

**EFFECT OF FINANCING DECISIONS ON PERFORMANCE OF
DEPOSIT-TAKING SACCOS IN NAIROBI COUNTY, KENYA**

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DECLARATION

I, the undersigned, hereby swear that this is my own original work, and that it has not been submitted for review to any other organization or university but the University of Nairobi.

Signed:  Date: 5th December 2022

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DEDICATION

This research project is dedicated to my parents, Mr. & Mrs. Kibuti for their persistent reminders of my childhood dreams and constant follow ups on progress.

To my husband Mark, beloved children Malcolm, Valene and Ariana for unwavering support and challenging me to aim higher. I appreciate and love you all and may The Almighty God bless you abundantly.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
DEA	Data Envelopment Analysis
DPS	Dividend Per Share
DTS	Deposit Taking SACCO
EPS	Earnings Per Share
GDP	Gross Domestic Product
NSE	Nairobi Securities Exchange
OLS	Ordinary Least Square
ROA	Return on Assets
ROE	Return on Equity
ROS	Return on Sales
SACCO	Savings and Credit Cooperative
SASRA	SACCO Societies Regulatory Authority
VIF	Variance Inflation Factor

ABSTRACT

Financing decisions and performance are significant concepts among firms. Acknowledging this, several interventions have been undertaken by firm managers to address weaknesses in financing decisions. Despite the efforts in making the best financing decisions, firms still struggle to attain their performance goals. This therefore makes firm managers unable to decipher the contribution that financing decisions have on the performance of firms. The inability of firm managers to make financing decisions can be linked to the difficulty in determining exactly the financing structure that is optimal for their firms that can help increase performance. The main aim of this research was to determine financing decisions effect on performance of DT-SACCOs in Nairobi County, Kenya. The independent variables for the research were financial leverage, dividend policy and working capital while the dependent variable was performance measured using ROA. The control variable was firm size. The study was guided by trade-off theory, information signaling theory and liquidity preference theory. Descriptive research design was utilized in this research. The 43 DT-SACCOs in Nairobi County, Kenya as at December 2021 served as target population. The study collected secondary data for five years (2017-2021) on an annual basis from SASRA and individual DT-SACCOs annual reports. Descriptive, correlation as well as regression analysis were undertaken and outcomes offered in tables followed by pertinent interpretation and discussion. The research discovered a 0.5411 R square value implying that 54.11% of changes in DT-SACCOs performance can be described by the four variables chosen for this research. The multivariate regression analysis further revealed that individually, financial leverage has a negative effect on performance of DT-SACCOs ($\beta=-0.337$, $p=0.001$). Dividend policy exhibited a positive and significant effect on performance of DT-SACCOs ($\beta=0.858$, $p=0.000$). Firm working capital also exhibited a positive and significant effect on performance ($\beta=0.178$, $p=0.029$). The control variable which was firm size displayed a positive and significant performance influence as shown by ($\beta=0.679$, $p=0.000$). The study recommends that DT-SACCOs should work at improving their working capital and their dividend policy as they significantly affect their performance. Future research ought to focus on other DT-SACCOs in Kenya to corroborate or refute the findings of this research.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Financing decisions defines the mode in which a firm or organization will finance its operations (Salazar, Soto & Mosqueda, 2018). In deciding how to finance the its operations, a firm need to analyze the relative advantages of using certain form of financing say equity against use of debt (Mateos-Ronco & Guzmán-Asunción, 2018) and how financing decisions impact firm performance. Theoretically, the firm financing decision taken by a firm in regards to leverage, dividend and working capital is expected to influence the level of financial performance (Kasasbeh, 2021).

This study was based on three theories namely; trade-off theory, information signaling theory and liquidity preference theory. The trade-off theory by Myers (1984) was the anchor theory as it brings explicit understanding of how financial leverage increases the firm value through the tax-deductibility feature associated with borrowing. In addition, the theory introduces the of agency costs as well as costs of financial distress and shows how financial leverage may negatively influence the firm financial performance by increasing the agency costs associated with borrowing. According to information signaling theory by Ross (1977), investors consider dividends as a proxy for the managements' assessment of the firm's performance and its prospects. The theory hypothesizes a positive relationship between dividend policy and financial performance of deposit-taking SACCOs. According to Keynes (1936) liquidity preference theory, an efficient liquidity management would lead to more stable economic cycles, increasing profits and making it possible to increase performance.

The current study focused on deposit-taking SACCOs in Kenya; this is because they are recognized as a significant contributor to national development since their

presence can be traced in virtually all sectors of the economy. Although significant progress has been made by the co-operatives in Kenya, their performance and sustainability has been debatable (Memba & Nyanumba, 2019). The importance of financing decisions cannot be over emphasized since many of the factors that contribute to business failure can be addressed using strategies and financial decisions that drive growth and the achievement of organizational objectives (Salazar, Soto & Mosqueda, 2018).

1.1.1 Financing Decisions

Financing decisions refer to decisions pertaining the equity and the liabilities side of the statement of financial position. These decisions entails; the degree of financial leverage, dividend policy and working capital position (Abiad, Oomes & Ueda, 2015). Seidu and Andani (2018) maintains that financing decisions of a firm involves choosing between the various sources of finance either external or internal financing. Internal financing methods comprise of using retained earnings whereas external financing entails issuance of new shares or debt instruments. According to Crouzet (2014), financing decision is the composition of both the short term and long-term instruments concerned with how a firm sources its finances to meet its obligations and finance its operations. Financing decisions as used in this study consist of three constructs: financial leverage, dividend policy and working capital.

Financial leverage is the amount of money borrowed from outside sources to cover a company's short as well as long-term financial deficits (Bierman, 2019). The majority of businesses borrow money at some point to purchase assets, embark on large capital-intensive projects, or expand via research and development (Kumar, 2014). Debt ratios are used to assess financial leverage. Debt ratios are calculated by

comparing a company's total debt to its total assets. A low ratio implies that a company is less reliant on debt, whilst a large percentage suggests that the organization is more reliant on debt financing (Margaritis & Psillaki, 2017). The current study measured financial leverage in terms of the ratio of total debt to total assets.

The dividend policy is defined by Brockington (2013) as earnings percentage dispersed as dividend to owners, which is calculated as a company's firm's dividend per share (DPS) to earnings per share (EPS) ratio. Dividend policy may be operationalized in relation to dividend yield, payout ratio or dividends cover. Dividend yield refers to a shareholder's returns derived only from dividends. Dividing the DPS by the market price per share yields the dividend yield. Earnings share dispersed as dividends is known as dividend payout; however, if profits are negative, dividend payout is meaningless (Brigham & Houston, 2018). It's determined by taking a company's DPS and dividing it by its EPS. Dividend cover is determined through division of firms' EPS by its DPS to determine the dividend payment margin of safety in the case of a reduction in earnings (Menamin, 2016). The current study operationalized dividend policy in terms of dividend per share to earnings per share.

Adeniji (2018) defined working capital as the money used by enterprises in their routine activities or operations. The working capital of a firm is ascertained as the surplus of short-term assets over short-term liabilities and it forms the necessary items for production of business merchandise for sale (Akinsulire, 2018). According to Finkler (2017), working capital refers to the ratio of current liabilities and current assets employed by a firm to maximize results where current assets are those that will be spent or will be converted to cash in a span of a year and the obligations that will

have to be paid within a year are the current liabilities. Thus implying that, working capital is short term assets and obligations. The current study operationalized working capital as the ratio of current assets to current liabilities.

1.1.2 Firm Performance

Firm performance, according to Almajali, Alamro, and Al-Soub (2012), is the ability of a corporation to attain a variety of goals, like profitability and efficiency. Firm performance refers to the extent to which a firm benchmark have been met or exceeded. It demonstrates the extent to which objectives are met. As per Baba and Nasieku (2016) performance depict how a corporation generates money through using assets, and as a result, it aids decision making for stakeholders. As per Nzuve (2016), a firm's health is mostly determined by its performance, which is an indication of a firm's strengths and shortcomings. Furthermore, for regulatory purposes, the government and regulatory agencies are concerned in how corporations perform.

The necessity of focusing on performance is important since it primarily affects factors that directly affect the financial statements or the company's reporting (Omondi & Muturi, 2013). The performance of the company is the primary criterion for evaluation by external stakeholders (Bonn, 2000). Consequently, the company's performance is employed as a metric. How well a company accomplishes its objectives determines how well it performs. A company's performance results from achieving both internal as well as external goals (Lin, 2008). The terms growth, rivalry, and survival are ones that are used to characterize performance (Nyamita, 2014).

Various methods of evaluating performance are used and should be harmonized. Asset returns (ROA), size of company, equity returns (ROE) and sales return (ROS)

are factors recognized as measures of performance. In relation to Mwangi and Murigu, (2015) the often used metrics for evaluating performance are ROA and ROE. Efficiency measures have also been used to measure performance (Baba & Nasieku, 2016). Data Envelopment Analysis (DEA) and free disposal hull are forms of non-parametric frontier approaches used in the measurement of efficiency which rely on technical efficiency (Rao & Lakew, 2012). The current study used ROA as a measure of performance due to its wide applicability in previous literature.

1.1.3 Financing Decisions and Firm Performance

The objective of all financing decisions is wealth maximization and the immediate way of measuring the quality of any financing decision is to examine the effect of such a decision on the firm's performance. Theoretically, the financing decision taken by a firm is expected to influence the working capital levels of such a firm which in effect influences the level of performance. The finance factor is the main cause of financial distress (Memba & Nyanumba, 2019).

Myers' (1984) trade-off hypothesis suggests that in order for businesses to maximize profits, they must find a middle ground between the benefits of dividend payments and the risks of illiquidity. Deterioration in a company's liquidity might be caused by the payment of dividends; hence, this argument points to a detrimental connection between the variables under investigation. It might be more detrimental to a company if they attempt to increase their earnings by decreasing their degree of liquidity (Shin & Soenen, 1998). The trade-off model explains how a company chooses the amount of cash on hand that is most suitable for its operations by analyzing the marginal costs and benefits associated with keeping that amount of money on hand.

