EFFECT OF TAX INCENTIVES ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVES SOCIETIES OPERATING IN NAIROBI COUNTY, KENYA

BY

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DECLARATION

Declaration by Candidate

I wish to affirm that this research project is my original work and has not been submitted for a degree award in any other university.

Signature..... Date.....

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DEDICATION

This study is dedicated to my family for their moral and financial support.

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ABSTRACT

Savings and Credit Cooperatives (SACCOs) play a crucial role in providing financial services to rural and underserved communities, contributing to economic development and poverty alleviation. In the recent past, SACCOs in Kenya have experienced poor outcomes in their financial performance which has occasioned the collapse and eventual closure of some of these financial institutions with the deposits of their members. Recent reports from the SASRA highlight the underperformance of DT-SACCOs nationwide, with Nairobi County prominently affected. Understanding how tax incentives affect their financial performance is essential for promoting their sustainability and effectiveness in serving their members. The main objective of the study was to determine the effect of tax incentives on financial performance of deposit taking savings and credit cooperatives societies operating in Nairobi County, Kenya. Specific objectives were to determine the effect of investment allowance, accelerated depreciation and capital gain tax exemption on financial performance of DT-SACCOS in Nairobi County, Kenya. The research hypotheses were: H01: Investment allowance have no significant effect on the financial performance of DT-SACCOS in Nairobi County; H02: Accelerated depreciation has no significant effect on the financial performance of DT-SACCOS in Nairobi County and; H03: Capital gains tax exemption has no significant effect on the financial performance of DT-SACCOS in Nairobi County. The study was anchored on agency and Neo-classical Theories. This study utilized explanatory research design. The study used panel data collected from 12 selected DT-SACCOs out of a total 40 licensed entities in the region for the period of twelve years (2012-2023). The study used advanced estimation techniques, such as correlation and panel data regression model to estimate the relationship. The study's findings indicated that both investment allowance (β=-0.0477, P=0.000) and accelerated depreciation (β=-2.472, P=0.000) have significant negative impacts on the financial performance of DT-SACCOs in Nairobi County, as measured by Return on Assets (ROA), suggesting inefficiencies in capital allocation and the need for more strategic utilization of these tax incentives. While capital gain tax exemption showed a negative relationship with ROA (β=-7.17816), this effect was not statistically significant (P=0.208), implying minimal or inconclusive impact. To address these challenges, it is recommended that DT-SACCOs in Nairobi County can engage in comprehensive financial and tax planning, incorporating careful assessment and utilization of investment allowances and accelerated depreciation to optimize benefits without compromising long-term financial stability. Consulting with financial experts and regularly reviewing tax strategies are advised to adapt to evolving regulations and market conditions, alongside improving investment decisions and asset management practices to align with organizational goals and enhance overall financial performance. This study adds to the existing body of knowledge on the intersection of taxation, tax incentive such as investment allowance, accelerated depreciation, capital gains exemption and financial performance, offering empirical data and insights that could inform future research in the sector or similar cooperative financial institutions in other regions. To gain a richer understanding of how tax incentives affect DT-SACCOs, future research should explore a few key areas in more depth. For instance, studying how different types of tax incentives impact various segments within SACCOs could uncover specific effects that vary across the sector. It would also be useful to look at how broader economic factors, like inflation or interest rates, interact with these incentives and influence financial performance. Additionally, researching the long-term effects of tax incentives on SACCOs' growth and operational efficiency, rather than just immediate financial metrics, could provide a fuller picture.

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DEFINITION OF TERMS

Accelerated Depreciation: Faster asset depreciation method, allowing SACCOs to deduct more from asset costs early on, providing immediate tax benefits.

Board characteristics: This refers to the composition, structure, and governance practices of the board of directors within a SACCO.

Capital Gain Tax Exemption: Exemption from taxes on profits from asset sales, encouraging SACCOs to engage in strategic financial activities without tax burdens.

Financial Performance: The evaluation of an organization's ability to generate profits, manage resources, and achieve financial goals, typically assessed through metrics like profitability, liquidity, and efficiency.

Firm Size: refers to the scale on which a SACCO operates.

Investment Allowance: Tax deduction for depreciating SACCO assets, reducing taxable income and potential tax liabilities.

Ownership structure: refers to the distribution of ownership claims between insiders (management) and outsiders (investors) in a firm, determining control rights and benefits allocation

Savings and Credit Cooperative Societies: Member-owned financial institutions providing savings, credit, and other services to members, aiming to promote thrift and socio-economic development within communities.

Tax Incentives: Policies implemented by governments to encourage specific economic activities by offering favourable tax treatment, such as tax credits or exemptions.

ABBREVIATIONS AND ACRONYMS

CGTE:	Capital Gain Tax Exemption;
COVID-19:	Coronavirus Disease 2019
CSR:	Corporate Social Responsibility
DER:	Debt to Equity Ratio
DTS:	Deposit-Taking Savings and Credit Cooperative Societies
DT-SACCOS:	Deposit Taking Savings and Credit Cooperative Societies
EBIT:	Earnings Before Interest and Tax
FEM:	Fixed Effects Model
GLS:	Generalized Least Squares
LTD:	Long-Term Debt Ratio
MFIs:	Microfinance Institutions
NACOSTI:	National Commission for Science, Technology and Innovation
NSE:	Nairobi Securities Exchange
RDT:	Resource Dependence Theory
REM:	Random Effects Model
ROA:	Return on Assets
ROE:	Return on Equity
ROI:	Return on Investment
SACCOs:	Savings and Credit Cooperative Societies
SASRA:	The Sacco Societies Regulatory Authority
STD:	Short-Term Debt Ratio
TD:	Total Debt Ratio
VIF:	Variance Inflation Factor

CHAPTER ONE

INTRODUCTION

1.1 Overview

This chapter serves as an introduction to the research study, providing an overview of the key components included in this chapter. It begins by presenting the background information and context of the study, highlighting the significance of the research topic. Additionally, the chapter outlines the research problem, objectives, and research hypotheses to be addressed in the study. Furthermore, it discusses the coverage or scope of the research.

1.2 Background Information

The financial performance identifies how well a company generates revenues and manages its assets, liabilities, and the financial interests of its stakeholders and stockholders (Barauskaite & Streimikiene, 2021). For Saccos, financial performance determines how well a Sacco is generating value for its member's deposits and share capital. SACCOs operate in a competitive environment, and their financial performance is critical to their sustainability, growth, and ability to meet the financial needs of their members. Therefore, the financial performance of the SACCO is critical to the success of its expansion offerings (Kahuthu, Muturi & Kiweu, 2015). SACCOs that have a strong financial performance and good returns on expansion are more likely to attract and retain members who are interested in investing their savings (Barasa & Ngugi, 2019).

According to Mardiana and Purnamasari (2018) financial performance serves as a vital barometer for evaluating the effectiveness and sustainability of organizations across various sectors, including SACCOs. At its core, financial performance encapsulates the organization's ability to generate revenues, manage expenses, and optimize returns on

investments, ultimately contributing to its long-term viability and success. Within this overarching framework, several key indicators are commonly used to assess different facets of financial performance, providing stakeholders with valuable insights into the organization's financial health and operational efficiency.

Financial performance, a critical metric for evaluating the health and effectiveness of organizations, encompasses various dimensions that reflect their ability to generate and manage financial resources efficiently (Al-Hashimy, Alabdullah, Ries, Ahmed, Nor, & Jamal, 2022). In general terms, financial performance refers to the ability of an organization to achieve its financial goals and objectives while effectively managing risks and optimizing returns for stakeholders (Mardiana & Purnamasari, 2018). Within this broad framework, several key indicators are commonly used to assess financial performance, including profitability, liquidity, solvency, and efficiency. Profitability measures the organization's ability to generate profits from its operations, while liquidity assesses its ability to meet short-term financial obligations. According to Mathew and Sindhuja (2021), solvency evaluates the organization's long-term financial viability, and efficiency measures its ability to utilize resources effectively to generate value.

Cooperative societies, rooted in principles of voluntary association and democratic control, serve as vital agents of economic and social empowerment worldwide. These autonomous associations, driven by values such as self-help, honesty, transparency, and accountability, play a pivotal role in addressing the diverse needs of communities through collectively owned enterprises (Borzaga, Galera, Franchini, Chiomento, Nogales, & Carini, 2020). Within the cooperative landscape, Savings and Credit Cooperative Societies (SACCOs) stand as prominent entities, facilitating financial inclusion and empowerment by mobilizing savings and providing accessible credit

facilities to their members (Cuevas & Buchenau, 2018). According to Nassor (2022), SACCOs serve as engines of economic growth, particularly in regions where traditional banking services are limited, by fostering entrepreneurship, facilitating access to capital, and promoting a culture of thrift and financial responsibility.

The significance of SACCOs in the economy cannot be overstated. They serve as crucial intermediaries between savers and borrowers, channeling funds into productive ventures and enabling members to access credit on favorable terms (Juma & Maseko, 2022). SACCOs contribute to poverty alleviation, wealth creation, and social cohesion by empowering individuals and communities to improve their financial well-being and pursue economic opportunities (Ogum & Jagongo, 2022). Despite their integral role, SACCOs face various challenges that impact their financial performance and sustainability. One such challenge, according to Tang and Wang (2022), relates to the regulatory and fiscal environment in which they operate. Tax policies, including provisions for Investment allowance, accelerated depreciation, and capital gain tax exemption, can significantly influence the financial dynamics of SACCOs.

Investment allowance, for instance, allows SACCOs to deduct a portion of the cost of acquiring assets from their taxable income, thereby reducing their tax liability and freeing up funds for investment and operational purposes (Oeta, Kiai & Muchiri, 2019). Similarly, accelerated depreciation enables SACCOs to write off the cost of assets more quickly, enhancing their cash flow and financial flexibility. Capital gain tax exemption further incentivizes investment by exempting SACCOs from tax liability on the gains realized from asset sales or transfers.

Different theories including agency (Berle & Means, 1932; Jensen & Meckling, 1976), stewardship, resource dependence, and stakeholder-ship have highlighted various

aspects relevant to understanding how tax incentives influence the financial performance of organizations like Savings and Credit Cooperative Societies (SACCOs). Agency theory, as articulated by Berle and Means (1932) and Jensen and Meckling (1976), focuses on the potential conflicts of interest between stakeholders and managers due to the separation of ownership and control. In the context of SACCOs, this theory suggests that tax incentives may be utilized by managers to align their interests with those of stakeholders, potentially impacting financial performance outcomes. Stewardship theory views managers as stewards entrusted to act in the best interests of stakeholders, implying that tax incentives may be leveraged to enhance financial performance through responsible management practices. Resource dependence theory emphasizes the reliance of SACCOs on external resources and relationships, suggesting that tax incentives could influence financial performance by affecting access to critical resources or altering external dependencies. Stakeholder theory broadens the perspective to consider the diverse interests of stakeholders beyond shareholders, suggesting that tax incentives may need to align with the needs of various stakeholder groups to positively impact financial performance in SACCOs.

The effects of tax incentives on the financial performance of organizations are multifaceted and crucial for understanding their overall health (Pu et al., 2021). While tax incentives can potentially provide benefits such as reduced operating costs and increased competitiveness (Twesige & Gasheja, 2019). Their impact must be examined within the specific context of SACCOs particularly in regions like Kenya where they cater to a diverse range of urban and rural households, play a vital role in enhancing financial inclusion and economic development. Past research has highlighted the importance of SACCOs in Kenya's financial sector (Otanga, 2021; Ogum & Jagongo, 2022), but empirical evidence regarding the specific impact of tax incentives on

SACCO financial performance remains limited. This study aims to address this gap by examining how tax incentives, such as Investment allowance, accelerated depreciation, and capital gain tax exemption, influence the financial performance of SACCOs. By exploring these relationships, the study seeks to provide valuable contributions into the mechanisms through which tax policies impact the financial viability and sustainability of SACCOs, ultimately contributing to a deeper understanding of their role in fostering economic growth and empowerment.

Tax incentives represent a fundamental aspect of fiscal policy. According to Twesige and Gasheja (2019), they are aimed at shaping the behavior of organizations and individuals within an economy. In the context of SACCOs, tax incentives serve as powerful tools to influence various aspects of their operations, including liquidity, profitability, and operational efficiency. These incentives can take various forms, such as exemptions on income taxes, reduced corporate tax rates, or deductions for specific investments or activities.

Tax incentives can significantly impact the liquidity of SACCOs by influencing their cash flow dynamics. Exemptions or reductions in income taxes can directly enhance the liquidity position of SACCOs by increasing their net income available for operational activities (Du, Shen & Zou, 2023). This additional liquidity can be utilized to meet member withdrawals promptly, fund loan disbursements, or invest in income-generating assets. Conversely, tax burdens can strain SACCO liquidity, particularly if resources are diverted from core operations to meet tax obligations (Caylor & Whisenant, 2019). Therefore, the design and implementation of tax incentives must carefully consider their implications for SACCO liquidity management to ensure financial stability and resilience.

Furthermore, tax incentives can affect SACCO profitability by altering their overall financial performance. For example, tax deductions for investments in technology or training programs can enhance operational efficiency and productivity, leading to cost savings and increased profitability (Mauda & Saidu, 2019). Similarly, exemptions on certain types of income, such as interest earned on member deposits, can boost SACCO revenues and improve their bottom line. However, poorly designed incentives or inconsistent tax policies may create uncertainty and disrupt SACCO profitability (Kayode & Folajinmi, 2020), hindering long-term growth and sustainability. Hence, policymakers must strike a balance between incentivizing SACCO profitability and ensuring fiscal sustainability within the broader economic context.

Literature indicated that tax incentives can influence SACCO operational efficiency by incentivizing investments in critical areas such as infrastructure, human capital, and technology (Caylor & Whisenant, 2019; Kayode & Folajinmi, 2020; Du, Shen & Zou, 2023). For instance, tax credits for investments in digital banking platforms or risk management systems can enhance SACCO operational efficiency and service delivery, leading to improved member satisfaction and loyalty. Additionally, tax incentives that encourage SACCOs to adopt best practices in governance, risk management, and compliance can strengthen their overall operational framework, reducing operational risks and enhancing organizational resilience (Kayode & Folajinmi, 2020). However, the effectiveness of tax incentives in promoting operational efficiency depends on their alignment with SACCO strategic priorities, regulatory requirements, and market dynamics.

A notable global study by Harris et al. (2022) found a positive association between investment allowances and financial performance, as firms were able to increase their capital expenditures by 18%. Chowdhury and Hassan (2023) found that MFIs that

utilized investment allowances reported a significant increase in their ROE, with an average improvement of 9%. In Canada, Arnold and Hope (2021) highlighted how investment allowances aligned managers' and shareholders' interests by providing tax savings that could be reinvested in the company. Investment allowances led to higher returns on assets (ROA) and improved liquidity, enabling financial institutions to expand their market share. In developed countries, capital gains are chiefly from the sale of securities.

