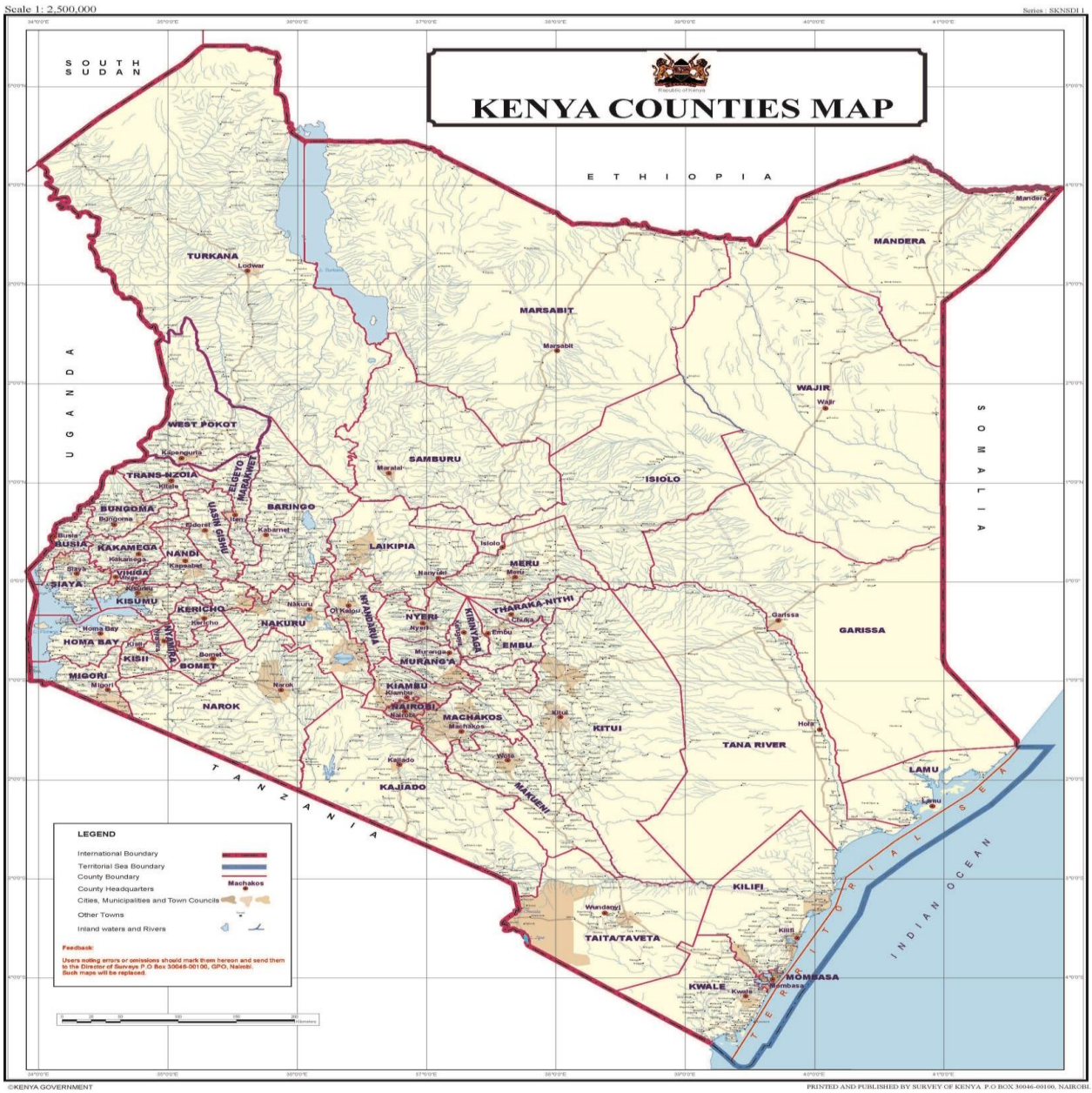
1. Good faith SACCOs
2. Fortude SACCOs
3. Wakenya Pamoja SACCOs
4. Muki SACCOs
5. Yetu SACCO
6. Mwito SACCOs
7. Capital SACCOs
8. Ukristo Na Ufanisi Wa Angelican SACCOs

Source: Researcher, 2020

APPENDIX VI

RSEARCH AREA

The Map of Kenya – Research Area



Resource: Researcher (2020)

APPENIDX VII: *RESEARCH PERMIT*

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APPENDIX IX: PLAGIARISM REPORT