Keynes (1936) formulated liquidity preference hypothesis. According to this school of thought, investors will demand a higher premium for investments with a longer time to maturity and will favor liquid over illiquid assets. This theory assumes that all other factors will remain the same. The convenience of retaining cash is referred to as liquidity. At any particular point in time, a person or company may hold onto money for a variety of reasons. Even if this theory does not directly address the link between financing decisions and financial performance, it is plausible to assume that a firm with adequate liquidity is more likely to report higher performance (Bitrus, 2011).

1.1.4 Deposit Taking SACCOs in Kenya

Government of Kenya (2018) defined DTS as SACCOs carrying out the business of accepting savings and in turn offers credit facilities to her clientele. The DTS also accepts to undertake business of depositing and withdrawing monies on daily basis like what banks do. Non-Deposit taking SACCOs normally operate at the back office only and have not obtained licensing from SASRA to have operations at a front office. FOSAs are considered one of the main profit centers for SACCOs and provide their members with valuable services (Wambua, 2015). By introducing FOSAs, there has been positive performance of SACCOs through improvement in profitability thereby leading to declaration of a high rate of dividend to members (IFSB, 2015).

According to Mudibo (2015), deposit taking SACCOs highly impact Kenya's economy. These institutions are responsible for approximately 45% of Kenya's GDP. This is in spite of the fact that they had not been formally recognized into the financial system. After the enactment of SACCO Societies Act no.14 of 2008 in 2010 these institutions have registered tremendous growth. The SASRA Annual report (June, 2022) at the end of 2021 stated that they had grown to 175 from 110 DTS in 2011 a

growth of 59%. In 2020, these institutions' total assets under their management totaled over 393 billion, up from 167 billion in 2011, a 135 percent increase in ten years.

Deposit-taking SACCOs incur various charges and interests upon acquisition of funds they need to undertake their activities. Cost of each component of capital like shares, debt and capital reserves constitute the cost of finance of cooperative societies (Kimetto, 2018). The financial performance of deposit-taking SACCOs is highly linked to the decisions based on the capital budgeting thus an appropriate estimate of the cost of finance expected is very crucial (Dube & Ozkan, 2019). Moreover, knowhow on cost of finance and how it is influenced by financial leverage is useful in financial management of deposit-taking SACCOs.

1.2 Research Problem

Financing decisions and performance are significant concepts among firms. Acknowledging this, several interventions have been undertaken by firm managers to address weaknesses in financing decisions. Despite the efforts in making the best financing decisions, firms still struggle to attain their performance goals. This therefore makes firm managers unable to decipher the contribution that financing decisions have on the performance of firms. The inability of firm managers to make financing decisions can be linked to the difficulty in determining exactly the financing structure that is optimal for their firms that can help increase performance (Noreen, 2018).

Although significant progress has been made by the deposit-taking SACCOs in Kenya, their performance and sustainability has been debatable (Kasungwa, & Moronge, 2016). The financial performance in terms of return on assets of deposit-taking SACCOs has been declining. In 2019, the ROA for deposit-taking SACCOs

was 10.93%, declining to 10.04% in 2019 and further decline to 9.46% in 2021 (SASRA report, 2021). The decline is an issue of concern considering the significant importance of deposit-taking SACCOs to socioeconomic. Considering that such performance has been attributed to financing decisions elsewhere, yet there is little evidence on the extent to which financing decisions affects financial performance of deposit-taking SACCOs, this erratic performance pattern calls for empirical investigation.

Globally, there exist studies on financing decisions and performance of firms but their findings have been different. This can be explained by the different methodologies used as well as conceptualizing of the study variables. Different contextual backgrounds can also explain the differences in previous findings. Khan et al. (2017) conducted a longitudinal study in Pakistan on the influence of financing decisions and financial performance. The study concluded that financing decisions have no influence on financial performance measured as ROA and ROE. Thu-Trang (2019) focused on the influence of financing decisions on financial performance of 102 firms listed at the Ho Chi Minh Exchange, Vietnam. The findings were that financing decisions have a significant influence on performance.

Regionally, Solaboni (2018) focused on the influence of financing decisions and working capital on profitability of manufacturing firms listed in Nigerian Stock Exchange and concluded that both financing decision and working capital have a positive influence on financial performance. Ogobe, Orinya and Kemi (2018) utilized a fixed effects panel regression analysis in establishing the influence of financing decisions on profitability of listed firms in Ghana and concluded that debt financing has a positive influence on ROA. Hasan et al. (2019) conducted a similar study in

Tunisia and concluded that financial leverage has a negative influence on financial performance.

Locally, while there is strong empirical evidence that financing decisions affects financial performance, empirical evidence has not provided the much-needed support in this regard especially for SACCOs. Gabow (2017) on a study of how financing decisions influence performance of listed firms at the NSE operationalized financing decision as the ratio of debt to total assets leaving a gap on other measures. Muiruri and Wepukhulu (2018) operationalized financing decisions in the same way and concluded that capital structure has no significant effect on ROA but has a significant positive influence on ROE. Makau (2019) using ordinary least squares concluded that leverage has a significant negative influence on ROA. From the foregoing, it is evident that although there exists previous studies, there are conceptual, contextual and methodological gaps.

Conceptual gaps are evidenced by the fact that previous studies in this area have arrived at contradicting findings. These contradictory findings can be explained by the different operationalization techniques employed. For instance, most of the available studies have often operationalized financing decisions as the proportion of debt and equity or rather as just capital structure without taking into account other financing decisions. Methodologically, the previous studies have also used various methodologies to achieve their objectives and this might explain the differences in findings. Different contextual backgrounds might also explain the differences. The previous studies did not focus on deposit-taking SACCOs in Nairobi County and due to different economic settings, their findings cannot be generalized. Based on these

gaps, this study sought to address the following question: how does financing decisions affect the performance of deposit-taking SACCOs in Nairobi County?

1.3 Research Objective

The objective of this research was to assess the effect of financing decisions on performance of deposit taking SACCOs in Nairobi County, Kenya.

1.4 Value of the Study

The conclusions aids investors as well as practitioners understand the relationship between the two variables. The findings also help investors and practitioners better grasp the connection between a well-rounded management team, solid operations, vigilant financing decisions management, and extensive public confidence in the firm and their ability to maximize financial performance.

Governments, SASRA, central banks, and economic agencies are all examples of policymakers; they may use the findings of this study to inform their decisions on financing and financial performance. It is possible that the authorities that make policy may utilize the study's suggestions as a basis for developing efficient financing decisions to increase financial performance.

In conclusion, the research provides novel insights to ongoing theoretical discussions of the trade-off theory, information signaling theory and liquidity preference theory. The findings of this study are significant because they contribute to the existing empirical literature on financing decisions and financial performance. On the basis of the recommendations and proposals made for more study, other investigations could potentially be conducted.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The theoretical underpinnings of financing decisions and performance are explored in depth in this chapter. In addition, it summarizes prior empirical research, points out knowledge gaps, and concludes with a conceptual framework and hypotheses that propose a likely causal link between the investigated variables.

2.2 Theoretical Framework

This section covers the theories upon which the research of financing decisions and performance is based. The research examined trade-off theory, information signaling theory and liquidity preference theory.

2.2.1 Tradeoff Theory

This is the anchor theory of the study and it was proposed by Myers (1984). The trade-off theory which clearly dominates the literature on capital structure claims that a firm's optimal financing mix is determined by balancing the losses and gains of debt financing. This theory builds on Modigliani and Miller (1963) followed the heavy criticism leveled against their irrelevance theory on account of their perfect market assumptions. By accepting that taxes exist in the real world arbitrage activities are not always sustainable, the authors showed that capital structure indeed affected the corporate market value. The theory therefore contended that in situations of permanent debt, constant cost of debt and static marginal tax rate, leveraged firms have more market value than unlevered firms. This is attributed to the present value of interest tax shield associated with debt financing.

Myers (1984) combined this model with the bankruptcy cost framework of Kraus and Litzenger (1973) and Scott (1976) to come up with the classic static trade-off theory where the costs of debt are mainly associated with direct and indirect costs of bankruptcy. However, the consensus view is that bankruptcy costs alone are too small to offset the value of tax shields and additional factors must be included in a more general cost-benefit analysis of debt (Ju, Parrino, Poteshman, & Weisbach, 2005). For that reason, the agency costs framework of Jensen and Meckling (1976) that is also considered in the trade-off model.

The relevance of this theory to the study is that it provides for explicit understanding of how financial leverage increases the firm value through the tax-deductibility feature associated with borrowing. In addition, the theory introduces the of agency costs as well as costs of financial distress and shows how financial leverage may negatively influence the firm performance by increasing the agency costs associated with borrowing.

2.2.2 Signalling Theory

This theory was pioneered by Ross (1977). The theory is mainly based on the issue of information asymmetry among the many market players particularly between shareholders and managers. Under such scenarios, the managers use the high cost of dividend payments to convey information regarding the prospects of the firm to the market. John and Williams (1985) opine that the strong desire of the investors to meet their needs may lead to the under-valuation of the firm. If the investors dispose their holdings upon the undervaluation of the firm, then wealth will be transferred to the new shareholders from the old ones.

Criticism against this theory is on the basis that for it to hold, managers must be in possession of private information on the prospects of a firm and should have incentives that would avail such information to the market. Such a signal must be valid; that is, a firm whose future prospects are poor should not be able to copy and send incorrect market signals to the market by increasing by raising dividend payments. In contrast to the assumptions by Miller & Modigliani (1963) that investors and management are in possession of perfect knowledge on the firm in the real market, there exists information asymmetry since managers who operate in the firm tend to be in possession of more timely information compared to investors hence creating a gap (Al-Makawi, 2007).