Mauda and Saidu (2019) revealed that investment allowance exerted a positive and significant influence on the performance of Saccos in Nigeria. In South Africa, Brown and Collins (2022) argued that cooperatives that took advantage of investment allowances experienced a 12% increase in capital expenditures and asset acquisition. Tax savings from the investment allowances were reinvested into the business, aligning managers' actions with the long-term interests of the cooperatives. In developing countries, capital gains are mainly from the sale or exchange of real estate. Therefore, a capital gains tax discourages investments that are not in line with the social and economic objectives of developing economies.

In Kenya, Kinyua and Okiro (2022) established that there is a positive relationship between capital allowance, accelerated depreciation and financial performance of SACCOs. Investment allowance, for instance, allows SACCOs to deduct a portion of the cost of acquiring assets from their taxable income, thereby reducing their tax liability and freeing up funds for investment and operational purposes (Oeta, Kiai & Muchiri, 2019).Similarly, accelerated depreciation enables SACCOs to write off the cost of assets more quickly, enhancing their cash flow and financial flexibility. Capital gain tax exemption further incentivizes investment by exempting SACCOs

from tax liability on the gains realized from asset sales or transfers (Marieta, Odunga & Rono, 2024).

1.2.1 Deposit Taking SACCOs in Nairobi County

Deposit-Taking Savings and Credit Cooperative Societies (DT-SACCOs) in Nairobi County play a pivotal role as financial intermediaries, contributing significantly to economic empowerment and financial inclusion within the region. Defined as cooperative financial entities owned and managed by members, SACCOs aim to promote savings and extend loans at reasonable rates (Tumwine, Mbabazize, & Shukla, 2015). Similar to other regions in Kenya, SACCOs in Nairobi County operate under the regulation of The Sacco Societies Regulatory Authority (SASRA), established to oversee their activities and ensure compliance with regulatory standards (Republic of Kenya, 2017; SASRA, 2022).

Nairobi County boasts a substantial presence of SACCOs, reflecting their importance as key financial institutions within the local economy. As of 2022, statistical data indicates the existence of numerous registered SACCOs operating across Nairobi County, serving a diverse membership base. These SACCOs play a critical role in mobilizing savings and providing affordable credit, thereby fostering entrepreneurship, supporting livelihoods, and driving economic development within the county.

A thorough analysis of SACCO performance in Nairobi County reveals a mix of strengths and challenges. Despite their significant contributions to financial inclusion and economic development, SACCOs in the county face obstacles related to liquidity management, loan recovery, and governance practices. Data from SASRA (2022) indicates instances of loan defaults and delays in loan processing, reflecting broader challenges confronting SACCOs in the region.

Insights gleaned from SASRA (2022) reports offer valuable insights into the trends and dynamics affecting SACCO performance in Nairobi County. Fluctuations in dividend payments and reliance on external borrowing for liquidity management underscore the multifaceted nature of challenges within the SACCO sector (Njenga & Jagongo, 2019), necessitating targeted interventions and strategic initiatives to address these issues effectively.

1.3 Statement of the Problem

In the recent past, SACCOs in Kenya have experienced poor outcomes in their financial performance which has occasioned the collapse and eventual closure of some of these financial institutions with the deposits of their members. Karuru and Njeru (2016) established that 2% of the SACCOs go under due to financial challenges. Chahayo et al. (2013) attributed this collapse to poor corporate governance and instability, taxation burden, and stiff competition, among other factors.

Recent reports from the SASRA highlight the underperformance of DT-SACCOs nationwide, with Nairobi County prominently affected (SASRA report, 2022). The report reveals a concerning trend, indicating that nearly half (47%) of Deposit-Taking SACCOs (DT-SACCOs) in Nairobi County are grappling with high levels of dissatisfaction, as evidenced by over 85% of them receiving complaints. Moreover, the low dividend pay-out rates, ranging from 6% to 8%, underscore the financial strain and operational challenges faced by these institutions. Over the last half decade, (2018-2023), there has been a high rate of failure (51 percent) among DT-SACCOs in Kenya with an average of three out every seven of these financial institutions having their deposit taking licenses abrogated as a result of financial non-performance as well as incessant dereliction of duty by these firms regarding non-conformity matters, thereby exposing the interest earned on members' deposits to financial risk (Nguta, 2021).

Further trend analysis into the component of non-performing loans (NPL) ratio shows a gradual increase from 5.23% in 2016, 6.14% (2017), 6.30% (2018), 6.15% (2019), 8.39% (2020) to 8.86% (2021) (Ntoiti & Jagongo, 2021). A minimal drop to 8.84% was recorded in 2022 (SASRA report, 2022). Such behaviour in NPL causes financial losses to DT-SACCOs. This under performance underscores the urgency of investigating the role of tax incentives in shaping DT-SACCO financial outcomes, as well as identifying potential areas for policy intervention to support DT-SACCO growth and stability in the region (Koowattanatianchai, Charles & Eddie, 2019; Tang & Wang, 2022). Additionally, the study draws on theoretical frameworks such as theory of internalization, agency, stakeholder and signaling theories to provide a comprehensive understanding of the mechanisms through which tax incentives influence DT-SACCO financial performance.

It is important to understand the interconnection between tax incentives and financial performance so as to have a view into the efficacy of fiscal policies in shaping organizational outcomes. This comprehension is pivotal for evaluating the effectiveness of tax incentives in fostering growth and stability within organizations (Mauda & Saidu, 2019). Tax incentives, including Investment allowance, accelerated depreciation, and capital gain tax exemption have been associated with the operational dynamics and financial outcomes of organizations (Caylor & Whisenant, 2019; Du, Shen & Zou, 2023). These tax incentives strongly relate with key financial performance indicators depicting effectiveness of tax policies in fostering SACCO growth and sustainability (Ajibola, Wisdom, & Qudus, 2018; Ullah et al., 2020; Maina & Jagongo, 2022). In the works of Feyitimi et al. (2016), it is revealed that attaining conventional utilization of tax incentives in many countries so as to bolster performance of firms like SACCOs remains an unachieved dream.

Moreover, existing literature primarily focuses on challenges such as corporate governance facing organizational performance (Nawaz & Koç, 2018; Suhadak et al., 2018; Braccini & Margherita, 2018); and explores determinants of financial performance in various contexts (Berassa, 2018; Ramli, Latan, & Solovida, 2019; Njenga & Jagongo, 2019; Rai, Rai, & Singh, 2021; Kipai, 2022; Kimani, 2023). However, there remains a notable gap in research specifically examining the link between tax incentives and DT-SACCO financial performance in Nairobi County, Kenya. Therefore, this study seeked to fill this gap by conducting an investigation into the intricate relationship between tax incentives and DT-SACCO financial performance in Nairobi County, Kenya.

1.4 Objectives of Study

The main objective of the study was to determine the effect of tax incentives on financial performance of deposit taking savings and credit cooperatives societies operating in Nairobi County, Kenya.

Specific objectives include;

1. To determine the effect of investment allowance on financial performance of DT-SACCOS in Nairobi County, Kenya.
2. To assess the effect of accelerated depreciation on the financial performance of DT-SACCOS in Nairobi County.
3. To evaluate effect of capital gain tax exemption on the financial performance of DT-SACCOS in Nairobi County.

1.5 Research Hypotheses

H_{01}: Investment allowance have no significant effect on the financial performance of DT-SACCOS in Nairobi County.

H_{02}: Accelerated depreciation has no significant effect on the financial performance of DT-SACCOS in Nairobi County.

H_{03}: Capital gains tax exemption has no significant effect on the financial performance of DT-SACCOS in Nairobi County.

1.6 Significance of the Study

By investigating the impact of specific tax policies such as investment allowance, accelerated depreciation, and capital gains tax exemption on DT-SACCO financial performance, this study aims to provide policymakers, regulators, DT-SACCO management, and stakeholders with evidence-based recommendations for enhancing the sector's sustainability and effectiveness. Understanding how tax incentives influence DT-SACCO financial performance is crucial for informing policy decisions aimed at promoting financial inclusion, economic growth, and poverty reduction in Nairobi County and beyond. By identifying the mechanisms through which tax policies affect DT-SACCO operations and outcomes, this study can help policymakers design more effective tax incentive frameworks tailored to the needs and circumstances of DT-SACCOs, thereby fostering a conducive environment for their growth and development.

Furthermore, the findings of this study have practical implications for DT-SACCO management and governance. By gaining insights into the impact of tax incentives on financial performance, DT-SACCOs can better align their strategies, investment decisions, and operational practices with the prevailing tax environment. This, in turn, can enhance their competitiveness, resilience, and ability to achieve their mission of serving members' financial needs and promoting socio-economic development in Nairobi County.

Moreover, the study's findings will inform capacity-building initiatives and knowledge dissemination efforts aimed at strengthening DT-SACCO governance, financial management, and regulatory compliance. By equipping DT-SACCO stakeholders with evidence-based insights into the implications of tax incentives, this study can empower them to make informed decisions, mitigate risks, and capitalize on opportunities arising from the tax environment. The study findings would also add to literature based on the effect of tax incentives on financial performance of DT Saccos hence can be used by future researchers to anchor their theoretical foundations.

1.7 Scope of the Study

The scope of this study was limited to licensed DT-SACCOs regulated by SASRA in Nairobi County, Kenya. Specifically, the study focused on DT-SACCOs that are authorized and monitored by SASRA, ensuring adherence to regulatory standards and compliance with relevant tax policies. Geographically, the study concentrated solely on licensed SASRA DT-SACCOs operating within Nairobi County. This enabled a focused examination of DT-SACCOs that operate under the same regulatory framework and are subject to similar tax incentives and regulations within the county.

In terms of the time frame, data collection and analysis occurred between May 2024 and June 2024. The study encompassed financial data, tax records, and other relevant information from licensed SASRA DT-SACCOs in Nairobi County for the years 2012 to 2023. This specific time frame was chosen to capture recent trends and impacts of tax incentives on the financial performance of DT-SACCOs.

In terms of data collection, the study gathered financial data, tax records, and other relevant information from licensed SASRA DT-SACCOs in Nairobi County. This involved accessing financial statements, tax filings, and other documents that provide

insights into DT-SACCO financial performance and the utilization of tax incentives. In addition, the study utilized statistical analysis to examine the impact of specific tax incentives, such as investment allowance, accelerated depreciation, and capital gains tax exemption, on the financial performance of licensed SASRA DT-SACCOs in Nairobi County.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature review serves as a critical component of this study, providing a comprehensive overview of existing research, theories, and empirical evidence related to the impact of tax incentives on the financial performance of DT-SACCOs. This chapter begins by exploring the theoretical framework underlying tax incentives and financial performance, followed by a review of relevant theoretical perspectives and empirical studies in the field.

2.2 Study Concepts

2.2.1 Concept of Financial Performance

Financial performance is a complete evaluation of a company's overall standing in categories such as assets, liabilities, equity, expenses, revenue, and overall profitability (Ofulue, Ezeagba, Amahalu & Obi, 2022). Financial performance is also defined as the achievement of the company's financial performance for a certain period covering the collection and allocation of finance (Ibrahim, Ibrahim & Hussain, 2023). Fatihudin (2018) defines financial performance as the company's ability to manage and control its own resources. Financial performance is a measure of how much a company's ability to create profit, profit or revenue (Fatihudin, 2018).

There are several ratios to measure the company's financial performance, among others; liquidity ratio, profitability ratio, solvency ratio, efficiency ratio, leverage ratio. For example, from profitability ratio there is ROI (Return on Investment), ROE (Return on Equity), ROA (Return on Assets), EBIT (Earnings Before Interest and Tax) profit. Liquidity Ratio consists of; fast ratio, current ratio, cash ratio, net working capital ratio to total assets, DER (Debt to Equity Ratio) (Rashid, 2021).

2.2.2 Concept of Investment allowance

Investment allowances are forms of tax relief that are based on the value of expenditures on qualifying investments (Nwonyuku, 2019). They provide tax benefits over and above the depreciation allowed for the asset. A tax allowance is used to reduce the taxable income of the firm. The investment allowance, permits investors to deduct from taxable income a certain percentage of the cost of eligible assets in addition to depreciation allowances. Investment allowances include wear and tear allowances, industrial building deduction, investment deduction and farm-works deductions (Kamau, 2020).

2.2.3 Concept of accelerated depreciation

Accelerated depreciation is a depreciation method in which a capital asset reduces its book value at a faster (accelerated) rate than it would using traditional depreciation methods such as the straight-line method (Akan & Kiraci, 2018). Accelerated depreciation only allows the amount of depreciation taken each year to be higher during the earlier years of the life of an asset (Morrow, 2016). The benefit of accelerated depreciation is confined to tax deferral. Companies generally pay taxes on profits: revenues minus expenses. Accelerated depreciation defers a company's taxes during the earlier years of an asset's life and increases them in later years. In many respects, this tax deferral property of accelerated depreciation will increase a firm's demand for depreciable facilities and expand its financial capabilities for acquiring them (Glogower, 2016).

Accelerated depreciation takes many different forms and is also known by other names. A widely-accepted way to accelerate the depreciation deductions is to alter the pattern of the depreciation deductions so that a larger part of the depreciable amount is charged against income in the earlier years of the asset's service life, while a smaller part is

charged in the later years. Two popular methods that change the pattern of the depreciation deductions are the declining-balance method and sum-of-the years-digits methods. Under the former method, the taxpayer could start deductions at usually 1.5 times or 2 times the amount allowed under the straight-line method (Koowattanatianchai, Charles & Eddie, 2009). Each year thereafter, the taxable value of the asset is computed by subtracting the amount already deducted from the initial value. This procedure dramatically curves the depreciation line. Under the latter method, a continually decreasing ratio is applied to the difference between the asset's original cost and the asset's estimated salvage value (Koowattanatianchai, 2011).

2.2.4 Concept of Capital Gain Tax Exemption

CGT is tax that is levied on. Gains which accrued to a company, an individual or partnership on transfer of property situated in Kenya, acquired on or before January 2015. It is also tax levied on Gains arising from the sale of shares or comparable interests in foreign entities which derive more than 20% of their value directly or indirectly from immovable property situated in Kenya to CGT in Kenya. Similarly, CGT also apply where a non-resident person who holds more than 20% of the share capital of a Kenyan company directly or indirectly disposes off their interest (KRA, 2024).

Several transactions are excluded from capital gains tax in Kenya: Transactions with transfer value of not more than three million shillings; Income that is taxed elsewhere as in the case of property dealers; Agricultural property of less than fifty acres where that property is situated outside a municipality, gazetted township, or urban area; Transfer of property for the purpose of securing a debt or a loan; Transfer of inheritance / succession; Transfer of assets between spouses; To a company where spouses or a spouse and immediate family hold 100% shareholding and; 1 private residence where

individual owner has occupied the residence continuously for the last three year prior to the transfer (Netia & Omwenga, 2023).

2.2.5 Firm Size

Firm Size refers to the scale on which a company operates. It is often determined by several factors such as total sales, assets value, employment numbers, or business volume (Margono & Gantino, 2021). Firm Size is a quantifiable measure of a business's scale and operating capacity. The firm size measurement can be carried out in several methods namely through sales, employees, assets or value add features. Normally, those using the technological theory based on economy of scale derived from capital inputs would use only sales figures or assets to for the measurement purpose. It has been found that sales and assets are not particularly apt methods of measurement for size; the main issue would be how agency, transactions and the range of costs impact the profits. Costs are normally related to the fundamental way the organisation is controlled by a hierarchy more than just the value of physical assets (Zadeh & Eskandari, 2012). According to Kaen and Baumann (2003) in fact measuring the employee's enrolment and value-added measurement are a better choice in measuring the size of the firm in organizational theories rather than sales or assets.

2.2.6 Ownership Structure

Ownership structure refers to the distribution of ownership claims between insiders (management) and outsiders (investors) in a firm, determining control rights and benefits allocation (Jensen & Meckling, 2019). The main classes of ownership are government (state) ownership, institutional ownership, insider (managerial), institutional, foreign and family ownership (Boyd & Solarino, 2016). Other common ways to organize a business are sole proprietorship, partnership, limited partnership,

limited liability company (llc), corporation (for-profit), non-profit corporation (not-for-profit) and cooperative (Yousuf, 2023).

2.3 Theoretical Literature

2.3.1 Agency Theory

The theoretical literature surrounding the relationship between tax incentives and financial performance of DT-SACCOs provides valuable insights into the mechanisms through which tax policies may influence organizational behavior and outcomes. The Agency theory has been applied to understand this relationship. Agency theory, initially proposed by Jensen and Meckling (1976), provides a theoretical framework for understanding the relationship between principals (such as SACCO members) and agents (such as SACCO managers) in organizations.

Serving as the anchor theory, agency theory explains the principal-agent relationship within DT-SACCOs, suggesting that tax incentives can align or misalign the interests of members (principals) and management (agents), impacting financial performance. The theory posits that conflicts of interest arise due to the divergence of goals between principals, who seek to maximize their own utility, and agents, who may pursue their own interests at the expense of the principals (Kostova, Nell & Hoenen, 2018). In the context of SACCOs, agency theory helps elucidate how tax incentives can be used to align the interests of members and managers, thereby enhancing financial performance.

From an agency perspective, tax incentives such as investment allowance and accelerated depreciation can serve as mechanisms to mitigate agency costs and align the interests of SACCO managers with those of members (Oeta, Kiai, & Muchiri, 2019). For example, investment allowance policies may incentivize SACCOs to invest in income-generating assets, such as property or equipment, by allowing them to deduct

a portion of the asset's cost from taxable income over time. By encouraging investment in productive assets, investment allowance policies can align the interests of SACCO managers, who seek to maximize profits, with those of members, who benefit from increased returns on savings and access to credit.

Similarly, accelerated depreciation policies allow organizations to deduct a larger portion of the asset's cost in the early years of its useful life, thereby reducing taxable income and tax liabilities (Toma, Ionescu, & Founanou, 2018). This can incentivize SACCOs to invest in technology upgrades or infrastructure improvements that enhance operational efficiency and financial performance over time. By providing tax incentives for investments that benefit both SACCO managers and members, accelerated depreciation policies can help align incentives and mitigate agency conflicts within SACCOs.

However, Payne and Petrenko (2019) alludes that agency theory also highlights the potential for opportunistic behavior by agents, who may seek to maximize their own utility at the expense of the principals. For example, DT-SACCO managers may exploit tax incentives for personal gain or engage in risky investments that prioritize short-term gains over long-term sustainability. Therefore, effective governance mechanisms, are essential to ensure that tax incentives are used in the best interests of DT-SACCO members and contribute to sustainable financial performance.

2.3.2 Neo-classical Theory

This theory dwells on labour, technology and capital. It was developed by Solow (1956) who articulates that the population growth rate and the technical progress plays a critical role in a government’s long run growth rate. This theory mostly focuses on the human beings in an organization. Though taxation interferes with the incentive to invest in

human or business capital. This theory further posits that a good organization is that in which there is a combination of informal and formal sectors. It advocates for low tax rates, tax incentives and limited government spending for firms so that they may flourish and perform well financially.

Colmar (2005) indicates that tax incentives offer many benefits like compensation for losses in investments and symbolic signaling effects. Tax cut also causes a rise in labor supply as the workers will be able to increase their work efficiency, effectives and working hours. The government will be able to increase its tax revenue, because due to low tax rates, the firms will submit their taxes effectively and thus tax evasion and tax avoidance will be a thing of the past. In Neo-classical economic theory, a tax system of horizontal equity to the investors is a 'good tax system' and it prevents prejudice in the provision of tax incentives (Barbour, 2005). Furthermore, the presence of inequality in distribution of tax incentives in particular sectors will discourage investors, and lead to a drop in growth.

2.4 Empirical Literature

Empirical literature plays a crucial role in understanding the practical implications of tax incentives on the financial performance of SACCOs. This section explores the findings of empirical studies that have investigated the impact of specific tax policies, including investment allowance, accelerated depreciation, and capital gains tax exemption, on SACCO outcomes comparative studies on tax incentives.

2.4.1 The Link between Tax Incentives and Financial Performance

Analyzing the link between tax incentives and financial performance is essential for understanding how fiscal policies impact the operational and strategic dynamics of SACCOs. Tax incentives, designed to influence behavior and stimulate economic

activity, can significantly affect SACCOs' financial performance across various dimensions, including profitability, liquidity, solvency, and efficiency (Mauda & Saidu, 2019). One of the primary ways tax incentives influence SACCO financial performances is through their impact on profitability. Governments seek to incentivize SACCOs to invest in income-generating activities, expand their operations, and increase their bottom line by offering tax relief or exemptions (Juma & Maseko, 2022). For example, tax deductions for investments in technology or capacity-building initiatives can enhance SACCO operational efficiency and productivity, leading to cost savings and increased profitability. Similarly, exemptions on certain types of income, such as interest earned on member deposits, can boost SACCO revenues and improve their overall financial performance (Mauda & Saidu, 2019).

Tax incentives can also influence SACCO liquidity by affecting their cash flow dynamics. Exemptions or reductions in income taxes can directly enhance SACCO liquidity by increasing their net income available for operational activities (Atsango, 2018). This additional liquidity can be utilized to meet member withdrawals promptly, fund loan disbursements, or invest in income-generating assets. On the other hand, tax burdens can strain SACCO liquidity, particularly if resources are diverted from core operations to meet tax obligations, thereby impacting their ability to meet short-term financial obligations and maintain adequate cash reserves (Njuguna, 2022).

Additionally, tax incentives play a critical role in shaping SACCO solvency by influencing their long-term financial viability and capacity to meet their obligations over time. Tax deductions for investments in risk management systems or regulatory compliance initiatives can enhance SACCOs' ability to manage financial risks and comply with regulatory requirements, thereby strengthening their overall solvency position (Berassa, 2018). However, Kayode and Folajinmi (2020), inadequately

structured incentives or erratic tax policies can introduce uncertainty, potentially destabilizing SACCO solvency and impeding their prospects for sustained financial health and growth. Tax incentives exert a significant influence on SACCO operational efficiency, serving as catalysts for investments in vital areas like infrastructure, workforce development, and technological advancements. For instance, tax breaks aimed at fostering investments in digital banking infrastructure or training programs for governance enhancement can elevate SACCO operational effectiveness and service quality, resulting in enhanced member satisfaction and loyalty.

Moreover, the composition and effectiveness of the board of directors are pivotal in determining how SACCOs leverage tax incentives to enhance financial performance. A diverse board with members possessing varied expertise and backgrounds can provide valuable insights and strategic direction in utilizing tax incentives optimally (Abdul-Jabbar et al., 2017). Boards comprising individuals with financial acumen, legal knowledge, and industry experience are better equipped to navigate the complexities of tax policies and identify opportunities for maximizing benefits while mitigating risks. Additionally, the independence of the board from undue influence, whether from internal or external sources, ensures that decisions regarding tax incentives are made in the best interests of the SACCO and its members (Mensah et al., 2020). Furthermore, board effectiveness, characterized by robust governance structures, clear roles and responsibilities, and proactive oversight, fosters accountability and transparency in the utilization of tax incentives (Mensah et al., 2020). Boards that prioritize governance principles and adhere to regulatory requirements are more likely to develop and implement sound strategies for optimizing tax incentives to drive SACCO financial performance.

2.4.2 Investment Allowances and the Financial Performance of Saccos

Investment allowances have been widely studied across various industries, with several empirical studies linking them to improved financial performance. A notable global study by Harris et al. (2022) examined firms in the European Union, focusing on the role of investment allowances in enhancing capital expenditures. The study is anchored in tax planning theory, which posits that firms strategically adjust their investments to benefit from available tax incentives. Through descriptive and inferential analysis, Harris et al. (2022) found a positive association between investment allowances and financial performance, as firms were able to increase their capital expenditures by 18%. This finding is consistent with the trade-off theory, which suggests that tax savings from investment allowances reduce the cost of capital, encouraging firms to make long-term investments in assets that enhance their operational efficiency.

Similarly, a study by Arnold and Hope (2021) in Canada used panel data analysis to explore the effect of investment allowances on the profitability of financial institutions. Anchored on the agency cost theory, the study highlighted how investment allowances aligned managers' and shareholders' interests by providing tax savings that could be reinvested in the company. Their results showed that investment allowances led to higher returns on assets (ROA) and improved liquidity, enabling financial institutions to expand their market share. The study's use of positivism research philosophy ensured a rigorous quantitative approach, producing statistically significant results.

In a similar vein, Chowdhury and Hassan (2023) explored the role of investment allowances in improving the profitability of microfinance institutions (MFIs) in Bangladesh. Using panel data analysis, the study evaluated the relationship between investment allowances and return on equity (ROE). The authors used SPSS software to perform regression analysis and found that MFIs that utilized investment allowances

reported a significant increase in their ROE, with an average improvement of 9%. The findings are consistent with trade-off theory, suggesting that investment allowances reduce the cost of capital and encourage long-term investment in productive assets. This study is significant as it highlights how financial institutions, including SACCOs, can benefit from investment allowances by improving their profitability and expanding their operations.

In their study, Mauda and Saidu (2019) investigated the impact of tax incentives on the financial performance of listed consumer goods companies in Nigeria. Utilizing data gathered from published annual reports and accounts of seven sampled companies, alongside tax-related submissions from the investment promotion commission and Federal Inland Revenue Services, the study spanned a period of eighteen years (2000-2017). The study employed Pearson's correlation and multiple regressions, the research aimed to establish the influence of tax incentives on the financial performance of the sampled firms. The findings revealed that investment allowance and loss relief exerted a positive and significant influence on the performance of the sampled firms, while investment allowance had a positive but insignificant impact.

Brown and Collins (2022) examined the impact of investment allowances on the financial performance of agricultural cooperatives in South Africa. The study, grounded in tax planning theory, aimed to understand how tax incentives such as investment allowances influenced the long-term capital investments of cooperatives. Through a combination of descriptive and inferential analysis, the study revealed that cooperatives that took advantage of investment allowances experienced a 12% increase in capital expenditures and asset acquisition. The findings support the agency cost theory, as tax savings from the investment allowances were reinvested into the business, aligning managers' actions with the long-term interests of the cooperatives. The study also

highlighted the need for more financial literacy among cooperative managers to optimize the use of tax incentives. This research is particularly relevant to DT-SACCOs in Nairobi County, as similar incentives could help enhance their capital base and improve their financial performance.

Ndlovu and Moyo (2021) conducted a similar study in South Africa, employing an explanatory research design to examine the relationship between investment allowances and financial performance in SACCOs. Using SPSS for statistical analysis, the researchers found a significant positive impact of investment allowances on total asset growth. Their findings align with the political power theory, which posits that tax incentives are designed to promote certain industries or sectors by easing their financial burden. The study suggests that SACCOs, including those in Kenya, can leverage investment allowances to enhance their capital structure, ultimately improving their financial outcomes.

Juma and Maseko (2022) undertook a study to assess the factors affecting the financial performance of SACCOS operating in Dodoma, Tanzania, particularly during the COVID-19 pandemic. Utilizing quantitative methods, the research employed a descriptive survey approach and employed systematic and purposive sampling techniques to secure 63 respondents. Data were collected through surveys and documentary reviews, and analyzed using descriptive and regression analysis. The study was guided by Resource Dependence Theory (RDT) and Cash Conversion Cycle Theory. Results indicated that the overall model was statistically significant (Prob > chi2=0.000), with independent variables explaining approximately 63.8% of the variation in return on assets of SACCOS in Dodoma. Explanatory variables such as interest rate, loan default, and member dropouts were found to be statistically significant in influencing return on assets for the selected SACCOS. The researchers

recommended that SACCOS focus on online supervision and self-regulation during pandemics as strategies to enhance sector viability. Additionally, they suggested that the Cooperative Audit and Supervision Corporation adopt off-site audit methods in hygienic environments to mitigate the spread of the virus.

In Kenya, Ngugi and Wekesa (2022) utilized panel data analysis to investigate the impact of investment allowances on DT-SACCOs. Their research focused on the trade-off theory, analyzing how investment allowances contribute to reducing operational costs. The study concluded that investment allowances significantly improved the financial performance of DT-SACCOs by increasing their asset base and liquidity. The authors employed both descriptive and inferential statistics, ensuring a comprehensive analysis of the relationship between tax incentives and financial performance. This study is particularly relevant to Kenya's financial sector, where DT-SACCOs continue to face high operational costs, making investment allowances a vital tool for improving profitability.

The study conducted by Otanga (2021) examined the moderating effect of investment decisions on the relationship between corporate risk management and financial performance of Deposit Taking Savings and Credit Cooperative Societies (DT-SACCOs) in Western Kenya. Utilizing secondary data from financial statements and primary data from key informants, the study finds a significant moderating effect of investment decisions on the relationship between corporate risk management and financial performance ($\Delta R2 = .166$, $p < 0.05$), suggesting that incorporating investment decisions in risk management enhances financial performance by 16.6%. The study underscores the importance of considering investment decisions alongside corporate risk management in improving DT-SACCOs' financial performance and recommends investment in risk management constructs like credit and operational risk management.