According to the theory, investors consider dividends as a proxy for the managements' assessment of the firm's performance and its prospects. In spite of this, management is hesitant to lower dividends even when the earnings of the firm dampen and raise the level of dividends when an upward trend in earnings is predicted (Lintner, 1956). Therefore, payment of dividends has relevance since raising dividend payouts would increase the value of a firm. The theory hypothesizes a positive relationship between dividend policy and performance of cooperative societies.

2.2.3 Liquidity Preference Theory

The Keynesian liquidity preference theory, which Keynes (1936) developed, is widely regarded as the theoretical cornerstone upon which liquidity rests. Because investors dislike being in possession of assets that are difficult to sell quickly, Keynes postulated that they would demand a higher return on investments that had a longer maturity period. He maintains that this preference will exist even if all other conditions remain the same. The convenience of retaining cash is referred to as

liquidity. At any particular point in time, a person or company may hold onto money for a variety of reasons (Bitrus, 2011).

Keynes's liquidity preference theory has been subjected to a significant amount of criticism for insinuating that the interest rate will be greater when the desire for liquidity is higher, and that it will be lower when the demand for liquidity is lower (Gill et al., 2010). In addition, Keynes operates on the assumption that the only two options available are illiquid bonds or liquid cash. As a result, we might refer to this theory as an all or nothing hypothesis. In point of fact, there are many different kinds of investable assets, each of which has a different level of liquidity (Stewart, 2011).

The Keynesian theory of liquidity preference is relevant to the current study as it relates liquidity with performance of firms. Managers are obligated to safeguard sufficient working capital to allow the firm to achieve its main objective of increasing shareholder value. For this reason, firms should work to minimize both their liquidity costs and their illiquidity premiums.

2.3 Determinants of Firm Performance

A firm performance can be affected by a number of factors that can be found inside or outside the company. Firm-specific internal variables that can be changed internally; they are leverage, dividend policy, working capital and asset base among others. As per Athanasoglou et al., (2005) external factors that affect a company's efficiency include; inflation, GDP, political stability as well as interest rates.

2.3.1 Financial Leverage

Based on the sort of debt as well as the manner in which finances are used by the finance officers, financial leverage can be beneficial or cause financial distress. Prudent usage and deployment of borrowed funds results in enhanced financial

performance (Salazar, Soto & Mosqueda, 2018). Essentially, debt financing is anticipated to have an effect on a company's working capital amounts, which in turn affects the degree of financial performance (Eckbo, 2008).

The trade-off theory includes the fact that using debt has tax benefits for a business. This is one of two sets of conclusions; other study has shown that higher leverage causes share values to fluctuate more when sensitive information is involved; a company's ultimate fate depends on issues that are kept secret from the general public (Nyamboga, Omwario & Muriuki, 2014).

2.3.2 Working Capital

According to Cheluget, Gekara, Orwa, and Keraro's (2014) argument, there is a correlation between a company's financial performance and its liquidity. They also discovered that liquidity management has a significant impact on performance. Increases in cost efficiency were significantly influenced by indices of liquidity and solvency; when these indications are taken into consideration, enterprises with higher bought input costs similar to capital have a lower likelihood of becoming efficient (Arif, 2012).

Firms with higher spending on purchased inputs compared to capital are less likely to boost efficiency when liquidity and solvency indicators are included (Levi, Russell, & Langemeier, 2013). Liang Fu (2016) claims that liquidity is another word for corporate liquidity which refers to the amount of liquid assets recorded in the accounting records. Family businesses have less tolerance for the danger of financial distress when investing in companies with liquidity risk, as seen by their substantially higher levels of corporate liquidity (Liang Fu, 2016).

2.3.3 Dividend Policy

Indicators of a company's capacity to distribute profits to shareholders are widely agreed upon to be profitability and growth. For Lintner (1956), a company's dividend distribution history is a function of both past dividend payments and the current year's earnings. According to Baker and Powell (2000), dividends are substantially influenced by the amount of expected future profits.

According to Gitman and Pruitt (2013), the capacity of a corporation to pay dividends is heavily influenced by both the earnings of the current year and those of the years prior to that. Dividends are mostly determined by the amount of future earnings in an industry, as revealed by Baker and Powell (2000) in their study of businesses trading on the New York Stock Exchange. This finding is in line with the theory put forward by Lintner, who argues that companies whose profits are less subject to periodic fluctuations would ultimately be more successful (Abala, 2013). The results imply that cyclical earnings have a major role in dividend decisions.

2.3.4 Firm Size

A company's earnings from economies of scale are inversely correlated with its size. Due to significant economies of scale, firm operational activities have a higher efficiency the larger it is. Large organizations, irrespective of its size, risk losing control of both their operational and strategic activities, which would reduce their efficiency (Burca & Batrinca, 2015).

Large companies can spread their portfolios more and have more market power. They are also more likely to experience organizational waste if the business expands quickly. The amount of invested cash flow greatly depends on the size of the firm.

When determining a company's size, as per Almajali et al., (2012) it is crucial to take its workforce, property holdings, and sales volume into account.

2.4 Empirical Review

The purpose, methods, and conclusions of studies conducted both locally and abroad that indicate a connection between financing decisions and financial performance are examined.

2.4.1 Global Studies

Using fixed panel model, Miranda and Chen (2021) studied leverage, liquidity and agricultural cooperative profitability. The study employed US Farm Credit System panel data from 2011-2015. The study found that maintaining a low leverage ratio and a high liquidity ratio increases agricultural cooperative profitability. However, the study did not indicate the actual impact of leverage on the financial performance of deposit-taking SACCOs presenting conceptual gap.

Altaf and Ahmad (2019) undertook a study on the association amongst working capital financing and firm performance in India spanning 2007- 2016. In arriving to the results, the study used a two-step generalized method of moments approach showed that firms that are less financially constrained are able to finance more working capital by short term debt percentage. This study utilized ordinary least square. OLS may result to incorrect parameter estimates as it fails to take into consideration of time variance factor in the model. The proposed study will employ dynamic panel model.

Mateos-Ronco and Guzmán-Asunción (2018) investigated the determinants of financing decisions and management implications of Spanish agricultural cooperatives using multiple regression model. The results identified farmers'

cooperatives' financial leverage as a significant determinant of financing decisions. However, the study did not indicate the effect of cooperatives' financial leverage on the performance of cooperative societies. The current study sought to determine the effect of cooperatives' financial leverage on the performance of cooperative societies on particular focus on DT-SACCOs in Kenya.

2.4.2 Regional Studies

Using panel data set of 115 SACCOS in Tanzania in the period 2011–2014, Towo (2022) investigated the link between financial leverage and financial performance of savings and credit co-operative Societies in Tanzania. Fixed-effects models for analysis was employed. The results show that financial leverage is negatively and significantly related to SACCOS financial performance. The study focused at Saccos in Tanzania. The regulatory operations of Saccos may differ from country to country presenting geographical gap.

In Rwanda, Theogene (2021) conducted a study on how agricultural cooperatives use financial reports to make decisions. Data analysis involved quantitative using descriptive findings and qualitative inform of content analysis. Financial decision was found as one of important factor in the management of agricultural cooperatives. However, the study did not indicate the influence of financial decision on financial performance of cooperatives presenting conceptual gap.

Dube and Ozkan (2019) examined the financial performance of primary agricultural cooperatives in Dinsho District of Bale Zone of Ethiopia from 2015-2017 using panel regression. In terms of financial leverage, cooperatives have a shortage of their own capital. However, the study did not indicate the impact of financial leverage on performance of deposit taking SACCOs in Kenya presenting a conceptual gap.

2.4.3 Local Studies

Amondi (2020) investigated the determinants of financial performance of agricultural cooperative societies in Baringo County, Kenya. Data analysis was conducted using multiple regression. The findings of the study indicated that cost of finance influences financial performance of agricultural cooperative societies. However, the operationalization of cost of finance did not include working capital and how working capital impacts performance of cooperative societies presenting conceptual gap.

Waithira (2020) conducted a study to assess the relationship between dividend policy and financial performance among regulated SACCOs in Nairobi County, Kenya using multiple regression model. The study established that dividend payout ratio had a positive and insignificant influence on financial performance in SACCOs. However, the result contradicts the findings of other scholars (Gacheru and Muturi, 2018) who establishes that dividend payout has positive significant effect on performance of Saccos an indication of inconclusive findings and whether the differences is due to research methodologies used.

Gacheru and Muturi (2018) investigated financial factors that influence the performance of cooperative societies in Juja Sub County in Kiambu County Kenya. Using multiple regression model, dividend policy was found to have a positive influence on Return on Asset and Return on Equity. The context was all the cooperative Saccos in Kenya. Due to operational differences, the findings cannot be generalized among deposit-taking SACCOs in Nairobi County.

2.5 Summary of the Literature Review and Research Gaps

The summary of identified gaps is as presented in Table 2.1

Table 2.1: Summary of Relevant studies and Gaps

Author and year	Objective of the Study	Findings	Research Gaps	Focus of the current study
Dube and Ozkan (2019)	Financial performance of primary agricultural cooperatives in Dinsho District of Bale Zone of Ethiopia.	In terms of financial leverage, cooperatives have a shortage of their own capital	The study did not indicate the impact of financial leverage on performance of DT-SACCOs	Studies impact of financial leverage on performance DT-SACCOs
Amondi (2020)	Financial leverage and financial performance of agricultural co-operative societies in Kiambu	Found a negative relationship between financial leverage and financial performance	The study did not include other aspects of financial decisions like working capital and dividend payout	Includes working capital and dividend payout
Mateos-Ronco and Guzmán-Asunción (2018)	Determinants of financing decisions and management implications: evidence from Spanish agricultural cooperatives	cooperatives' financial leverage is a significant determinant of financing decisions.	Did not indicate the effect of cooperatives' financial leverage on the performance of cooperative societies	Determine the effect of DT-SACCOs' financial leverage on the performance
Theogene (2021)	How agricultural cooperatives use financial reports to make decisions	Financial decision was found as one of important factor in the management of agricultural cooperatives	The study did not indicate the influence of financial decision on financial performance.	To determine the influence of financial decision on financial performance
Towo (2022)	Financial leverage and financial performance of savings and credit co-operative Societies in Tanzania	leverage is negatively and significantly related to SACCOS financial performance	Mixed findings of the scholars who argued that leverage has positive effect on performance of Saccos (Amondi, 2020)	Seeks to establish the relationship between leverage and performance of DT-SACCOs.