2.4.3 Accelerated Depreciation and the Financial Performance of Saccos

The impact of accelerated depreciation on financial performance has also been extensively studied, with findings consistently indicating that firms benefit from the faster write-off of capital assets. In a global study, Johnson and Roberts (2021) examined financial institutions in the United States, focusing on the effect of accelerated depreciation on liquidity and profitability. The research employed a positivism research philosophy, using panel data and statistical software to conduct inferential analysis. The study found that accelerated depreciation enhanced liquidity by reducing taxable income, allowing firms to reinvest in newer assets. The findings support the tax planning theory, where firms maximize tax benefits to improve cash flow and reinvest in revenue-generating activities.

The study conducted by Toma, Ionescu, and Founanou (2018) aimed to investigate the impact of different depreciation methods of immobilized assets on financial performance. The research analyzed how various depreciation approaches affect the exploitation result of enterprises, considering factors such as accounting choices, cost calculation methods, inventory valuation, and provisioning policies. By comparing different depreciation methods, the study sought to determine their efficiency and effectiveness in influencing financial performance, particularly in terms of exploitation results. The findings indicated that while the depreciation system directly affects short-term operating results, its long-term impact is mitigated or even nullified by offsets between results of different periods. However, both theory and practice advocate for a logical and systematic depreciation regime that accurately reflects the reduction in the service capacity of assets over time. The study concluded that the choice of depreciation method depends on the enterprise's objectives, its approach to fiscal management, and decisions made by shareholders or associates. Ultimately, selecting an appropriate

depreciation method should align with the overarching goals and circumstances of the enterprise.

Zhang and Li (2021) conducted a study in China, focusing on the impact of accelerated depreciation on the financial performance of high-tech firms. The study was anchored in agency cost theory, as it examined how tax incentives like accelerated depreciation influenced managerial decision-making and asset investment. Using positivism research philosophy and panel data analysis, the researchers concluded that high-tech firms that utilized accelerated depreciation were able to significantly enhance their liquidity and operational efficiency. The findings revealed a positive relationship between accelerated depreciation and ROA, suggesting that firms could reinvest the tax savings from accelerated depreciation in research and development (R&D) activities, thus improving their competitive advantage. The relevance of this study to DT-SACCOs lies in the fact that accelerated depreciation could similarly allow them to modernize their infrastructure and improve customer service.

In their study, Du, Shen, and Zou (2023) investigated the impact of tax incentives on firm financing structures, utilizing China's accelerated depreciation policy implemented from 2014 to 2015 as an exogenous shock. Drawing on data from China's A-share listed companies spanning the period from 2010 to 2017, the study employed a difference-in-differences model to analyze the effects of the policy change. The findings revealed that the accelerated depreciation policy resulted in an increase in firms' liability–asset ratio, indicating a shift in their financing structures. Particularly, this rise was predominantly observed in firms' current liability–asset ratio, indicative of heightened short-term leverage, while long-term leverage remained relatively stable. The analysis further elucidated that the policy-induced increase in fixed asset investment was largely financed through short-term debt, contributing to a mismatch in maturity between firm

assets and liabilities. Moreover, the study conducted heterogeneity analysis, revealing that smaller-sized firms and those with a lower share of tangible assets experienced a more pronounced escalation in short-term leverage, suggesting that the impact of the policy was more significant for firms with limited access to long-term credit from banks.

In their study, Fan and Liu (2020) examined the impact of a Chinese accelerated depreciation policy implemented in 2014 on firm investment. Utilizing data analysis, they presented three key findings. It was found that the policy led to an overall increase in firms' investment in eligible capital, particularly in the acquisition of equipment and machinery. The effects of the policy were more pronounced for larger firms, those with greater cash reserves, and those with better access to finance, indicating that these firms were less financially constrained and exhibited better tax compliance. Furthermore, the magnitude of the policy's effect was found to be positively associated with imputed county tax enforcement but negatively correlated with provincial tax fraud rates. These findings underscore the significance of enhancing tax compliance in maximizing the effectiveness of tax incentives.

In another study, Williams and Morrison (2020) explored the role of accelerated depreciation in the construction industry in Australia. Using an explanatory research design, the study examined how accelerated depreciation influenced liquidity and profitability. The researchers employed descriptive and inferential statistics, revealing that firms that utilized accelerated depreciation were able to reduce their taxable income, freeing up resources for reinvestment in capital projects. The study supports the political power theory, which posits that tax incentives like accelerated depreciation are designed to stimulate investment in critical sectors of the economy. For DT-SACCOs in Kenya, the ability to leverage accelerated depreciation could provide them

with the financial flexibility to invest in technology, improve operational efficiency, and ultimately enhance their financial performance.

Blake and Cook (2020) conducted a similar study in Australia, where they examined the effects of accelerated depreciation on the financial health of credit unions. The study utilized a combination of descriptive and inferential statistics, revealing a significant positive relationship between accelerated depreciation and financial performance. The results suggest that credit unions using accelerated depreciation were able to modernize their operations, reducing operational inefficiencies and improving customer satisfaction. This finding aligns with the agency cost theory, as managers used the tax savings from accelerated depreciation to make capital investments that benefit both the firm and its shareholders.

In their study, Caylor and Whisenant (2019) examined the role of accelerated depreciation in signaling higher future prospects for firms, driven by information asymmetry and adverse selection concerns. Drawing on signaling theory, the study argued that firms opt for accelerated depreciation to credibly signal elevated future earnings and cash flows, despite its implications of reduced early-year earnings and increased earnings variability compared to straight-line depreciation. Despite these trade-offs, many firms voluntarily employ accelerated depreciation for certain depreciable assets. The study's findings revealed that the use of accelerated depreciation is associated with higher future earnings and cash flows over horizons of one, two, and three years ahead, supporting the signaling hypothesis.

In Nigeria, Okafor and Chukwuma (2021) employed an explanatory research design to study the effects of accelerated depreciation on SACCOs and credit unions. Using SPSS software, the researchers analyzed panel data and concluded that accelerated

depreciation significantly improved liquidity and profitability. Their findings were consistent with the trade-off theory, which explains that tax savings from accelerated depreciation reduce the firm's overall tax liability, allowing for more funds to be reinvested in productive assets. This study is particularly relevant to DT-SACCOs in Kenya, where capital-intensive investments in technology and infrastructure can benefit from accelerated depreciation policies.

In Kenya, Kinyanjui and Mwangi (2023) conducted a study that focused on the role of accelerated depreciation in improving the financial performance of DT-SACCOs. Their research employed an explanatory research design, using descriptive and inferential statistics to analyze panel data from multiple DT-SACCOs. The findings indicated that accelerated depreciation significantly improved liquidity and asset turnover, allowing DT-SACCOs to expand their operations and enhance customer service delivery. This is consistent with the political power theory, which posits that accelerated depreciation policies are designed to stimulate investment in key sectors of the economy, including financial institutions like DT-SACCOs.

2.4.4 Capital Gain Tax Exemption and the Financial Performance of Saccos

Kumar and Verma (2023) conducted a study in India to investigate the impact of capital gains tax exemptions on the financial performance of commercial banks. Anchored in tax planning theory, the study used panel data analysis to assess how capital gains tax exemptions affected liquidity, asset turnover, and profitability. The results indicated that banks that took advantage of capital gains tax exemptions reported a significant improvement in liquidity, as they were able to reinvest proceeds from asset disposals into high-yield investments. The study's findings are consistent with trade-off theory, which suggests that tax incentives reduce firms' overall tax liability, allowing for greater financial flexibility. For DT-SACCOs in Nairobi County, capital gains tax

exemptions could serve as a crucial tool for optimizing asset portfolios, improving liquidity, and enhancing financial sustainability.

In a broader study, Smith and Davis (2022) explored the role of capital gains tax exemptions in the real estate sector in the United States. Using panel data analysis and positivism research philosophy, the study evaluated how capital gains tax exemptions influenced firms' capital allocation decisions and overall financial performance. The researchers found that firms that utilized capital gains tax exemptions were able to enhance their liquidity and profitability by reallocating capital from non-performing assets to high-yield investments. The study supports agency cost theory, as it demonstrates how tax incentives align managers' decisions with shareholders' interests, ultimately improving financial performance. For DT-SACCOs in Nairobi County, capital gains tax exemptions could play a crucial role in optimizing their asset portfolios and enhancing long-term profitability.

In their study, Ajibola, Wisdom, and Qudus (2018) investigated the influence of capital structure on the financial performance of quoted manufacturing firms in Nigeria from 2005 to 2014. The study employed panel methodology to analyze this relationship. The findings, derived from panel ordinary least square analysis, revealed a positive and statistically significant relationship between long-term debt ratio (LTD) and total debt ratio (TD) with return on equity (ROE). However, the relationship between ROE and short-term debt ratio (STD) was positive but statistically insignificant. Moreover, all proxies of capital structure (LTD, STD, and TD) exhibited a negative and insignificant relationship with return on assets (ROA), indicating that ROE serves as a better measure of performance. The study concluded that capital structure positively impacts financial performance, emphasizing the importance of utilizing long-term debts. It further

recommended that firms should make sound capital structure decisions to enhance profitability and ensure successful business operations.

A global study by Blackwell and Zhao (2022) in the United Kingdom analyzed the effects of capital gains tax exemptions on the financial performance of firms in the financial sector. Anchored on tax planning theory, the study employed an explanatory research design to examine how capital gains tax exemptions affect liquidity and profitability. Using descriptive and inferential statistics, the researchers found a significant positive relationship between capital gains tax exemptions and financial performance. Firms that utilized these exemptions reported improved liquidity, as they were able to reinvest the proceeds from asset sales into higher-yielding projects. This finding highlights the importance of capital gains tax exemptions in promoting asset optimization and long-term profitability.

In Ghana, Nwankwo and Okechukwu (2021) conducted a study using panel data analysis to explore the effects of capital gains tax exemptions on the financial performance of SACCOs and credit unions. Their research focused on the trade-off theory, analyzing how capital gains tax exemptions reduce the overall tax burden, allowing firms to reinvest in profitable ventures. The findings revealed a significant positive impact of capital gains tax exemptions on liquidity and return on assets (ROA). This suggests that SACCOs, including those in Kenya, can benefit from capital gains tax exemptions by disposing of underperforming assets and reinvesting in more productive areas.

In Kenya, Githinji and Odhiambo (2023) studied the effects of capital gains tax exemptions on the financial performance of DT-SACCOs. Anchored in agency cost theory, their research employed both descriptive and inferential statistics to examine

how capital gains tax exemptions affect liquidity and profitability. The findings indicated that DT-SACCOs that utilized capital gains tax exemptions were able to improve their cash flow and reinvest in new projects, leading to enhanced financial performance. This is particularly relevant to Kenya's financial sector, where capital gains tax exemptions can provide critical financial relief to DT-SACCOs, enabling them to optimize their asset portfolios and remain competitive in the market.

According Kenani and Bett (2018), the cross-cutting issues affecting performance of SACCOs in Kenya include governance, inadequate human resource, weak regulations and supervision, limited products and services, low marketing, innovation and poor image. Ahmed and Rugami (2019) undertook a study to establish the influence of corporate governance on performance of SACCOs in Kilifi County. The target population for the study was 200 respondents from the 40 SACCOs. The study used purposive sampling technique and a semi-structured questionnaire was administered. The study established that corporate governance was a significant factor in determining performance of the performance of the SACCOs in Kilifi County. Boards of directors among the SACCOs in Kilifi County were moderately representative, diverse, professional and qualified. The study further concluded that lean or small board size but professional and qualified contributed positively and significantly to the performance of the SACCOs due to their efficiency and effectiveness in decision making, management, communication, coordination, monitoring and in operation cost. Despite the study elucidating board characteristics of SACCOs well, the study considered performance factor and not tax incentives of SACCOS.

Njoroge and Njenga (2021) extended the analysis to Kenyan SACCOs by examining the effect of capital gains tax exemptions on financial performance. Their study utilized SPSS software to conduct regression analysis, focusing on the relationship between

capital gains tax exemptions and profitability. The findings revealed a positive correlation between capital gains tax exemptions and return on assets (ROA), with SACCOs benefiting from increased financial liquidity and improved asset management. The authors argued that capital gains tax exemptions allowed SACCOs to restructure their asset portfolios, dispose of non-performing assets, and reinvest in profitable ventures. This study is particularly relevant to DT-SACCOs operating in Nairobi County, as it highlights how tax incentives can help SACCOs improve their financial stability and performance in a competitive financial market.

The study conducted by Maina and Jagongo (2022) aimed to determine the effects of capital structure on the financial performance of small-tiered deposit-taking savings and credit cooperative societies (DTS) in Nairobi County. Employing a systematic review research design, the study evaluated relevant studies addressing the dependent and independent variables using specific criteria. The major findings revealed a conceptual framework gap in empirical literature, with inconclusive results regarding the nature of the relationship between capital structure and financial performance. Moreover, the studies reviewed were conducted for prior periods and in different markets, highlighting a contextual gap. The study contributed unique insights by utilizing the pecking order theory to emphasize the preference of external funds (debt) over internal funds (equity) in capital structure decisions, along with the trade-off theory indicating the mutual exclusivity of debt and equity financing decisions. The findings suggested that DTS in Kenya could benefit from adopting capital structure strategies to sustain consistent superior financial performance. The study concluded that the models used may aid regulatory institutions in developing policies on capital structure for DTS in Kenya, thereby adding new knowledge to the field of capital structure and financial performance of DTS.

2.4.5 Contribution of the Current Study

Based on the identified research gaps in the previous studies undertaken, the current study offers the following contribution. First, the study was conducted among DT-Saccos specifically hence being able to exclusively cover tax incentives extended to DT saccos. The study was also conducted in Kenya hence being able to factor in Sacco policies that are specific to Kenya and hence addressing the geographical gap. The study further adopted different measurements of the variables hence addressing the existing conceptual gap. Finally, by adopting different methodologies apart from the ones previously adopted, the study helped address the gap hence adding to existing knowledge on the effect of tax incentives on the financial performance of DT Saccos.

2.5 Conceptual Framework

The conceptual framework for this study encompassed the interplay between tax incentives, board characteristics, and SACCO financial performance. Tax incentives, such as investment allowance, accelerated depreciation, and capital gain tax exemption, serve as independent variables influencing SACCO financial performance, measured by Return on Assets (ROA). These incentives are operationalized through specific indicators, including the percentage of allowable capital expenditure deducted from taxable income, the rate at which fixed assets' value is reduced for tax purposes, and the exemption from taxes on capital gains from asset sales. The control variables firm size and ownership structure (Ahmed & Rugami, 2019), further shape the relationship between tax incentives and financial performance. Through this framework, the study aimed at exploring how tax incentives and board characteristics collectively impact DT-SACCO financial performance, providing insights into effective tax planning strategies and governance practices for these cooperative institutions.

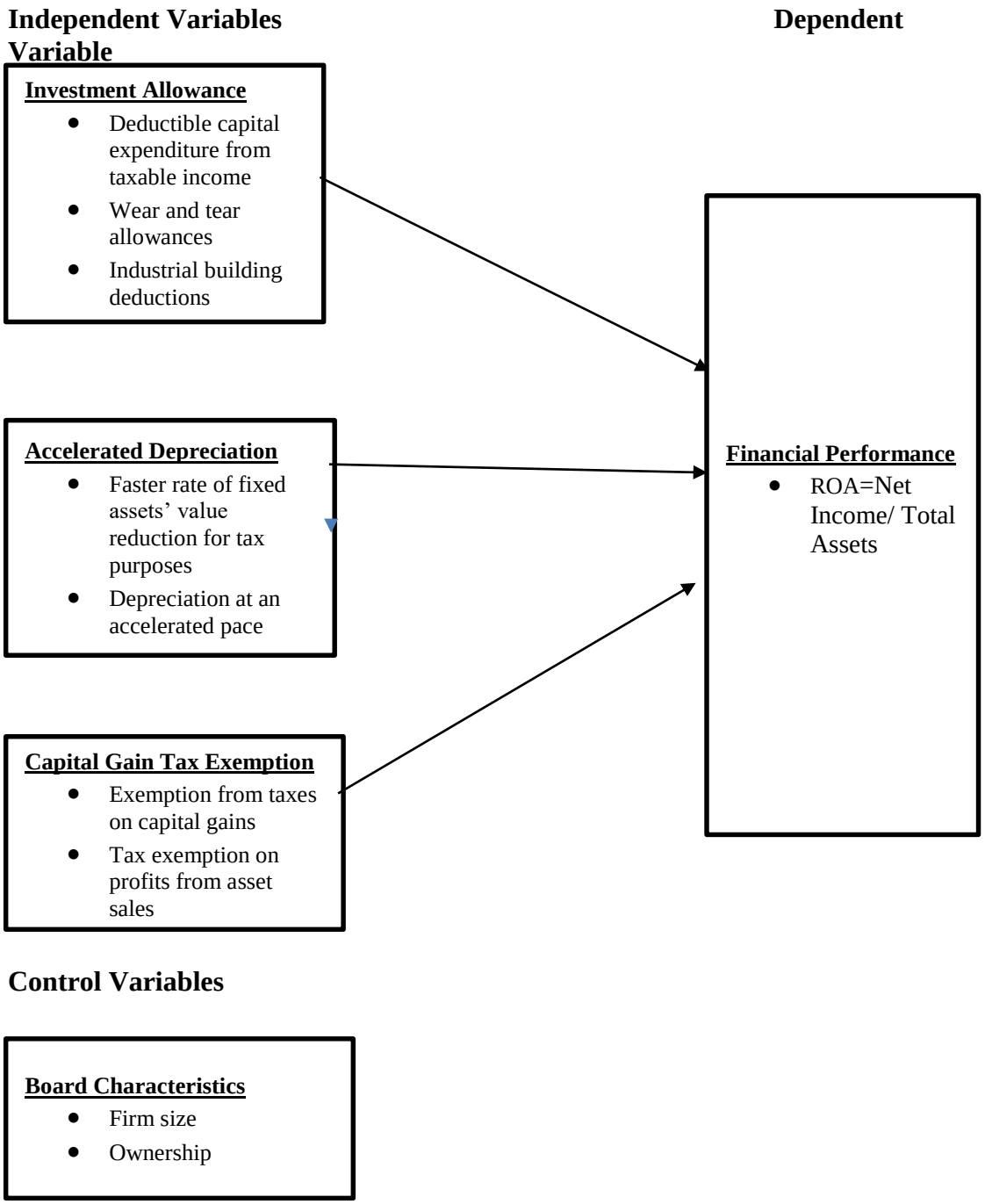

Figure 2.1: Conceptual framework

Source: Researcher (2024)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Research design, population goal, data collection, model definition (including estimating methodologies), statistical diagnostic tests (regression model tests), and ethical considerations are covered in this part.

3.2 Research Design

This pertains to the overall research design as well as the specific steps necessary to gather the data required to formulate or resolve study questions (Saunders, Lewis & Thornhill, 2007). Therefore, to meet the purpose of the research, the investigator used an explanatory research design. Explanatory research design is preferred for its ability to clarify the underlying reasons behind observed phenomena, offering insights into the cause-and-effect relationships between variables, thus providing a deeper understanding of the studied topic. Additionally, it provides the researcher with an opportunity to determine the various features of the variables under investigation. This study assumes the condition of causal relationship whereby the dependent variable (financial performance) is supposed to be associated with independent variables (investment allowance, accelerated depreciation, capital gain tax exemption, and board characteristics (firm size, firm ownership).

3.3 Target Population

The target population for this study was DT-SACCOs registered and operating in Nairobi County, Kenya (see appendix 2). According to SASRA (2022), there are 40 registered DT-SACCOs operating in Nairobi County. The unit of analysis is the registered and operating DT-SACCO. The study aimed to capture a representative

sample of DT-SACCOs to ensure the findings are applicable across the broader DT-SACCO sector in Nairobi County.

3.4 Sample Design and Sample Size

According to Mugenda and Mugenda (2008), a sample size of 30% is sufficient to represent the target population. The study thus chooses 30% of the 40 active DT SACCOs operating within the county. The sample was 12 DT-SACCOs. It is from this sample that the random sampling approach was used to select the target DT-SACCO from the list (see appendix 2). It is the most accurate approach that eliminates the selection bias. Sampling was done so as to narrow down to a manageable sample since a long period of time was used.

3.5 Data Collection

The study collected secondary data (see appendix 1) for all variables. Secondary panel data for the DT-SACCOs in Nairobi County was gathered. The data covered a period of 12 years (2012-2023) since the desired information is available at SASRA and all sampled Saccos were operational during this period. Other information was collected from annual reports produced by respective DT-SACCOs.

3.6 Operationalization of the Study Variables

This research revolves around the concept of financial performance and the respective tax incentives. Identified tax incentives are the independent variables while financial performance of DT-SACCOs is the dependent variable. Board characteristics is the control variable. The Table 3.1 demonstrates how the study variables were operationalized.

Table 3.1: Variable Operationalization

Variable	Indicator	Operationalization	Source
Dependent Variable	DT-SACCO Financial performance	Return on Assets (ROA): ROA is calculated by dividing the net income (profit) of the DT-SACCO by its total assets. ROA = Net Income / Total Assets.	Otanga (2021)
Independent Variables (tax incentives)	Investment Allowance	Percentage of allowable capital expenditure deducted from taxable income for tax purposes.	Mauda and Saidu (2019)
	Accelerated Depreciation	Rate at which fixed assets' value is reduced for tax purposes at a faster pace than under straight-line depreciation.	Toma, Ionescu, and Founanou (2018)
	Capital Gain Tax Exemption	Exemption from taxes on capital gains arising from the sale of certain assets.	Ullah et al. (2020)
Control Variable (Board characteristics)	Firm size	Total assets or revenue of the DT-SACCO.	Felix and Mamidu (2021)
	Firm ownership	Ownership structure of the DT-SACCO (e.g., 1= shareholder-owned, 0=member-owned).	Alabdullah (2018)

Source: Researcher (2024)

3.7 Data Analysis

The collected data was analysed using descriptive as well as inferential statistics. Statistical software, STATA, aided the researcher to describe the data. In analysing data descriptively, measures of central tendency (the mean and standard deviation) were used. Also, frequencies and percentages described the data. As for inferential statistics, the study employed correlation and regression techniques where multiple linear regression analyses were carried out. The findings were presented using tables, charts and graphs for interpretation purposes and to facilitate comparison. The analytical model, assumption tests and model selection tests are discussed below.

3.7.1 Analytical Model

Panel data regression analysis was used in the study because it allows for more flexibility in modelling behavioural differences across the firms under investigation and

allows for the control of unobserved heterogeneity. It also has a higher statistical degree of freedom and less multicollinearity, which leads to more efficient estimates (Hsiao, 2003). Multiple regressions were used to determine the predictive power of tax incentives on financial performance of DT-SACCOs in Nairobi County. The study determined to estimate either random effects or fixed effects model based on specification test. These models have ability to test the nature of influence of independent variables on a dependent variable. Regression is able to estimate the coefficients of the linear equation, involving one or more independent variables, which best predicts the value of the dependent variable. Financial performance of the DT-SACCOs was used as dependent variable. The model to be estimated is presented as shown;

$$FP_{it} = \beta_0 + \beta_1 InvA_{it} + \beta_2 AD_{it} + \beta_3 CGTE_{it} + \beta_4 BC_{it} + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots 3.1$$

Where:

FP_{it} is DT-SACCO financial performance as a dependent variable;

$InvA_{it}$ is the Investment Allowance;

AD_{it} is the Accelerated Depreciation;

$CGTE_{it}$ is the Capital Gain Tax Exemption;

BC_{it} is Board characteristics (firm size, firm ownership)

β_0 is the constant coefficient and $\beta_1 - B_4$ are the coefficients for respective variables while **ε** is the error term.

3.7.2 Hausman Test for Model Selection

The study used a panel data estimation technique because of its several advantages over both cross-section and time-series data sets. The panel data analysis method has two main approaches, namely; the fixed effects model (FEM) which assumes omitted effects specific to cross sectional units are constant over time and the random effects model (REM) which assumes the omitted effects are random over time. In order to choose between the random effects and fixed effects, a Hausman test was conducted. It tests whether the unique errors are correlated with the regressors; the null hypothesis is that they are not (Greene, 2008). If the null hypothesis cannot be rejected, then random effect is preferred because it is a more efficient estimator. The specified model was thus estimate using statistical programme (STATA) and the study objects investigated through systematic tests.

3.7.3 Diagnostic Tests

To determine the significance of the variables, parametric tests were performed under the study that is tax incentives and financial performance of DT-SACCOS in Nairobi County. The study used the coefficient of determination (R^2) which investigates the fit's quality in regression analysis, the coefficient of correlations to determine the strength and the direction of a linear relationship among variables. On the other hand, F-Test and p value to test for overall significance at 5% level.

3.7.3.1 Stationarity Test

To ensure that the data was suitable for regression analysis, a Fisher unit root test was applied to assess the stationarity of the study variables. Non-stationary data can lead to spurious regression results. The null hypothesis of the Fisher unit root test is that the

variable contains a unit root (non-stationary). If the null hypothesis is rejected, the variable is deemed stationary, meaning it has a constant mean and variance over time.

3.7.3.2 Normality Test

According to Sekaran & Bougie (2013), the assumption of normality is critical for parametric tests as populations are expected to follow a normal distribution. To confirm this assumption, the Shapiro-Wilk test for normality was conducted. The null hypothesis for this test is that the data follows a normal distribution. A p-value greater than 0.05 indicates that the assumption of normality holds, while a p-value less than 0.05 suggests that the data significantly deviates from normality. This study employed the Shapiro-Wilk test to verify the normality of the variables used, ensuring that the conclusions drawn from the estimates are reliable and accurate.

3.7.3.3 Autocorrelation Test

Autocorrelation refers to the correlation of a variable with itself over time, which can lead to biased estimates in regression models. The Wooldridge test for autocorrelation in panel data was used in this study. The null hypothesis is that there is no first-order autocorrelation. A significant test result (p-value < 0.05) would indicate the presence of autocorrelation, which may require corrective measures such as including lagged variables or using generalized least squares (GLS) regression.

3.7.3.4 Heteroscedasticity

Heteroscedasticity occurs when the variance of the residuals or errors in a regression model is not constant across observations. This can lead to inefficient estimates and unreliable conclusions. In this study, scatter plots of the residuals versus the fitted values were used to visually assess the presence of heteroscedasticity. A random scatter of points indicates homoscedasticity (constant variance), while a discernible pattern

suggests heteroscedasticity. If heteroscedasticity is detected, corrective measures such as applying robust standard errors may be necessary to improve the accuracy of the regression results.

3.7.3.5 Multicollinearity Test

Multicollinearity was assessed to determine the correlation among the independent variables in the multiple regression model. Variance Inflation Factor (VIF) was computed for each independent variable. A VIF value exceeding 10 suggests the presence of multicollinearity, which can distort the regression results. If multicollinearity was detected, measures such as variable transformation or removal from the model were considered.

3.8 Ethical Considerations

The researcher ensured adherence to ethics in collecting data from published secondary sources. While no direct interaction with human subjects is involved, it is essential to ensure that the data sources used are obtained and utilized in an ethical manner. This includes respecting copyright laws and intellectual property rights by appropriately citing and acknowledging the sources of the data. Furthermore, researcher was transparent about their data collection methods and any potential limitations or biases associated with the secondary data sources. In that case, a letter from the university permitting the collection of data was sought and the researcher further sought National Commission for Science, Technology and Innovation (NACOSTI) permit.

CHAPTER FOUR

RESULTS AND DISCUSSION OF THE FINDINGS

4.1 Introduction

The details of this chapter indicate results analyzed from the consolidated secondary data collected from various sources as indicated in the previous chapter for the years 2012-2023. The data took panel dimension for the 12 SACCOS considered. The main objective was to establish the effect of tax incentives on financial performance of deposit taking savings and credit cooperatives societies operating Nairobi County, Kenya. Specific objectives include; to determine the effect of investment allowance on financial performance of DT-SACCOS, Kenya, assess the effect of accelerated depreciation on the financial performance of DT-SACCOS, and evaluate effect of capital gain tax exemption on the financial performance of DT-SACCOS in Nairobi County. Findings are discussed and presented in form of tables and organized according to the core objectives of the study.

4.2 Descriptive Statistics

The study used the following descriptive statistics; mean, standard deviation, minimum and maximum. The mean is the average value, standard deviation is a measure of dispersion that illustrates how the variables are distributed around their means, and the minimum is the lowest value while maximum is the greatest value of that particular indicator under consideration.

Table 4.1: Summary Statistics

Variable		Mean	Std. Dev	Min	Max	Observations
ROA	Overall	9.378056	6.451397	1.47	21	N = 144
	Between		6.516437	1.8575	19.28333	n = 12
	Within		1.556609	2.833056	14.87806	T = 12
InvA	overall	17.00694	8.756014	1.00	34.00	N = 144
	Between		5.522676	9.583333	23.00	n = 12
	Within		6.965198	4.631944	29.38194	T = 12
AD	overall	32.33333	11.72649	8.00	50.00	N = 144
	Between		9.847319	19.00	39.00	n = 12
	Within		6.928203	21.33333	43.33333	T = 12
CGTE	overall	626.6667	18.18014	20.00	102.00	N = 144
	Between		17.49459	31.00	91.00	n = 12
	Within		6.928203	51.66667	73.66667	T = 12
FO	overall	.75	.4345241	0.00	1.00	N = 144
	Between		.452267	0.00	1.00	n = 12
	Within		0.00	0.75	.75	T = 12

ROA= Return on Assets, InvA= Investment Allowance, AD= Accelerated Depreciation, CGTE= Capital Gain Tax Exemption, FO= Firm Ownership
Source: Analysis based on SASRA data using STATA.