Source: Researcher (2022)

2.6 Conceptual Framework

The conceptual model illustrates the anticipated link between the study variables. Independent variable included; financial leverage, dividend policy and working capital. Firm performance represents the dependent variable that the research tried to elaborate and it was measured using return on assets. The control variable was firm size measured as natural logarithm of total assets.

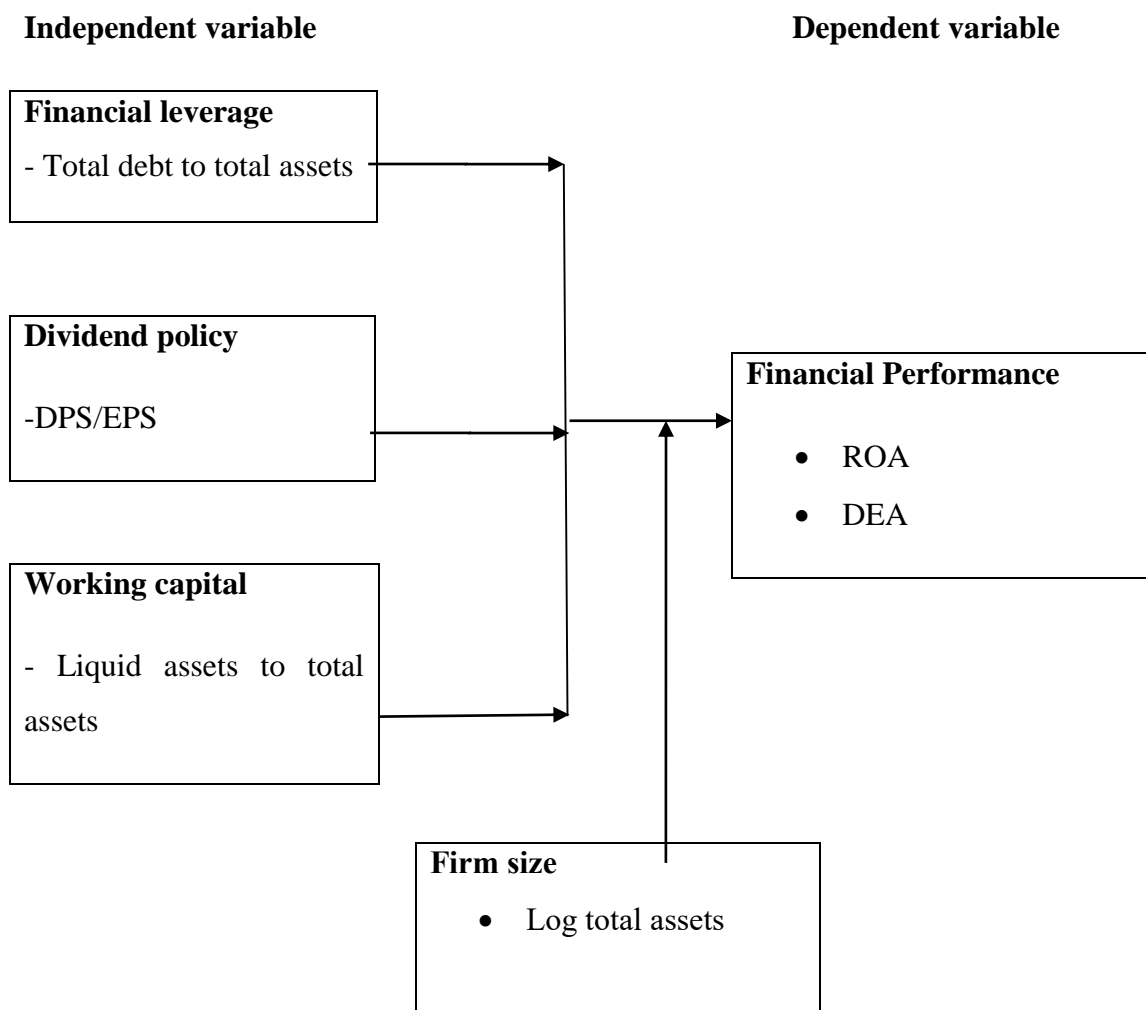


Figure 2.1: Conceptual Model

Source: Researcher (2022)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methods that were used to determine whether and how financing decisions affects the performance of deposit-taking SACCOs in Nairobi County. There was a strong focus on research methodology, data collection, and statistical analysis.

3.2 Research Design

A descriptive approach was used for this investigation. Examining the relationship that exists between financing decisions and performance was the focus of this descriptive study's main objective. Given that the researcher was primarily interested in the phenomenon's fundamental characteristics, this approach was appropriate (Khan, 2008). It was also effective for defining the phenomena' interconnections. This design also represented the variables precisely and legitimately, yielding sufficient data to answer the research objectives (Cooper & Schindler, 2014).

3.3 Population

A population is comprised of all of the observations that have been gathered from a collection of interesting objects that have been specified in an investigation (Burns & Burns, 2008). The 43 deposit-taking SACCOs in Nairobi County as of December 31st, 2021 made up the research population for this study (Appendix II).

3.4 Data Collection

The study relied exclusively on secondary data. As secondary data collection template was developed as per the study variables. The data was collected for a 5 year period (2017 to 2021) on an annual basis. The 5 year period was chosen as it provides the

latest information and it was considered adequate for robust regression analysis. The source of the data was SASRA reports and individual DT-SACCOs annual reports.

3.5 Data Analysis

Stata 16 was used to do an analysis on the data collected. Charts and tables were used to quantitatively display the results. Together, the gathered descriptive statistics and the standard deviation served as the basis for measurements of central tendency and dispersion for each variable. Both correlation and regression played a role in the construction of inferential statistics. A panel regression linearly determined the relation between the dependent as well as independent variables.

3.6.1 Diagnostic Tests

The diagnostic tests performed are outlined in Table 3.1

Table 3.1: Diagnostic Tests

Assumption	Description	Test	Interpretation	Treatment
Normality	To verify normal distribution, the test is conducted	Shapiro–Wilk test	If p values are above 0.05, the variables are normally distributed	application of square roots or logs to non-normality
Linearity Test	There is linearity when there is a linear link between the variables.	ANOVA test	A linear relationship exists where the alpha values are < 0.05	Use of the reciprocal method
Multicollinearity	The phenomenon known as multicollinearity occurs when there is a connection between many variables, which then leads to the standard errors distorting the regression analysis.	VIF Test	Multicollinearity exist where the $VIF > 10$	Eliminate highly correlated variables.

Heteroscedasticity	to determine whether the model's or the errors' variance is different for each observation	Breusch–Pagan test	Heteroscedasticity exist where the p-value $p < 0.05$)	Use Natural log of variables
Autocorrelation	To determine the value of a single variable by considering other variables that are connected to it.	Breusch-Godfrey test.	If p-values are lower than 0.05, autocorrelation is present.	Hildreth-Lu Procedure
Stationarity test	In order to evaluate whether or not a time series variable has a unit root and whether or not it is stationary	ADF test	If p values are below 0.05, unit roots exist.	Use Natural log of variables
Hausman specification test	In order to distinguish between fixed-effects and random-effects models and to choose the most appropriate one	Hausman test	Use fixed effects model if p value is less than 0.05 and random effects if otherwise	Use natural log of variables

3.6.2 Analytical Model

The panel regression model below was applied:

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

Where: Y_{it} is performance which will have two measures; equation one will be return on assets (net income divided by total assets) on an annual basis while equation two will be efficiency (the ratio of weighted total revenues to weighted total operating expenses) for DT-SACCO i at time t . The intention is to develop a profitability and efficiency matrix as borrowed from Xaba et al. (2018).

β_0 is y regression intercept.

$\beta_1, \beta_2, \beta_3, \beta_4$ are the regression slope coefficients

X_{1it} was financial leverage measuring using total debt to total assets of DT-SACCO i at time t

X_{2it} was dividend policy measured as DPS over EPS of DT-SACCO i at time t

X_{3it} was working capital measured as liquid assets to total assets of DT-SACCO i at time t

X_{4it} was firm size measured as log total assets of DT-SACCO i at time t

ε =error term

3.6.3 Tests of Significance

The relevance of the overall model as well as the variable was determined via the use of parametric tests. To determine whether the model was useful, F-test in the analysis of variance (ANOVA) was used, but to determine if any given variable was statistically significant, t-test was used.

CHAPTER FOUR: DATA ANALYSIS RESULTS AND FINDINGS

4.1 Introduction

This chapter offers descriptive statistics and the results and interpretations of various tests namely; test of normality, Multicollinearity, heteroskedasticity tests, autocorrelation and stationarity test. The chapter also presents the results of Pearson correlation and regression analysis.

4.2 Descriptive Statistics

This section presents the descriptive findings from the collected data. The descriptive results include mean and standard deviation for every research variables. The analyzed data was obtained from individual DT-SACCOs annual reports for duration of 5 years (2017 to 2021). The number of observations is 215 (43*5) as 43 DT-SACCOs provided complete data for the 5 year period. The results are as shown in Table 4.1

Table 4.1: Descriptive Results

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	215	.1093558	.0852779	.0015	.365
Financialle	215	.2595893	.2519921	.0227	1.9617
Dividendpoy	215	.0913479	.089406	0	.57
Liquidity	215	2.393823	1.462651	1.023697	10.08932
Firmsize	215	7.78492	.5685225	6.072405	8.730346

Source: Field data (2022)

4.3 Diagnostic Tests

As rationalised in chapter three, the researcher conducted diagnostic tests to ensure that the assumptions of Classic Linear Regression Model (CLRM) are not violated and to attain the appropriate models for probing in the significance that the CLRM

hypotheses are infringed. As a result, pre-approximation and post-approximation assessments of the regression model were performed prior to processing. The multicollinearity test and unit root test were the pre-approximation tests used in these situations, whereas the normalcy test, test for heteroskedasticity, and test for autocorrelation were the post-estimation tests. These analyses were performed by the study to avoid having factual regression results.