The summary statistics presented in Table 4.1 provide an overview of the key financial variables across 12 firms over 12 periods. The table includes metrics such as Return on Assets (ROA), Investment Allowance (InvA), Accelerated Depreciation (AD), Capital Gain Tax Exemption (CGTE), and Firm Ownership (FO). Each variable is broken down into overall, between-firm, and within-firm variations, offering a comprehensive view of the differences of across entities(between) and across time(within).

Return on Assets (ROA) shows an overall mean of 9.38%, indicating moderate profitability across firms. The variation between firms is notable, with a standard deviation of 6.52%, suggesting some firms outperform others in asset efficiency. However, the within-firm standard deviation is lower at 1.56%, implying that individual firms experience relatively stable returns over time, with limited fluctuation from year to year.

For Investment Allowance (InvA), the overall mean is 17.01%, with a significant standard deviation of 8.76%, reflecting considerable variation in investment incentives. The between-firm variation is somewhat lower, indicating that differences in investment allowances are more prominent within firms across time rather than between different firms. This suggests that firms may adjust their investment strategies dynamically over time.

Accelerated Depreciation (AD) has an overall mean of 32.33%, with noticeable variation both between and within firms. The between-firm standard deviation is 9.85%, showing that firms employ different levels of accelerated depreciation. The within-firm variation is also significant, pointing to changes in depreciation strategies within firms over time, potentially due to evolving financial strategies or external influences.

Lastly, Firm Ownership (FO) is a binary variable with an overall mean of 0.75, indicating that the majority of the firms are privately owned. There is some between-firm variation, as reflected by a standard deviation of 0.45, but no within-firm variation, suggesting that the ownership status remains constant over the observed periods. This stability in ownership could impact the consistency of other financial variables over time.

4.3 Correlation Analysis

Correlation analysis examines the strength and direction of the linear relationship between two or more variables. It is a crucial step in understanding the associations between different financial metrics before conducting more in-depth analyses, such as regression. In this section, we present the correlation matrices before and after first differencing the data. Table 4.2 shows the correlations among Return on Assets (ROA),

Investment Allowance (InvA), Accelerated Depreciation (AD), Capital Gain Tax Exemption (CGTE), and Firm Ownership (FO).

Table 4.2: Correlation Matrix

Variables	ROA	InvA	AD	CGTE	FO
ROA	1.0000				
InvA	-0.2931	1.0000			
	(0.0004)				
AD	-0.4182	0.8949	1.0000		
	(0.0000)	(0.0000)			
CGTE	-0.1798	0.0121	0.2997	1.0000	
	*(0.0310)	(0.8856)	(0.0003)		
FO	-0.0927	-0.0096	-0.0000	-0.0531	1.0000
	(0.2691)	(0.9086)	(1.0000)	(0.5272)	

Significance levels are indicated in parentheses below each correlation coefficient.

**p < 0.05; p < 0.01*

Source: Analysis based on SASRA data using STATA.

The correlation matrix reveals several important relationships. **ROA** is negatively correlated with all other variables, with the strongest negative correlation observed with **AD** (-0.4182), indicating that higher accelerated depreciation is associated with lower returns on assets. **InvA** and **AD** are strongly positively correlated (0.8949), suggesting that firms with higher investment allowances also tend to have higher accelerated depreciation. The correlation between **CGTE** and the other variables is generally weak, with the strongest being a moderate positive correlation with **AD** (0.2997). **FO** has very weak negative correlations with all other variables, implying little to no linear relationship between firm ownership and the other financial metrics before differencing.

4.4 Diagnostic Tests

Diagnostic tests are crucial in econometric analysis to validate the assumptions underlying statistical models and ensure the reliability of the results. These tests help

identify potential issues such as non-stationarity, normality, autocorrelation, heteroscedasticity, and multicollinearity, which can significantly impact the accuracy of model estimates. Among these, the stationarity test is particularly important, as it assesses whether the variables have a consistent mean and variance over time, ensuring that the data is suitable for further analysis.

4.4.1 Stationarity Test

The stationarity test is used to determine whether a variable has a stable mean and variance over time or if it requires transformation to achieve this stability. The fisher unit root test is a commonly employed method to assess stationarity in panel data for unbalanced data. Non-stationary variables can lead to unreliable regression results, so it is important to ensure that the data is stationary before proceeding with further analysis. Table 4.3 presents the results of the fisher unit root test for the variables in the study, showing the inverse chi-squared values and corresponding p-values at different levels of differencing and after applying transformations.

Table 4.3: Fisher Unit Root Test

Variables	Inverse chi-squared (Before differencing)	P-value at lag (0)	Inverse chi-squared (First differencing)	P-value at lag (0)	Inverse chi-squared (Second differencing)	P-value at lag (0)	Inverse chi-squared (After Transformation and Differencing)	P-value at lag (1)
ROA	45.2927	0.0054 **						
InvA	7.5767	0.9994	0.0000	1.0000	0.0000	1.0000	584.4953	0.0000
AD	0.0000	1.0000	0.0000	1.0000	0.0000	1.0000	865.0477	0.0000
CGTE	0.0000	1.0000	0.0000	1.0000	0.0000	1.0000	865.0477	

Significance Levels: p *< 0.05 (), p < 0.01 (**)*

Source: Analysis based on SASRA data using STATA.

The results in Table 4.3 show that Return on Assets (ROA) is stationary at its level, as indicated by a significant inverse chi-squared value of 45.2927 and a p-value of 0.0054. This means that ROA does not require any further differencing or transformation, as

the null hypothesis of a unit root is rejected, confirming that the variable is stable and suitable for further analysis without adjustments.

On the other hand, Investment Allowance is non-stationary at its level, with an inverse chi-squared value of 7.5767 and a p-value of 0.9994. The variable remains non-stationary even after first and second differencing, as shown by p-values of 1.0000. However, after applying transformation and differencing (at lag 1), InvA achieves stationarity, evidenced by a significant inverse chi-squared value of 584.4953 and a p-value of 0.0000, indicating that the necessary adjustments were successful in stabilizing the variable.

Similarly, Accelerated Depreciation (AD) and Capital Gain Tax Exemption (CGTE) are non-stationary at their levels and require both transformation and differencing to achieve stationarity. AD shows an inverse chi-squared value of 865.0477 with a p-value of 0.0000 after adjustments, while CGTE also achieves stationarity with a significant p-value of 0.0000 after similar adjustments. These results highlight the importance of ensuring that variables like InvA, AD, and CGTE are properly transformed and differenced to meet the stationarity assumption, which is critical for the validity of subsequent analyses.

4.4.2 Normality Test

Normality testing is crucial for ensuring the validity of statistical analyses that assume data follows a normal distribution. This study used the Shapiro-Wilk test to assess this assumption, which provides a formal evaluation of whether the data significantly deviates from normality as shown below in Table 4.4.

Table 4.4: Results of Shapiro Wilk Test for Normality

variable	observation	W	V	Z	Prob>z
res	132	0.97296	2.821	2.335	0.00976

Source: Analysis based on SASRA data using STATA.

The Shapiro-Wilk test for normality on the residuals values results in a W statistic of 0.97296 from 132 observations. This statistic, while close to 1, indicates a slight deviation from normality. The Z-value of 2.335 further reflects a moderate departure from a normal distribution. With a p-value of 0.00976, significantly below the 0.05 threshold, there is strong evidence to reject the null hypothesis of normality. This suggests that the data does not follow a normal distribution. To address this non-normality conducting data- transformations solved for the issue.

4.4.3 Autocorrelation Test

Autocorrelation measures how a variable's current value is correlated with its past values over time. In the context of panel data, it refers to the correlation of residuals from one time period with residuals from previous periods. This correlation can undermine the assumption of independent errors, potentially leading to biased or inefficient estimates. To test for its presence, we used the Wooldridge test, specifically designed for detecting first-order autocorrelation in panel data as presented in Table 4.5.

Table 4.5: Results of the Wooldridge Test for Autocorrelation

Test	Statistic	Degrees of Freedom	Value	p-value
Wooldridge test	F-statistic	(1, 11)	6.187	0.0302

Source: Analysis based on SASRA data using STATA.

Wooldridge test for autocorrelation shown in Table 4.5 produces an F-statistic value of 6.187 with degrees of freedom (1, 11), and a p-value of 0.0302. This result indicates significant evidence of first-order autocorrelation, as the p-value is below the conventional threshold of 0.05, leading us to reject the null hypothesis of no autocorrelation. This finding suggests that the residuals in our panel data are correlated over time. To address this issue, use of robust measures such as robust standard errors corrected for the autocorrelation, providing more reliable and efficient estimates in the presence of correlated errors.

4.4.4 Heteroscedasticity Test

Heteroscedasticity refers to the presence of non-constant variance in the error terms of a regression model. When heteroscedasticity is present, the variability of the residuals or errors differs across levels of an independent variable, which can lead to inefficient estimates and affect the reliability of hypothesis tests. Detecting and addressing heteroscedasticity is crucial to ensure the accuracy of the model's results. The presence or absence of heteroscedasticity in the data can be visually assessed through a scatter plot, as shown in Figure 4.1. This figure provides a graphical representation of the residuals to help identify any patterns indicating heteroscedasticity.

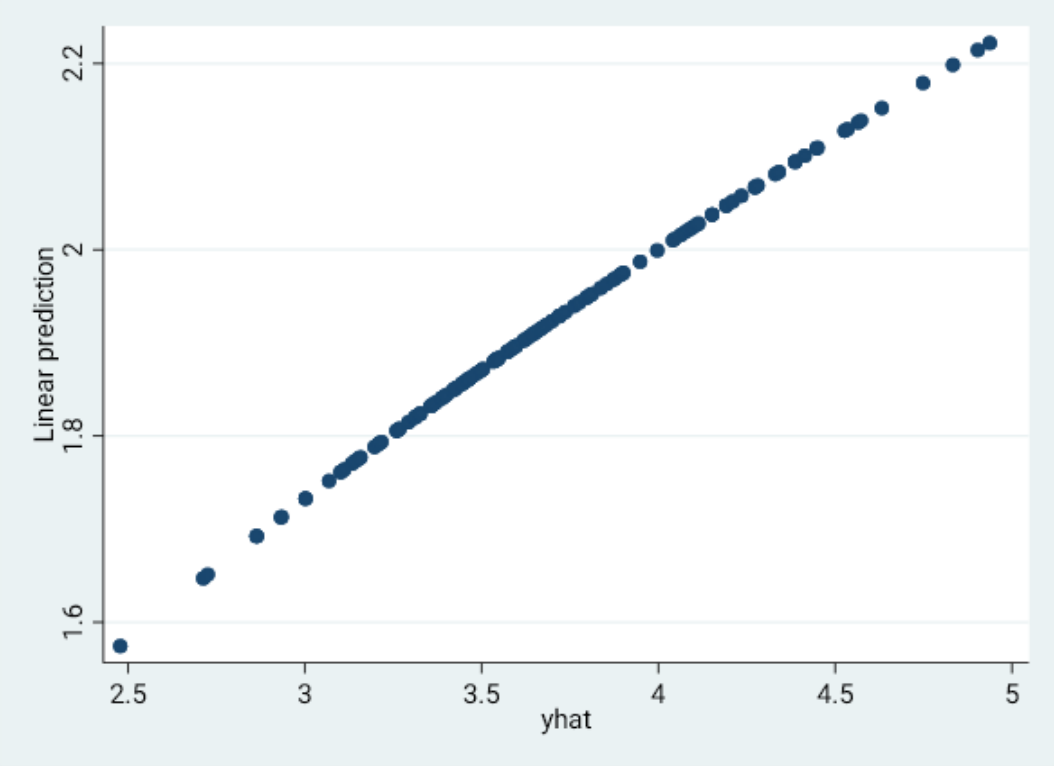

Figure 4.1: Scatter plot for heteroscedasticity

Source: Author's calculation based on SASRA data

In this analysis, a scatter plot of residuals revealed the presence of heteroscedasticity, indicating that the variance of errors was not constant across different levels of the independent variables. To address this issue and ensure the reliability of the regression results, the study applied robust standard errors. This adjustment corrects for heteroscedasticity by providing more accurate estimates of the standard errors, thereby enhancing the validity of our statistical inferences. By incorporating robust standard errors, the study mitigated the risk of biased conclusions and improve the overall robustness of our findings.

4.4.5 Multicollinearity Test

Multicollinearity is considered to exist when there is perfect linear relationship between the variables under the study. The variance inflation factors were utilised to determine whether any pair of independent variables was highly collinear and the size and

magnitude of the pairs of variables determined by the correlation matrix. This bias arises when one or more pairs of independent variables are perfectly correlated to each other. Therefore, the Variance Inflation Factors (VIF) and the correlation matrices were examined. The VIF test measured how much variance of an estimated coefficient increased due to collinearity. For VIF values greater than 10 and 1/VIF values less than 0.10 Multicollinearity is deemed to be presence. Multicollinearity results are as shown in Table 4.6.

Table 4.6: Multicollinearity

Variable	**VIF before Differencing**	**1/VIF before Differencing**	**VIF after Differencing**	**1/VIF after Differencing**
ln_InvA	48.29	0.020709	1.16	0.861006
ln_AD	220.19	0.004541	4.57	0.218841
ln_CGTE	95.17	0.010508	4.89	0.204462
FO	3.98	0.250951	2.81	0.356002
Mean VIF	91.91		3.36	

Source: Analysis based on SASRA data using STATA.

The multicollinearity results in Table 4.6 indicate significant multicollinearity issues before differencing, particularly for **ln_AD**, **ln_CGTE**, and **ln_InvA**, with VIF values of 220.19, 95.17, and 48.29, respectively. According to the commonly accepted decision rule for VIF, a VIF value greater than 10 is indicative of significant multicollinearity. Therefore, these VIF values suggest that **ln_AD**, **ln_CGTE**, and **ln_InvA** are highly correlated with other variables in the model, which can distort the regression coefficients and compromise the reliability of the results. In contrast, **FO** has a VIF of 3.98, which is below the threshold of concern, indicating that it does not contribute significantly to multicollinearity. The mean VIF before differencing is quite high at 91.91, further highlighting the severity of the multicollinearity issue in the model.

After differencing, the VIF values decrease substantially, indicating that the multicollinearity problem has been largely addressed. **ln_AD** and **ln_CGTE** show reduced VIF values of 4.57 and 4.89, respectively, while ln_InvA drops to 1.16, all of which are within acceptable limits. **FO** also shows a reduction in VIF to 2.81. The mean VIF after differencing is 3.36, reflecting a significant improvement in the model's reliability by minimizing multicollinearity, allowing for more accurate and dependable regression estimates.

4.4.6 Hausman Specification Test

The Hausman specification test is crucial for determining the suitability of the random effects versus the fixed effects model for the analysis of the relationship between tax incentives and financial performance of Deposit Taking Savings and Credit Cooperative Societies (DT-SACCOs).

Table 4.7: Hausman test

Variables	Co-efficients of Fixed Effects (b)	Co-efficients of Random Effects (b)	Difference (b-B)	S. Error
Ln_InvA	-0.0163672	-0.0179346	0.0015674	-
Ln_AD	-0.1382052	-0.18947	0.0512648	0.0286308
Ln_CGTE	0.5733802	0.456121	0.1172592	0.0676047
Chi2(3) = 2.96 Prob>chi2 = 0.3973				
H0: difference in coefficients not systematic				

Source: Analysis based on SASRA data using STATA.

The Hausman specification test supports the use of the random effects model. The p-value of 0.3973 is above the 0.05 significance level, suggesting that the differences in coefficients between fixed and random effects models are not systematic.

4.5 Random Effects Model

The model was used in testing the research hypotheses. The first hypothesis stated that, investment allowance has no significant effect on the financial performance of DT-SACCOS, the second hypothesis was stating that accelerated depreciation has no significant effect on the financial performance of DT-SACCOS while the third hypothesis was stating that capital gains tax exemption has no significant effect on the financial performance of DT-SACCOS in Nairobi County. The study adopted the use of random effects model for the analysis. The random effects model is suitable given that the differences in coefficients between the fixed and random effects models are not systematic. The results of the final Random-Effects GLS regression are presented in Table 4.8.

Table 4.8: Final Model- Random-Effects GLS regression

ln_ROA	Coefficients	Robust Std. Err.	Z	P>z	95% confidence interval	
ln_InvA	-.0476657	.0114497	-4.16	0.000	-.0701067	-.0252246**
ln_AD	-2.472207	.5765136	-4.29	0.000	-3.602153	-1.342261**
ln_CGTE	-7.17816	5.699725	-1.26	0.208	-18.34942	3.993096
FO	-.1441659	.6815888	-0.21	0.832	-1.480045	1.191724
_cons	2.082883	.6169234	3.38	0.001	.8737352	3.29203**

***Significant at 5% level*

Source: Analysis based on SASRA data using STATA.

The results from the Random-Effects GLS regression in Table 4.8 show that natural logarithm of investment allowance (ln_InvA) and natural logarithm of accelerated depreciation (ln_AD) have significant negative relationships with natural logarithm of return on assets (ln_ROA). Specifically, a 1% increase in InvA is associated with a 0.0477% decrease in ROA (p-value = 0.000), and a 1% increase in AD leads to a 2.4722% decrease in ROA (p-value = 0.000). These findings suggest that higher

investment allowances and accelerated depreciation negatively impact the return on assets, possibly indicating that these financial strategies might be associated with lower profitability within the firms studied.

The natural logarithm of Capital Gain Tax Exemption has a negative coefficient of -7.1782, but it is not statistically significant (p-value = 0.208), indicating that changes in capital gain tax exemptions do not have a significant impact on the return on assets in this sample. Similarly, Firm ownership, which is a binary variable where 0 represents member-owned firms and 1 represents shareholder-owned firms, has a coefficient of -0.1442 with a high p-value of 0.832, suggesting that whether a firm is member-owned or shareholder-owned does not significantly influence its return on assets.

The model's overall fit is moderate within groups, with an R-squared of 0.4536, indicating that the model explains about 45.36% of the variation in ROA within the groups. However, the model explains much less of the variance between groups (R-squared = 0.0399) and overall (R-squared = 0.0431), suggesting that factors other than the ones included in the model may better explain differences in return on assets across different firms. The Wald Chi-squared statistic of 123.89 with a p-value of 0.0000 indicates that, despite the low R-squared values, the model as a whole is statistically significant.

4.6 Summary of Hypothesis Testing

The first null hypothesis was that Investment allowance have no significant effect on the financial performance of DT-SACCOS in Nairobi County. The study found that Investment allowance has a negative and significant effect on financial performance ($p=.000<0.05$). Hence the null hypothesis was rejected.

The second null hypothesis was that Accelerated depreciation has no significant effect on the financial performance of DT-SACCOS in Nairobi County. The study found Accelerated depreciation has a negative and significant effect on financial performance ($p=0.000<0.05$). Therefore, the null hypothesis was rejected.

The third null hypothesis was that Capital gains tax exemption has no significant effect on the financial performance of DT-SACCOS in Nairobi County. the study found that Capital gains tax exemption has no significant effect on financial performance ($p=0.208>0.05$). Therefore, the null hypothesis was not rejected.

Table 4.9 shows a summary of the hypothesis test.

Table 4.9: Summary of Hypotheses testing

Hypothesis	P-value	Verdict
H_{01} Investment allowance have no significant effect on the financial performance of DT-SACCOS in Nairobi County.	0.000	**Reject H_{01}**
H_{02} Accelerated depreciation has no significant effect on the financial performance of DT-SACCOS in Nairobi County.	0.000	**Reject H_{02}**
H_{03} Capital gains tax exemption has no significant effect on the financial performance of DT-SACCOS in Nairobi County.	0.208	**Do not Reject H_{03}**

4.7 Discussion of the Findings

The analysis of the Random-Effects GLS regression model reveals several important insights regarding the influence of tax incentives on the financial performance of Deposit Taking Savings and Credit Cooperative Societies (DT-SACCOs) in Nairobi County. The study's findings on the negative impacts of investment allowances and accelerated depreciation on Return on Assets (ROA) provide a nuanced understanding

that contrasts with the general assumption that tax incentives invariably enhance financial performance.

Firstly, the significant negative relationship between investment allowance and financial performance, as indicated by the coefficient of -0.0477, suggests that increasing investment allowances might not effectively enhance profitability within DT-SACCOs. This result is in contrast to findings by Mauda and Saidu (2019), who observed that investment allowances positively influenced the financial performance of consumer goods companies in Nigeria. Their study argued that such tax incentives reduce the taxable income, thereby enhancing firms' profitability. However, in the context of DT-SACCOs in Nairobi, the negative impact could be due to inefficiencies in the use of these allowances or perhaps a mismatch between the incentives provided and the actual needs or strategies of the SACCOs. Similarly, Oeta, Kiai, and Muchiri (2019) found a positive but insignificant relationship between capital intensity and financial performance for manufacturing firms, suggesting that the mere availability of tax incentives does not automatically translate into improved financial outcomes unless aligned with effective strategic management.

The significant negative effect of accelerated depreciation on ROA, as shown by a coefficient of -2.4722, aligns with some aspects of previous literature but contradicts others. For instance, Toma, Ionescu, and Founanou (2018) discussed how different depreciation methods could impact financial results, noting that accelerated depreciation could strain short-term profitability due to the rapid expense recognition. This is somewhat consistent with the findings of this study, which suggest that while accelerated depreciation is intended to provide tax relief and enhance cash flows by reducing early tax burdens, it might simultaneously impose financial stress due to

increased depreciation charges that reduce reported profits. This result contrasts with the findings of Fan and Liu (2020), who reported a positive impact of accelerated depreciation on firm investment in China, particularly in large firms with substantial cash reserves and better access to finance. The divergence in results may be attributable to differences in the economic environment, firm size, and access to capital, indicating that the effectiveness of such tax policies can be highly context-specific.

Regarding capital gains tax exemption, the study found no significant effect on the financial performance of DT-SACCOs, with a coefficient of -7.1782 and a p-value of 0.208. This aligns with the findings of Ullah et al. (2020), who observed an insignificant relationship between certain tax-related variables and financial performance in Pakistani textile firms. The lack of significant impact in this study suggests that capital gains tax exemptions might not be a critical factor for the financial performance of SACCOs, possibly because these institutions do not frequently engage in asset sales that would result in capital gains. Therefore, the expected benefits from such exemptions are not realized in practice, pointing to a possible misalignment between the tax incentive and the typical operations of DT-SACCOs.

The finding that firm ownership does not significantly influence ROA, with a coefficient of -0.1442, also merits discussion. This result suggests that whether a SACCO is member-owned or shareholder-owned does not substantially impact its financial performance. This aligns with the findings of Alabdullah (2018), which reported mixed effects of ownership structure on firm performance. The insignificant result in this study could imply that other factors, such as governance practices, financial management, or external economic conditions, might play more critical roles in determining financial outcomes than ownership structure alone.

Moreover, the model's R-squared values indicate that while the model explains a moderate amount of the variance in ROA within groups (45.36%), it explains very little of the variance between groups (3.99%) or overall (4.31%). This suggests that the included variables are better at explaining differences in financial performance within individual SACCOs rather than across different SACCOs. This is consistent with findings by Ogum and Jagongo (2022), who emphasized that internal factors such as investment decisions and governance practices could significantly influence SACCO performance. The low between-group R-squared suggests that unobserved factors not captured by the model, such as managerial competence, market conditions, or member loyalty, could be influencing the differences in performance across SACCOs.

4.8 Justification of Findings

The findings from the Random-Effects GLS regression analysis provide critical insights into the influence of tax incentives on the financial performance of DT-SACCOs in Nairobi County. The negative relationships observed between investment allowances (ln_InvA) and accelerated depreciation (ln_AD) on Return on Assets (ROA), as well as the insignificant effects of other variables such as Capital Gain Tax Exemption (ln_CGTE) and Firm Ownership (FO), can be justified based on several key considerations.

First, the significant negative relationship between investment allowances and financial performance (ROA) can be explained by potential inefficiencies in how these allowances are utilized. Although investment allowances are designed to encourage capital investment and improve profitability, the context of DT-SACCOs may differ from other sectors, such as manufacturing, where such incentives have a more direct financial benefit. SACCOs, primarily being financial cooperatives, may not engage in capital-intensive activities in the same manner, resulting in suboptimal utilization of

these allowances. Consequently, the negative impact observed could be due to a mismatch between the nature of the SACCOs' operations and the expected benefits of the investment allowances. This contrasts with findings in other sectors, such as Mauda and Saidu (2019), who noted a positive influence of investment allowances on consumer goods companies, emphasizing the need for sector-specific considerations.

The significant negative effect of accelerated depreciation on ROA aligns with the understanding that while this tax incentive provides short-term tax relief, it can reduce reported profits due to higher depreciation charges. In SACCOs, which may have less financial flexibility than larger firms, the burden of accelerated depreciation could diminish short-term profitability. This result is consistent with literature such as Toma, Ionescu, and Founanou (2018), who discussed the potential for accelerated depreciation to affect financial performance negatively by increasing depreciation expenses early in the asset's life. However, this contrasts with studies like Fan and Liu (2020), who found that accelerated depreciation had a positive impact on investment in China. The difference in outcomes highlights the importance of considering the specific financial structure and liquidity of SACCOs in interpreting these results.

The lack of a significant impact from capital gains tax exemptions on financial performance is another notable finding. Given that DT-SACCOs primarily provide savings and credit services, they may not frequently engage in asset sales that generate capital gains. This limited exposure to capital gains would explain why the exemption has no meaningful effect on their financial performance. This finding is supported by Ullah et al. (2020), who similarly observed that certain tax incentives did not significantly influence financial outcomes in sectors where they were not particularly relevant. In the case of SACCOs, the operations are not aligned with the benefits of capital gains tax exemptions, further justifying the lack of significance.

Similarly, the study found that firm ownership, whether member-owned or shareholder-owned, did not significantly impact ROA. This result suggests that ownership structure alone is not a major determinant of financial performance in SACCOs. More influential factors likely include governance structures, financial management practices, and market conditions. This aligns with findings from Alabdullah (2018), who reported mixed effects of ownership structure on firm performance, emphasizing that other organizational factors likely play a more critical role in financial outcomes than ownership alone.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings of the research variables. Deductions are thereafter made with a key focus on the recognised correlation between effect of tax incentives on financial performance of deposit taking savings and credit cooperatives societies. Later, relevant policy recommendations and areas of further research are suggested.

5.2 Summary of the findings

In the recent past, SACCOs in Kenya have experienced poor outcomes in their financial performance which has occasioned the collapse and eventual closure of some of these financial institutions with the deposits of their members. About 2% of the SACCOs go under due to financial challenges. Literature attributed this collapse to poor corporate governance and instability, taxation burden, and stiff competition, among other factors. It is on this basis that this study was conducted to establish the effect of tax incentives on financial performance of deposit taking savings and credit cooperatives societies operating Nairobi County, Kenya. Specific objectives include; to determine the effect of investment allowance on financial performance of DT-SACCOS, assess the effect of accelerated depreciation on the financial performance of DT-SACCOS, and evaluate effect of capital gain tax exemption on the financial performance of DT-SACCOS in Nairobi County.

The target population for this study was DT-SACCOs registered and operating in Nairobi County, Kenya. According to SASRA (2022), there are 40 registered DT-SACCOs operating in Nairobi County. The data covered a period of 12 years (2012-2023). The collected data was analysed using descriptive as well as inferential statistics.

Also, frequencies and percentages described the statistics. As for inferential statistics, the study employed correlation and panel data regression analysis was carried out.

The first objective was meant to determine the effect of investment allowance on financial performance of DT-SACCOs. From the findings, it was revealed that investment allowance has a significant negative effect on ROA (β=-0.0477, p=0.000). This could reflect inefficiencies or misalignments in capital allocation. This suggests that increased investment allowance is associated with a decrease in financial performance. This could indicate that the benefits of the investment allowance may not translate directly into improved profitability for DT-SACCOS, potentially due to inefficiencies in how these allowances are utilized or other operational challenges.

In the second objective, that is assessing the effect of accelerated depreciation on the financial performance of DT-SACCOS, the study found out that accelerated depreciation has a substantial negative impact on ROA (β=-2.4722, p=0.000). This substantial negative effect implies that accelerated depreciation significantly reduces financial performance. The immediate tax benefits of accelerated depreciation appear to come at the cost of lower reported earnings and potentially reduced asset valuations.

The study's third objective on evaluating effect of capital gain tax exemption on the financial performance of DT-SACCOS the findings of capital gain tax exemption (CGTE) indicate a negative relationship with financial performance; however, this effect is not statistically significant (β=7.17816, P=0.208). This suggests that there is insufficient evidence to conclude that capital gain tax exemptions partake a meaningful impact on the ROA of DT-SACCOS in Nairobi County. The lack of statistical significance could imply that either the effect of CGTE on financial performance is minimal, or there may be other confounding factors at play that dilute its impact.