4.3.1 Normality Test

The normality of data can be tested using a variety of methods. The most commonly utilized approaches include the Shapiro–Wilk test, Kolmogorov–Smirnov test, skewness, kurtosis, histogram, P–P Plot, box plot, Q–Q Plot, mean and standard deviation. The most extensively used normality tests are the Kolmogorov–Smirnov test and the Shapiro–Wilk test. The Shapiro–Wilk test is better for small sample sizes ($n < 50$ samples), while it can also be used on more extensive samples selections, whereas the Kolmogorov–Smirnov test is better for $n > 50$ samples. As a result, the study used the Kolmogorov–Smirnov test as the numerical method of determining normality. For both of the above tests, the null hypothesis says that the data are obtained from a normal distribution population. When P-value is below 0.05, null hypothesis is rejected and the data are said to be not normally distributed.

Table 4.2: Test for Normality

	Kolmogorov-Smirnov	P-value
ROA	0.799	0.078
Financial leverage	0.891	0.099
Dividend policy	0.877	0.093
Working capital	0.896	0.101
Firm size	0.927	0.122

Source: Research Findings (2022)

Evident in Table 4.2 results, all the study variables have a p value above 0.05 and therefore were normally distributed.

4.3.2 Multicollinearity Test

Multicollinearity transpires when the independent variables in a regression model are significantly linked. Multicollinearity was assessed using the VIF and tolerance indices. When the VIF value is above ten and the tolerance score is less than 0.2, multicollinearity is present, and the assumption is broken. The VIF values are less than 10, indicating no problem with multicollinearity.

Table 4.3: Multicollinearity

Variable	Collinearity Statistics	
	Tolerance	VIF
Financial leverage	0.518	1.931
Dividend policy	0.492	1.434
Working capital	0.713	2.033
Firm size	0.654	1.529

Source: Research Findings (2022)

4.3.3 Heteroskedasticity Test

The residual variance from the model must be constant and unrelated to the independent variable in linear regression models calculated using the Ordinary Least Squares (OLS) method(s). Homoskedasticity refers to constant variance, whereas heteroscedasticity refers to non-constant variance (Field, 2009). The research utilized the Breusch-Pagan/Cook-Weisberg test to check if the variation was heteroskedastic. The null hypothesis implies constant variance, indicating that the data is homoscedastic. The outcomes are presented in Table 4.4.

Table 4.4: Heteroskedasticity Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity		
chi2(1)	=	0.6218
Prob > chi2	=	0.4239

Source: Research Findings (2022)

As evident in Table 4.4 null hypothesis was not rejected since the p-value was 0.4239, which was statistically significant ($p > 0.05$). As a result, the dataset had homoskedastic variances. Since the P-values of Breusch-Pagan's test for homogeneity of variances above 0.05. The test thus confirmed homogeneity of variance. The data can therefore be used to conduct panel regression analysis.

4.3.4 Autocorrelation Test

Serial correlation, also known as autocorrelation, makes the standard errors of coefficients appear to be less than in linear panel data models, resulting in higher R-squared and erroneous hypothesis testing. Autocorrelation was verified via Durbin-Watson test. If the Durbin-Watson test results in a value of 2, the error terms of regression variables are uncorrelated (i.e. between 1 and 3). The nearer the figure to 2 is; the better. The outcomes are presented in Table 4.5.

Table 4.5: Test of Autocorrelation

Durbin Watson Statistic
2.293

Source: Research Findings (2022)

The Durbin-Watson statistic was 2.293, according to the findings in Table 4.5. The fact that the Durbin-Watson statistic was near to 2 demonstrates that the error terms of regression variables are uncorrelated.

4.3.5 Stationarity Test

The research variables were subjected to a panel data unit-root test to establish if the data was stationary. The unit root test was Levin-Lin Chu unit root test. At a standard statistical significance level of 5%, the test was compared to their corresponding p-values. In this test, the null hypothesis is that every panel has a unit root, and the alternative hypothesis is that at least one panel is stationary. The Levin-Lin Chu unit root test outcomes are listed in Table 4.6.

Table 4.6: Levin-Lin Chu unit-root test

Levin-Lin Chu unit-root test			
Variable	Statistic	p value	Comment
ROA	6.2126	0.0000	Stationary
Financial leverage	8.2031	0.0000	Stationary
Dividend policy	7.8718	0.0000	Stationary
Working capital	6.8447	0.0000	Stationary
Firm size	6.8132	0.0000	Stationary

Source: Research Findings (2022)

As demonstrated in Table 4.6, this test concludes that the data is stationary at a 5% level of statistical significance since the p-values all fall below 0.05.

4.3.6 Hausman Test

When using panel data, it is necessary to determine whether a fixed effect or random effect model is more desirable. For the purpose of choosing the best panel regression model, the Hausman specification test was used. In essence, a Hausman specification test determines if the unique errors have a relationship to the regressors, with the null hypothesis being that they do not (random effect is preferred). Fixed effects were utilized if the P-value was significant (below 0.05), while random effects were used otherwise. The results of the Hausman test are shown in Table 4.7.

Table 4.7: Hausman Test Results

chi2(4)	P-Value
33.29	0.0000

Null Hypothesis: The appropriate model is Fixed Effects

Source: Research Findings (2022)

4.4 Correlation Results

To determine the degree and direction of link between each predictor variable and the response variable, correlation analysis was carried out. The correlation findings in Table 4.8 display correlation nature between the research variables in relation to magnitude and direction.

Table 4.8: Correlation Results

		ROA	Financial leverage	Dividend policy	Working capital	Firm size
ROA	Pearson Correlation	1				
	Sig. (2-tailed)					
Financial leverage	Pearson Correlation	-.562**	1			
	Sig. (2-tailed)	.000				
Dividend policy	Pearson Correlation	.583**	-.165*	1		
	Sig. (2-tailed)	.000	.016			
Working capital	Pearson Correlation	.592**	.050	.114	1	
	Sig. (2-tailed)	.000	.468	.097		
Firm size	Pearson Correlation	.481**	.015	-.129	.241**	1
	Sig. (2-tailed)	.000	.824	.058	.000	

** . Correlation is significant at the 0.01 level (2-tailed).
 * . Correlation is significant at the 0.05 level (2-tailed).
 c. Listwise N=215

Source: Research Findings (2022)

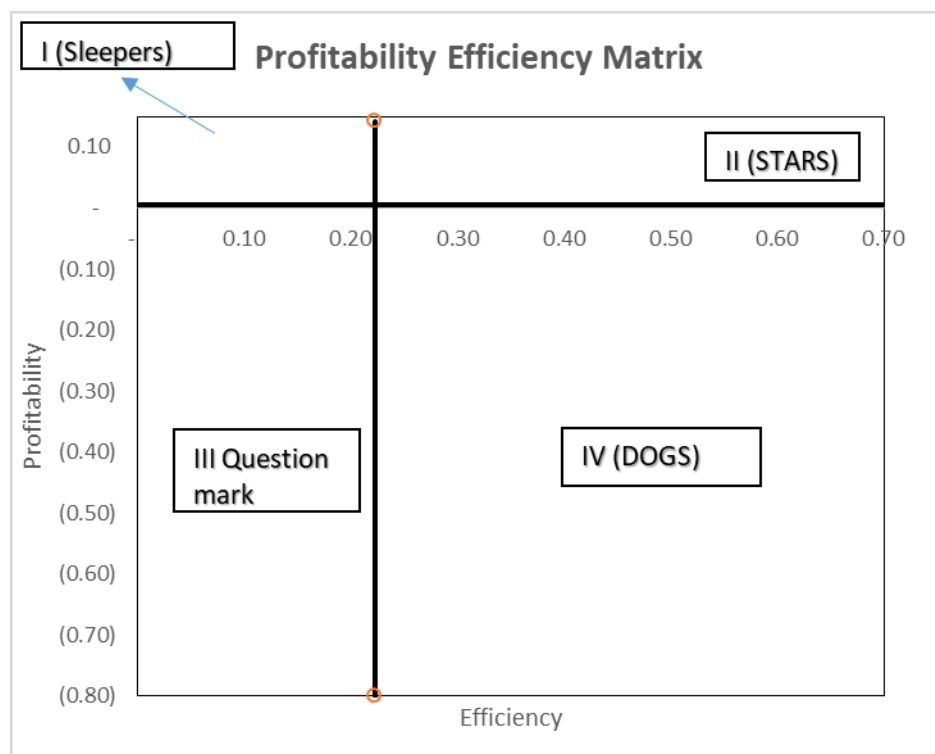
The correlation results disclose that financial leverage and ROA have a negative as well as significant correlation ($r=-0.562$) at 5 % significance level. The relationship

between dividend policy and ROA was positive and significant ($r=0.583$) at 5 % significance level. The outcomes also reveal that both working capital ($r=0.592$) and size ($r=0.481$) had positive as well as significant relation with ROA as depicted by p values below 0.05.

4.5 Profitability Efficiency Matrix

The study formed a profitability efficiency matrix showing the profitability in contrast to the efficiency of DT-SACCOs. From the results the Median for profitability was 0.005 whereas the median for efficiency was 0.22. A matrix comprising of four quadrants as shown in table 4.9 below was created.

Table 4.9: Profitability-Efficiency Matrix



Source: Research Findings (2022)

Quadrant I is referred as sleepers, quadrant II is referred as stars, Quadrant III is referred as Question Mark and Quadrant IV referred as the Dogs. Quadrant I contains

those DT-SACCOs with high profitability and low efficiency, Quadrant II is those DT-SACCOs that have high profitability and high efficiency, Quadrant III is those DT-SACCOs with low profitability and low efficiency and Quadrant IV is those DT-SACCOs with low profitability and high efficiency. From the findings (12/43) of the DT-SACCOs were sleepers in Quadrant I having a high profitability and low efficiency, 12/43 of DT-SACCOs were in stars having high profitability and high efficiency, Quadrant IV(DOGS) also had 12/43 DT-SACCOs having high efficiency and low profitability. Finally, quadrant III had 7/43 DT-DT-SACCOs having low profitability and low efficiency.

4.6 Regression Results

To determine the extent to which ROA is described by the chosen variables, regression analysis was used. In Table 4.10, the regression's findings were displayed. From the conclusions as epitomized by the adjusted R^2 , the studied independent variables explained variations of 0.5411 in ROA among DT-SACCOs in Kenya. This suggests that other not researched factors account for 45.89% of the variability in ROA among DT-SACCOs in Kenya, while the five variables account for 54.11% of those variations.

The data had a 0.000 significance level, according to Table 4.10's ANOVA results, which suggests that the model is the best choice for drawing conclusions about the variables.

Table 4.10: Regression Results

ROA	Coef.	std.err	Z	P> z 	[95% conf.interval]	
Financial leverage	-0.337	0.025	-3.21	0.001	-0.032	-0.131
Dividend policy	0.858	0.012	5.64	0.000	0.058	0.008
Working capital	0.178	0.015	2.18	0.029	0.003	0.061
Firm size	0.679	0.023	4.31	0.000	0.446	0.492
_cons	0.788	0.126	4.98	0.000	0.523	0.030
R squared =0.5411						
Wald chi2(4)=62.11						
Prob>chi2=0.000						

Source: Research Findings (2022)

The coefficient of regression model was as below;

$$Y = 0.788 - 0.337X_1 + 0.858X_2 + 0.178X_3 + 0.679X_4$$

Where:

Y = ROA X₁ = Financial leverage; X₂= Dividend policy X₃= Working capital; X₄ = Firm size

4.7 Discussion of Research Findings

The objective of this research was to establish the effect of financing decisions on performance of DT-SACCOs in Kenya. The research applied a descriptive design whereas population was the 43 DT-SACCOs in Nairobi County. Complete data was obtained from 43 DT-SACCOs in Kenya and which were considered adequate for regression analysis. The research applied secondary data which was gotten from SASRA and individual DT-SACCO annual statements. The independent variable was financing decisions measured as financial leverage, dividend policy and working capital while the control variable was firm size. Both descriptive as well as inferential statistics were applied in analyzing the data. This section discusses the findings.

Multivariate regression outcomes revealed that the R square was 0.5411 implying that 54.11% of changes in performance of DT-SACCOs are due to the four variables alterations selected for this study. This means that variables not considered explain 45.89% of changes in performance. The overall model was also statistically significant as the p value was 0.000 that is below the 0.05 significance level. This implies that the overall model had the required goodness of fit.

The multivariate regression analysis further revealed that individually, financial leverage has a negative effect on performance of DT-SACCOs ($\beta=-0.337$, $p=0.001$). Dividend policy exhibited a positive and significant effect on performance of DT-SACCOs ($\beta=0.858$, $p=0.000$). Firm working capital also exhibited a positive and significant effect on ROA ($\beta=0.178$, $p=0.029$). The control variable which was firm size displayed a positive and significant performance influence as shown by ($\beta=0.679$, $p=0.000$).

These conclusions concur with those of Towo (2022) who investigated the link between financial leverage and financial performance of savings and credit co-operative Societies in Tanzania. Fixed-effects models for analysis was employed. The results show that financial leverage is negatively and significantly related to SACCOS financial performance.

The research findings also concur with Miranda and Chen (2021) who studied leverage, working capital and agricultural cooperative profitability. The study employed US Farm Credit System panel data from 2011-2015. The study found that maintaining a low leverage ratio and a high working capital ratio increases agricultural cooperative profitability.

The study further concurs with Gacheru and Muturi (2018) who investigated financial factors that influence the performance of cooperative societies in Juja Sub County in Kiambu County Kenya. Using multiple regression model, dividend policy was found to have a positive influence on Return on Asset and Return on Equity. The study findings also concur with Gacheru and Muturi (2018) who establishes that dividend payout has positive significant effect on performance of Saccos.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The key aim of the research was determining how financing decisions influences the performance of DT-SACCOs in Nairobi County, Kenya. This section includes a summary of the findings from the previous chapter as well as the conclusions and limitations of the study. Additionally, it makes recommendations for potential policy measures. The chapter provides recommendations for further research.

5.2 Summary of Findings

The objective of this research was to establish the effect of financing decisions on performance of DT-SACCOs in Nairobi County, Kenya. The research applied a descriptive design whereas population was the 43 DT-SACCOs in Nairobi County. Complete data was obtained from all the 43 DT-SACCOs and which were considered adequate for regression. The research applied secondary data which was gotten from

SASRA and individual DT-SACCO annual statements. The independent variable was financing decisions measured as financial leverage, dividend policy and working capital while the control variable was firm size. Both descriptive as well as inferential statistics were applied in analyzing the data. This section discusses the findings.

The correlation results disclose that financial leverage and performance of DT-SACCOs in Nairobi County have a negative as well as significant correlation. The relationship between dividend policy and performance of DT-SACCOs was positive and significant. The outcomes also reveal that both working capital and firm size had positive as well as significant relation with performance of DT-SACCOs.

Multivariate regression outcomes revealed that the R square was 0.5411 implying that 54.11% of changes in performance of DT-SACCOs are due to the four variables alterations selected for this study. This means that variables not considered explain 45.89% of changes in performance. The overall model was also statistically significant as the p value was 0.000 that is below the 0.05 significance level. This implies that the overall model had the required goodness of fit.

The multivariate regression analysis further revealed that individually, financial leverage has a negative effect on performance of DT-SACCOs ($\beta=-0.337$, $p=0.001$). Dividend policy exhibited a positive and significant effect on performance of DT-SACCOs ($\beta=0.858$, $p=0.000$). Firm working capital also exhibited a positive and significant effect on ROA ($\beta=0.178$, $p=0.029$). The control variable which was firm size displayed a positive and significant performance influence as shown by ($\beta=0.679$, $p=0.000$).

5.3 Conclusions

The research intention of the research was establishing correlation between financing decisions and Kenyan DT-SACCOs performance. The findings designated that financial leverage had a negative and significant effect on performance of DT-SACCOs. This may imply that DT-SACCOs with high financial leverage have low levels of performance. Financial leverage management is therefore necessarily to achieve the targeted performance.

The study conclusions revealed that dividend policy had a positive as well as significant effect on performance. This may mean that the DT-SACCOs that DT-SACCOs which pay a high proportion of their earnings as dividends are able to attract more members and more savings which implies more funds to put in active investments which in essence boosts performance.

Additionally, the outcomes discovered that working capital has a significant positive effect on performance. This infers that firms with low liquid assets level compared to their assets end up having a lower ROA. This can be explained by the inability of illiquid firms of taking investment opportunities advantage whenever they arise leading to poor performance.

The research outcomes further depicted that DT-SACCO size had a positive as well as significant influence on ROA which might mean that an increase in asset base of a DT-SACCO leads to enhanced ROA. This can be explained by the fact that bigger DT-SACCOs are likely to have developed structures to monitor the internal operations of a firm leading to better ROA. Bigger DT-SACCOs are also likely to have better governance structure which can also explain the high ROA associated with firm size.

5.4 Recommendations for Policy and Practice

The study's results indicate that financial leverage significantly and negatively affected ROA. Hence, the study recommends that DT-SACCO administrators endeavor to lower the level of financial leverage in their books. This can be accomplished by developing policies and guidelines stating the percentage of debt that can be allowed in a DT-SACCO as a proportion of total assets.

From the study findings, dividend policy was found to enhance performance of DT-SACCOs; this study recommends that DT-SACCOs should strive to enhance their dividend payments as this is likely to boost their performance. The policy makers should set a limit of the dividend payout ratio that DT-SACCOs should have as too much dividend is also disadvantageous as it comes with opportunity costs.

Further, working capital was discovered to possess a significant and positive impact on performance. The research therefore commends that management of DT-SACCOs in Kenya should ensure that they do not over commit their assets by giving excess loans as this will likely lead to reduced ROA. The DT-SACCOs should come up with effective working capital management strategies. Regulators should ensure that the DT-SACCOs do not led beyond a certain set limit of their asset base.

5.5 Limitations of the Study

The focus was on various factors which are thought to influence performance of Kenyan DT-SACCOs. The study specifically examined four explanatory factors. Though, in certainty, there is presence of other variables probable to influence performance of firms including internal like corporate governance attributes and organization culture whereas others are beyond the control of the firm like interest rates as well as political stability.

In this study, a five-year period from 2017 to 2021 was selected. There is no proof that comparable results will remain the same across a longer time frame. Moreover, it is impossible to predict if the same outcomes would persist until 2021. Given that additional time contains instances of big economic transitions like recessions and booms, it is more dependable.

The quality of the data was the main restriction for this study. It is impossible to conclusively conclude that the study's findings accurately reflect the current reality. It has been presumed that the data utilized in the study are accurate. Due to the current conditions, there has also been a great deal of incoherence in the data measurement. The study made use of secondary data rather than primary data. Due to the limited availability of data, only some of the growth drivers have been considered.

The data analysis was performed using regression models. Because of the limitations associated with using the model, like inaccurate or erroneous findings resulting from a change in the variable value, the researchers would not be able to generalize the conclusions precisely. A regression model cannot be performed using the prior model after data is added to it.

5.6 Suggestions for Further Research

It has been suggested that several areas for advanced future research to be done on the basis of the tangible information gathered and the clarifying comprehension established in this research. First, other aspects influence firm performance apart from financing decisions. More research can be conducted to determine and evaluate them. Additionally, other factors moderate, intervene, or mediate the relationship between financing decisions and firm performance apart from firm size. Further research can be done to identify and analyze them.