5.3 Conclusion

The study concludes that tax incentives, such as investment allowances and accelerated depreciation, have a significant negative impact on the financial performance of deposit-taking savings and credit cooperative societies (DT-SACCOs) in Nairobi County. Both investment allowances and accelerated depreciation were found to reduce the return on assets (ROA) of these institutions. This suggests that, despite their intention to enhance financial growth and stability, these tax incentives may not be effectively translating into positive financial outcomes. Inefficiencies in the use of these incentives, misalignments in capital allocation, or operational challenges could be contributing to these negative effects.

In contrast, capital gain tax exemptions showed a negative but not statistically significant relationship with financial performance, indicating that these exemptions might not have a substantial impact on DT-SACCOs' ROA. Therefore, the findings highlight the need for a critical re-evaluation of the effectiveness of tax incentives in supporting the financial health of DT-SACCOs. Policymakers and SACCO management should consider revising how these incentives are implemented and explore other strategies that could more effectively promote financial stability and growth in the sector.

5.4 Recommendations

First, the study recommends that DT-SACCOs management should make more effective use of tax incentives, so as to translate into better returns on their investments, enhanced stability, and increased confidence in these financial institutions. By addressing inefficiencies in the use of tax incentives, SACCOs can avoid the financial pitfalls that lead to collapses, safeguarding members' savings.

The findings underscore the significant impact of investment allowance and accelerated depreciation on the financial performance of DT-SACCOS, as evidenced by their strong negative coefficients. Given that these variables are crucial determinants of Return on Assets, it is imperative for DT-SACCOS to strategically utilize these tax incentives to enhance their financial outcomes. Investment allowances, despite their negative association with financial performance, offer a valuable opportunity for DT-SACCOS to reduce taxable income and optimize investment in growth-enhancing assets. However, this should be balanced with careful planning to avoid potential adverse effects on financial performance.

Accelerated depreciation, while also having a significant negative effect on return on assets presents an opportunity for DT-SACCOS to manage their tax liabilities more effectively. Leveraging accelerated depreciation allows DT-SACCOS to accelerate the expensing of their assets, which can lead to immediate tax savings. Nonetheless, it is crucial for these organizations to evaluate the long-term implications of such strategies on their asset management and overall financial health. This approach should be part of a broader tax planning strategy that considers both short-term benefits and long-term sustainability.

Given the significance of these variables, DT-SACCOS should engage in comprehensive financial and tax planning to optimize the benefits derived from investment allowances and accelerated depreciation. They should consider consulting with financial experts to tailor strategies that align with their specific operational contexts and financial goals. Additionally, regular reviews and adjustments of their tax strategies will be essential to adapt to changing regulations and market conditions.

To maximize the benefits from these tax incentives, DT-SACCOS should also focus on improving their investment decisions and asset management practices. Ensuring that investments are aligned with organizational goals and financial stability can help mitigate the negative effects observed in the regression results. A balanced approach that integrates tax incentives with sound financial management can enhance DT-SACCOS' overall financial performance and sustainability.

5.5 Contribution to Knowledge

This study adds to the existing body of knowledge on the intersection of taxation, tax incentive such as investment allowance, accelerated depreciation, capital gains exemption and financial performance, offering empirical data and insights that could inform future research in the sector or similar cooperative financial institutions in other regions.

5.6 Further Areas of Study

To gain a richer understanding of how tax incentives affect DT-SACCOs, future research should explore a few key areas in more depth. For instance, studying how different types of tax incentives impact various segments within SACCOs could uncover specific effects that vary across the sector. It would also be useful to look at how broader economic factors, like inflation or interest rates, interact with these incentives and influence financial performance.

Additionally, researching the long-term effects of tax incentives on SACCOs' growth and operational efficiency, rather than just immediate financial metrics, could provide a fuller picture. Comparing experiences of DT-SACCOs in different regions or countries might highlight effective practices and common challenges. Finally, incorporating interviews with SACCO managers and policymakers could offer valuable

insights into the practical impacts of tax incentives and help tailor more effective policies. These approaches would help paint a clearer, more detailed picture of how tax incentives truly shape the financial health and success of SACCOs.

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APPENDICES

Appendix 1: Secondary Data Collection Schedule

Variable	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ROA												
ROE												
Investment Allowance												
Accelerated Depreciation												
Capital Gain Tax Exemption												
Firm size												
Firm ownership												

Appendix 2: List of Deposit Taking SACCOs in Nairobi County

1. Afya Sacco Society Ltd	P.O Box 11607 00400, Nairobi.
2. Airports Sacco Society Ltd	P.O Box 19001 00501, Nairobi
3. Ardhi Sacco Society Ltd	P.O Box 28782 00200, Nairobi.
4. Asili Sacco Society Ltd	P.O Box 49064 00100, Nairobi.
5. Chai Sacco Society Ltd	P.O Box 278 00200, Nairobi.
6. Chuna Sacco Society Ltd	P.O Box 30197 00100, Nairobi.
7. Comoco Sacco Society Ltd	P.O Box 3334 00200, Nairobi.
8. Elimu Sacco Society Ltd	P.O Box 10073 00100, Nairobi.
9. Harambee Sacco Society Ltd	P.O Box 47815 00100, Nairobi.
10. Hazina Sacco Society Ltd	P.O Box 59877 00200, Nairobi.
11. Jamii Sacco Society Ltd	P.O Box 57929 00200, Nairobi.
12. Kencream Sacco Society Ltd	P.O Box 300131 00200, Nairobi
13. Kenpipe Sacco Society Ltd	P.O Box 314 00507, Nairobi.
14. Kenversity Sacco Society Ltd	P.O Box 10263 00100, Nairobi.
15. Kenya Police Sacco Society Ltd	P.O Box 51042 00200, Nairobi
16. Kingdom Sacco Society Ltd	P.O Box 8017 00300, Nairobi.
17. Taqwa Sacco Society Ltd	P.O Box 10180 00100, Nairobi.
18. Stima Sacco Society Ltd	P.O Box 75629 00100, Nairobi.
19. Shoppers Sacco Society Ltd	P.O Box 16 00507, Nairobi.
20. Safaricom Sacco Society Ltd	P.O Box 66827 00800, Nairobi.
21. Sheria Sacco Society Ltd	P.O Box 34390 00100, Nairobi.
22. Shirika Sacco Society Ltd	P.O Box 43429 00100, Nairobi.
23. NSSF Sacco Society Ltd	P.O Box 43338 00100, Nairobi.
24. Nyati Sacco Society Ltd	P.O Box 7601 00200, Nairobi.
25. Nation Sacco Society Ltd	P.O Box 22022 00400, Nairobi.
26. Mwito Sacco Society Ltd	P.O Box 56763 00200, Nairobi.
27. Nacico Sacco Society Ltd	P.O Box 34525 00100, Nairobi.
28. Nafaka Sacco Society Ltd	P.O Box 30586 00100, Nairobi.
29. Mwalimu National Sacco Society Ltd	P.O Box 62641 00200, Nairobi.
30. Magereza Sacco Society Ltd	P.O Box 53131 00200, Nairobi.
31. Maisha Bora Sacco Society Ltd	P.O Box 30062 00100, Nairobi.
32. Ufanisi Sacco Society Ltd	P.O Box 2973 00200, Nairobi.

33. Ukristo Na Ufanisi Wa Anglicana Sacco Society Ltd	P.O Box 872 00605, Nairobi.
35. Ukulima Saco Society Ltd	P.O Box 44071 00100, Nairobi.
36. Unaitas Sacco Society Ltd	P.O Box 3879100100, Nairobi.
37. United Nations Sacco Society Ltd	P.O Box 2210 00621, Nairobi.
38. Ushuru Sacco Society Ltd	P.O Box 52072 00200, Nairobi.
39. Wanaanga Sacco Society Ltd	P.O Box 34680 00501, Nairobi.
40. Waumini Sacco Society Ltd	P.O Box 66121 00800, Nairobi.

Source: SASRA (2023)

Appendix 3: KESRA letter

KENYA REVENUE AUTHORITY

PUBLIC

ISO 9001:2015 CERTIFIED

KENYA SCHOOL OF REVENUE ADMINISTRATION

REF: KESRA/NBI/036

21st May 2024

TO: WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: REQUEST FOR ASSISTANCE TODAISY KWAMBOKA OF REGISTRATION NO.: MU/KESRA/105/0012/2022 UNDERTAKING MASTERS AT KESRA

This is to confirm that the above named is a student at Kenya School of Revenue Administration (KESRA) Nairobi Campus pursuing Masters in Tax and Customs Administration.

The named student is undertaking Research on TOPIC: *"Effect of Tax incentives on Financial Performance of Deposit taking Savings and Credit Cooperatives Societies Operating in Nairobi Country,Kenya."*

The purpose of this letter is to request for your kind facilitation in enabling the student progress in her research project by allowing access to any relevant information and/or conduct interviews, which are relevant to the project.

Your support to the student in this regard will be highly appreciated.

Thank you.

SCHOOL OF REVENUE ADMINISTRATION
DEAN OF STUDIES
21 MAY 2024
ACADEMIC AFFAIRS DIVISION

Damacrine Masira
Manager Academic Research,
KESRA

Tulipe Ushuru, Tujitegemee!

Appendix 4: NACOSTI Letter

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **588599**

Date of Issue: **11/June/2024**

RESEARCH LICENSE

This is to Certify that Ms.. Daisy Kwamboka Marieta of Kenya School of Revenue Administration, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: EFFECT OF TAX INCENTIVES ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVES SOCIETIES OPERATING IN NAIROBI COUNTY, KENYA for the period ending : 11/June/2025.

License No: **NACOSTI/P/24/35973**

588599

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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Appendix 5: Summary of literature review and knowledge gaps

Author(s) and year	Type of study	Methodology and data	Findings	Research Gaps	Relevance to Study Objectives
Mauda and Saidu (2019)	Impact of tax incentives on financial performance of listed consumer goods companies in Nigeria	Quantitative; Pearson's correlation and multiple regressions	Investment allowance and loss relief positively and significantly influenced performance; Investment allowance had a positive but insignificant influence	Need for more exploration of tax incentives in enhancing productivity; Introduction of more incentives for critical sectors; Enhancement of understanding on the influence of tax incentives on financial performance	Directly relevant to the study objectives, as it examines the impact of specific tax incentives on financial performance, aligning with the main objective of determining the effect of tax incentives on SACCOS' financial performance.
Juma and Maseko (2022)	Factors affecting financial performance of Savings and Credit Cooperative Societies (SACCOS) in Dodoma, Tanzania	Quantitative; Descriptive survey approach	Interest rate, loan default, and member dropouts significantly influenced return on assets	Adoption of online supervision and self-regulation during pandemics; Introduction of off-site audit methods	While not directly related to tax incentives, the findings highlight external factors influencing financial performance, which could indirectly impact the effectiveness of tax incentives, aligning with the broader objective of understanding factors affecting financial performance.
Otanga (2021)	Moderating effect of investment decisions on relationship between corporate risk management	Quantitative; Secondary and primary data analysis	Significant moderating effect of investment decisions on relationship between corporate risk	Importance of considering investment decisions in risk management; Recommendations for	Although not directly related to tax incentives, the findings emphasize the importance of investment decisions in moderating the

Author(s) and year	Type of study	Methodology and data	Findings	Research Gaps	Relevance to Study Objectives
	and financial performance of Deposit Taking Savings and Credit Cooperative Societies (DT-SACCOs) in Western Kenya		management and financial performance	investment in risk management constructs	relationship between risk management and financial performance, which could indirectly affect the effectiveness of tax incentives in enhancing financial performance.
Toma, Ionescu, and Founanou (2018)	Investigation of impact of different depreciation methods on financial performance	Analysis of depreciation methods and their impact on enterprise performance	Depreciation system affects short-term results; Long-term impact mitigated by offsets between periods	Need for systematic depreciation regime reflecting asset service capacity over time	Provides insight into financial performance aspect of tax incentives, but not directly related to objectives
Tang & Wang (2022)	Exploration of relationship between tax incentives and corporate social responsibility	Analysis of tax incentives' influence on CSR activities	Positive association between tax incentives and CSR performance	Highlights benefits of tax incentives on CSR activities	Indirectly relevant as it focuses on CSR rather than financial performance
Du, Shen, and Zou (2023)	Investigation of impact of tax incentives on firm financing structures	Utilization of difference-in-differences model to analyze policy effects	Policy led to increase in short-term leverage, financed through short-term debt	Policy-induced mismatch in maturity between assets and liabilities	Offers insights into policy effects on firm financing, but not directly addressing objectives
Fan and Liu (2020)	Examination of impact of Chinese accelerated depreciation policy on firm investment	Data analysis revealing policy effects on investment	Policy led to overall increase in eligible capital investment	Effects more pronounced for certain firm characteristics	Relevant to objective 2, evaluating effects of accelerated depreciation on financial performance

Author(s) and year	Type of study	Methodology and data	Findings	Research Gaps	Relevance to Study Objectives
Caylor and Whisenant (2019)	Examination of role of accelerated depreciation in signaling higher future prospects for firms	Analysis supporting signaling hypothesis using accelerated depreciation	Use of accelerated depreciation associated with higher future earnings and cash flows	Supports signaling hypothesis, despite trade-offs	Relevant to objective 2, assessing impact of accelerated depreciation on financial performance
Maina and Jagongo (2022)	Examination of capital structure effects on small-tiered cooperative societies' financial performance	Systematic review research design	Conceptual framework gap in empirical literature regarding capital structure and financial performance	Limited conclusive results and contextual gaps in existing studies	Directly addresses objective 3 by evaluating capital structure's impact on financial performance
Ajibola, Wisdom, and Qudus (2018)	Investigation of capital structure's influence on financial performance of manufacturing firms	Panel methodology for data analysis	Positive relationship between long-term debt ratio and financial performance	Limited impact of certain capital structure proxies on financial performance	Directly addresses objective 1 by evaluating capital structure's impact on financial performance
Njenga & Jagongo (2019)	Theoretical review on financial management decisions and financial performance of non-deposit taking SACCOs	Theoretical review based on financial management decisions	Financial management decisions affect financial performance of SACCOs	Gaps in literature on the link between financial management decisions and financial performance	Not directly related to study objectives

Author(s) and year	Type of study	Methodology and data	Findings	Research Gaps	Relevance to Study Objectives
Ahmed and Rugami (2019)	Study on the influence of corporate governance on SACCOs' performance	Survey with semi-structured questionnaire	Corporate governance significantly affects SACCOs' performance	Lean board size positively impacts performance	Not directly related to study objectives

Source: Researcher (2023)