The current research scope was restricted to five years; more research can be done past five years to determine whether the results might persist. Thus, inherent future studies may use a wider time span, that can either support or criticize the current research conclusions. The scope of the study was additionally constrained in terms of context where DT-SACCOs were examined. Further studies can be extended to other financial firms to establish if they complement or contradict the current study findings. Researchers in the East African region, the rest of Africa, and other global jurisdictions can too perform the research in these jurisdictions to ascertain if the current research conclusions would persist.

The research only used secondary data; alternate research may use primary data sources such in-depth questionnaires and structured interviews given to practitioners and stakeholders. These can then affirm or criticize the results of the current research. This study used multiple linear regression and correlation analysis; future research could use other analytic techniques such factor analysis, cluster analysis, granger causality, discriminant analysis, and descriptive statistics, among others.

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APPENDICES

Appendix I: Research Data

DT-SACCO	Year	ROA	Financial leverage	Dividend policy	Working capital	Firm size
1	2017	0.0402	0.1723	0.1600	3.9703	8.2162
1	2018	0.0415	0.1645	0.0600	3.9512	8.2177
1	2019	0.2296	0.1528	0.1500	3.9318	8.2509
1	2020	0.2144	0.1560	0.0400	3.9120	8.2695
1	2021	0.1606	0.1844	0.0500	3.8918	8.3168
2	2017	0.1440	0.1592	0.1400	3.9120	8.3379
2	2018	0.1219	0.1639	0.1500	3.8918	8.4239
2	2019	0.0957	0.1616	0.1200	3.8712	8.4141
2	2020	0.2794	0.1578	0.0900	3.8501	8.4557
2	2021	0.2788	0.1602	0.1100	3.8286	8.4859
3	2017	0.1096	1.8796	0.0100	4.3944	8.2067
3	2018	0.0593	1.9617	0.0200	4.3820	8.2879
3	2019	0.2438	0.3053	0.0200	4.3694	8.3768
3	2020	0.1236	0.3229	0.0400	4.3567	8.4253
3	2021	0.1261	0.3466	0.0600	4.3438	8.4516
4	2017	0.1169	0.1596	0.1300	3.1781	7.5576
4	2018	0.0870	0.1840	0.1200	3.1355	7.6198
4	2019	0.0850	0.1786	0.1300	3.0910	7.5878
4	2020	0.0769	0.1803	0.1700	3.0445	7.5652
4	2021	0.0621	0.1638	0.2200	2.9957	7.5406
5	2017	0.0665	0.3941	0.0400	2.0794	8.0577
5	2018	0.0515	0.4230	0.0500	1.9459	8.1238
5	2019	0.0227	0.4574	0.0100	1.7918	8.1659
5	2020	0.0227	0.5397	0.0100	1.6094	8.2286
5	2021	0.2837	0.4392	0.0700	1.3863	8.3287
6	2017	0.0015	0.2730	0.1000	3.5835	8.5767
6	2018	0.0337	0.2832	0.0800	3.5553	8.6278
6	2019	0.1402	0.2637	0.0200	3.5264	8.6514
6	2020	0.0819	0.2555	0.3900	3.4965	8.6986
6	2021	0.3061	0.2764	0.0600	3.4657	8.7303
7	2017	0.1685	0.1791	0.0400	3.9703	8.0019
7	2018	0.2919	0.1792	0.1500	3.9512	8.0506
7	2019	0.2136	0.1845	0.3100	3.9318	8.0485
7	2020	0.0041	0.1732	0.0200	3.9120	8.1428
7	2021	0.0041	0.1573	0.1100	3.8918	8.1599
8	2017	0.1179	0.1099	0.3500	3.9120	7.9815

DT-SACCO	Year	ROA	Financial leverage	Dividend policy	Working capital	Firm size
8	2018	0.2618	0.0939	0.1800	3.8918	8.0263
8	2019	0.1030	0.0790	0.3900	3.8712	8.0767
8	2020	0.1341	0.0509	0.1900	3.8501	8.1894
8	2021	0.0918	0.0280	0.0500	3.8286	8.2824
9	2017	0.0045	0.1883	0.1000	4.3944	8.0201
9	2018	0.0527	0.1551	0.1100	4.3820	8.0438
9	2019	0.0538	0.2285	0.1200	4.3694	7.9725
9	2020	0.0737	0.1477	0.0400	4.3567	7.9744
9	2021	0.0201	0.1451	0.0500	4.3438	7.9950
10	2017	0.0475	0.2165	0.0200	3.1781	8.1877
10	2018	0.0879	0.2126	0.0200	3.1355	8.2356
10	2019	0.1244	0.2277	0.1900	3.0910	8.2709
10	2020	0.0180	0.0227	0.0200	3.0445	8.3291
10	2021	0.0180	0.1618	0.0300	2.9957	8.3508
11	2017	0.1605	0.2345	0.0900	2.0794	8.3898
11	2018	0.1071	0.2442	0.0900	1.9459	8.4802
11	2019	0.0045	0.2508	0.1000	1.7918	8.5279
11	2020	0.0225	0.2355	0.0400	1.6094	8.5719
11	2021	0.0400	0.2456	0.0200	1.3863	8.6261
12	2017	0.0397	0.2291	0.0200	2.3571	7.2060
12	2018	0.0421	0.1463	0.0200	2.2968	7.1988
12	2019	0.1185	0.1850	0.0300	2.6813	7.2236
12	2020	0.0468	0.1901	0.0400	2.3480	7.3186
12	2021	0.0662	0.2111	0.0300	2.6204	7.3549
13	2017	0.1105	0.4230	0.0600	1.3164	7.7230
13	2018	0.0800	0.4574	0.1900	1.1960	7.6766
13	2019	0.0468	0.5397	0.1900	1.1739	7.5374
13	2020	0.0759	0.7005	0.0200	1.2056	7.4993
13	2021	0.2283	0.2990	0.0400	1.2276	7.4789
14	2017	0.2214	0.3184	0.3000	1.0562	7.6874
14	2018	0.3650	0.2496	0.2400	1.0962	7.7237
14	2019	0.0561	0.1944	0.2000	1.1120	7.5611
14	2020	0.0168	0.1599	0.1700	1.1601	7.6254
14	2021	0.1243	0.1659	0.1400	1.1233	7.6188
15	2017	0.1145	0.2120	0.0000	4.5106	8.2162
15	2018	0.1364	0.2018	0.2000	6.2963	8.2177
15	2019	0.0400	0.1966	0.0100	10.0893	8.2509
15	2020	0.0199	0.2041	0.0200	4.2579	8.2695
15	2021	0.0111	0.2041	0.1200	8.8431	8.3168
16	2017	0.2872	0.2691	0.0200	1.1065	7.3921

DT-SACCO	Year	ROA	Financial leverage	Dividend policy	Working capital	Firm size
16	2018	0.0267	0.1441	0.0300	1.1464	7.3912
16	2019	0.0035	0.2078	0.1300	1.3815	7.4269
16	2020	0.1599	0.1986	0.3800	1.5359	7.4953
16	2021	0.1599	0.1952	0.0100	1.4639	7.6089
17	2017	0.1966	0.1125	0.0500	1.2832	7.7088
17	2018	0.2632	0.1145	0.0500	1.1679	7.7925
17	2019	0.0323	0.1399	0.0700	1.3048	7.7958
17	2020	0.0706	0.1534	0.0500	1.1971	7.8087
17	2021	0.1038	0.0911	0.0500	1.1606	7.7387
18	2017	0.1004	0.2335	0.0700	1.5853	8.1416
18	2018	0.0773	0.2649	0.0600	1.9464	8.2161
18	2019	0.0718	0.2547	0.0500	1.0851	8.2482
18	2020	0.0745	0.2387	0.0400	1.0237	8.2873
18	2021	0.0365	0.2597	0.0300	1.4691	8.2934
19	2017	0.0635	0.1712	0.2100	1.9836	7.0270
19	2018	0.0277	0.1763	0.0500	1.3339	6.9998
19	2019	0.0882	0.1904	0.0500	1.5404	6.9773
19	2020	0.0327	0.2022	0.0800	1.2591	6.9368
19	2021	0.0327	0.2275	0.0300	1.1154	6.9339
20	2017	0.2284	0.1351	0.5700	4.1442	6.8581
20	2018	0.3270	0.1577	0.5300	7.9538	6.8614
20	2019	0.2227	0.1872	0.0800	8.4745	6.9607
20	2020	0.2210	0.1620	0.0600	3.3451	7.0390
20	2021	0.2283	0.1866	0.0000	1.9506	7.1179
21	2017	0.2175	0.2022	0.0600	1.0966	8.3379
21	2018	0.2715	0.3213	0.0700	1.4218	8.4239
21	2019	0.2842	0.3911	0.0600	1.4858	8.4141
21	2020	0.2461	0.1700	0.0400	1.7358	8.4557
21	2021	0.2692	0.1534	0.1200	1.2374	8.4859
22	2017	0.0826	0.3909	0.1300	1.9502	8.3379
22	2018	0.1139	0.1813	0.1600	1.9346	8.4239
22	2019	0.1465	0.1769	0.2000	1.9684	6.7611
22	2020	0.1945	0.1700	0.2300	1.2242	6.7943
22	2021	0.1736	0.1534	0.0200	1.6434	8.2879
23	2017	0.2410	0.1885	0.0600	1.0320	8.2067
23	2018	0.1590	0.2020	0.0600	1.9226	8.2879
23	2019	0.0644	0.1815	0.1000	1.8973	8.3768
23	2020	0.0604	0.1858	0.0800	1.1574	8.4253
23	2021	0.0310	0.1793	0.1200	1.5021	8.4516
24	2017	0.0279	0.2610	0.1600	1.4648	8.4859

DT-SACCO	Year	ROA	Financial leverage	Dividend policy	Working capital	Firm size
24	2018	0.0248	0.1625	0.1400	1.5627	8.3379
24	2019	0.0139	0.2008	0.1100	1.4005	8.4239
24	2020	0.0019	0.1933	0.1100	1.0634	6.0724
24	2021	0.1050	0.1915	0.1700	1.6245	6.5049
25	2017	0.0840	0.2101	0.0500	1.7402	7.5107
25	2018	0.1331	0.1536	0.0100	4.3944	7.5376
25	2019	0.1709	0.1801	0.0900	4.3820	7.5084
25	2020	0.0574	0.1663	0.1000	4.3694	7.6403
25	2021	0.1230	0.1955	0.0300	2.2050	7.6508
26	2017	0.0887	0.1945	0.0500	2.5238	8.3898
26	2018	0.0937	0.4270	0.0100	3.3740	8.4802
26	2019	0.0986	0.3933	0.0900	2.8332	8.5279
26	2020	0.0999	0.5708	0.0300	3.0200	8.5719
26	2021	0.1514	0.4494	0.0500	4.4016	8.6261
27	2017	0.0609	0.4576	0.0100	2.3280	7.6734
27	2018	0.2966	0.3498	0.0700	1.7710	7.7973
27	2019	0.2323	0.3869	0.0900	1.8952	7.6170
27	2020	0.2298	0.3316	0.0700	2.1309	7.6754
27	2021	0.1657	0.3093	0.0800	1.9554	7.6856
28	2017	0.0105	0.1393	0.0100	1.2192	7.1251
28	2018	0.0572	0.1399	0.0000	1.1561	7.0917
28	2019	0.0125	0.0715	0.0800	1.1158	7.1023
28	2020	0.0912	0.0542	0.0700	1.0780	7.1695
28	2021	0.0185	0.0370	0.2500	1.5236	7.1649
29	2017	0.1863	0.2104	0.1400	1.4882	7.4691
29	2018	0.0950	0.2059	0.1600	1.2774	7.4211
29	2019	0.1526	0.2304	0.0000	1.2997	7.4344
29	2020	0.1072	0.2227	0.0100	1.1003	7.4408
29	2021	0.0096	0.1869	0.0000	1.6298	7.4577
30	2017	0.0175	0.2545	0.0300	1.5950	7.1018
30	2018	0.0041	0.2412	0.0100	1.4871	7.0967
30	2019	0.1415	0.2741	0.0300	1.2846	7.0904
30	2020	0.1548	0.2946	0.0400	1.4099	7.1179
30	2021	0.1681	0.2853	0.0300	1.0780	7.1249
31	2017	0.0296	0.1676	0.0200	1.5236	7.1984
31	2018	0.0382	0.1729	0.0400	1.4882	7.2791
31	2019	0.0419	0.2216	0.0600	1.0983	7.3376
31	2020	0.0275	0.2248	0.2300	1.0861	7.4162
31	2021	0.0570	0.3729	0.0300	2.3685	7.4263
32	2017	0.0402	0.2056	0.0300	2.2713	6.5049

DT-SACCO	Year	ROA	Financial leverage	Dividend policy	Working capital	Firm size
32	2018	0.0415	0.2468	0.1000	1.8378	7.5107
32	2019	0.2296	0.2325	0.0300	2.3583	7.5376
32	2020	0.2144	0.1646	0.0400	2.5221	7.5084
32	2021	0.1606	0.1440	0.0400	1.3097	7.6403
33	2017	0.1440	0.1723	0.1000	1.1747	7.6508
33	2018	0.1219	0.1870	0.0000	1.1699	8.3898
33	2019	0.0957	0.1812	0.0300	1.1666	8.4802
33	2020	0.2794	0.1684	0.0800	1.1380	8.5279
33	2021	0.2788	0.1723	0.0300	2.5641	8.5719
34	2017	0.1096	0.1982	0.0000	1.0423	8.6261
34	2018	0.0593	0.2116	0.0000	1.0590	7.6734
34	2019	0.2438	0.2091	0.1100	1.1121	7.7973
34	2020	0.1236	0.1852	0.1000	1.1251	7.6170
34	2021	0.1261	0.1947	0.0900	1.0611	7.6754
35	2017	0.1169	0.1071	0.1600	1.1587	7.6856
35	2018	0.0870	0.1745	0.1900	1.1441	7.1251
35	2019	0.0850	0.1627	0.2300	1.1447	7.0917
35	2020	0.0769	0.1265	0.1900	1.0939	7.1023
35	2021	0.0621	0.2201	0.2600	1.0332	7.1695
36	2017	0.0665	0.2773	0.2700	1.2705	7.1649
36	2018	0.0515	0.2164	0.2300	1.2776	7.4691
36	2019	0.0227	0.2230	0.2200	1.1715	7.4211
36	2020	0.0227	0.2908	0.0600	1.1658	7.4344
36	2021	0.2837	0.2111	0.2300	1.5334	7.4408
37	2017	0.0015	0.5862	0.1200	1.6234	7.4577
37	2018	0.0337	0.2379	0.0500	1.6385	7.1018
37	2019	0.1402	0.3868	0.0600	1.6048	7.0967
37	2020	0.0819	0.3878	0.0500	1.5050	7.0904
37	2021	0.3061	0.3316	0.0900	1.2653	7.1179
38	2017	0.1685	0.2908	0.1300	1.2875	7.1249
38	2018	0.2919	0.1723	0.1700	1.2781	7.1984
38	2019	0.2136	0.2545	0.1200	1.2225	7.2791
38	2020	0.0041	0.2274	0.0400	1.1691	7.3376
38	2021	0.0041	0.2109	0.0300	1.1254	7.4162
39	2017	0.1179	0.1592	0.0400	1.0996	7.4263
39	2018	0.2618	0.1639	0.0498	1.0417	8.2161
39	2019	0.1030	0.1616	0.0389	1.2396	8.2482
39	2020	0.1341	0.1578	0.0387	2.2624	8.2873
39	2021	0.0918	0.1602	0.0360	2.9326	8.2934
40	2017	0.0045	1.8796	0.0284	3.5336	7.0270

DT-SACCO	Year	ROA	Financial leverage	Dividend policy	Working capital	Firm size
40	2018	0.0527	1.9617	0.0498	2.5000	6.9998
40	2019	0.0538	0.3053	0.0389	3.1447	6.9773
40	2020	0.0737	0.3229	0.0387	2.5063	6.9368
40	2021	0.0201	0.3466	0.0360	2.5000	6.9339
41	2017	0.0475	0.1596	0.0284	2.9851	6.8581
41	2018	0.0879	0.1840	0.0449	3.0675	6.8614
41	2019	0.1244	0.1786	0.0446	2.9586	6.9607
41	2020	0.0180	0.1803	0.0471	2.6596	7.0390
41	2021	0.0180	0.1638	0.0278	2.9674	7.1179
42	2017	0.1605	0.3941	0.0374	2.1739	8.3379
42	2018	0.1071	0.4230	0.0417	1.4728	8.4239
42	2019	0.0045	0.4574	0.0414	2.4155	8.4141
42	2020	0.0225	0.5397	0.0427	1.3569	8.4557
42	2021	0.0400	0.4392	0.0386	1.8315	8.4859
43	2017	0.0397	0.1723	0.1600	3.9703	8.2162
43	2018	0.0421	0.1645	0.0600	3.9512	8.2177
43	2019	0.1185	0.1528	0.1500	3.9318	8.2509
43	2020	0.0468	0.1560	0.0400	3.9120	8.2695
43	2021	0.0662	0.1844	0.0500	3.8918	8.3168

Appendix II: Deposit-taking SACCOs in Nairobi County

1. AFYA SACCO SOCIETY LTD
2. AIRPORTS SACCO SOCIETY LTD
3. ARDHI SACCO SOCIETY LTD
4. ASILI SACCO SOCIETY LTD
5. CHAI SACCO SOCIETY LTD
6. CHUNA SACCO SOCIETY LTD
7. COMOCO SACCO SOCIETY LTD
8. ELIMU SACCO SOCIETY LTD
9. FUNDILIMA SACCO SOCIETY LTD
10. HARAMBEE SACCO SOCIETY LTD
11. HAZINA SACCO SOCIETY LTD
12. JAMII SACCO SOCIETY LTD
13. KENPIPE SACCO SOCIETY LTD
14. KENVERSITY SACCO SOCIETY LTD
15. KENYA BANKERS SACCO SOCIETY LTD
16. KENYA POLICE SACCO SOCIETY LTD
17. KINGDOM SACCO SOCIETY LTD
18. MAGEREZA SACCO SOCIETY LTD
19. MAISHA BORA SACCO SOCIETY LTD
20. METROPOLITAN NATIONAL SACCO SOCIETY LTD
21. MWALIMU NATIONAL SACCO SOCIETY LTD
22. MWITO SACCO SOCIETY LTD
23. NACICO SACCO SOCIETY LTD
24. NAFKA SACCO SOCIETY LTD

25. NATION SACCO SOCIETY LTD
26. NSSF SACCO SOCIETY LTD
27. NYATI SACCO SOCIETY LTD
28. SAFARICOM SACCO SOCIETY LTD
29. SHERIA SACCO SOCIETY LTD
30. SHIRIKA SACCO SOCIETY LTD
31. SHOPPERS SACCO SOCIETY LTD
32. STIMA SACCO SOCIETY LTD
33. TAQWA SACCO SOCIETY LTD
34. TEMBO SACCO SOCIETY LTD
35. UFANISI SACCO SOCIETY LTD
36. UKRISTO NA UFANISI WA ANGLICANA SACCO SOCIETY LTD
37. UKULIMA SACO SOCIETY LTD
38. UNAITAS SACCO SOCIETY LTD
39. UNITED NATIONS SACCO SOCIETY LTD
40. USHIRIKA SACCO SOCIETY LTD
41. WANA – ANGA SACCO SOCIETY LTD
42. WANANDEGE SACCO SOCIETY LTD
43. WAUMINI SACCO SOCIETY LTD

Source: SASRA (2022)