# DETERMINANTS OF DIVIDEND PAYOUT IN DEPOSIT TAKING SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN KENYA

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# **DECLARATION**

I declare this thesis is my original work and to have not been presented in other institutions or
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# **DEDICATION**

I devote this thesis to my family for their understanding and help during the time of the research.

# ACKNOWLEDGEMENT

First, am grateful to Allah who gave me good health throughout the time I was coming up with the thesis. Am also grateful to my supervisors Moses Kithinji and Dr. Wilson Muema for setting aside their time to offer guidance and corrections to the thesis.

#### **ABSTRACT**

Saccos' dividend payment strategy varies as to what determines the amount of dividend to pay to its shareholders, how?, and when? While working in the same market climate, some Saccos pay more, while others pay less. The problems regarding the dividend payout in Kenya arise because of the concerns about how the commercial Saccos institutions set their dividend and why Saccos pay dividends. Therefore, among the aspects of corporate finance, the strategy of dividend payout is not coherent and attracts a lot of debate among Saccos. The study's general objective was to establish the financial determinants for the dividend payout scheme among Saccos in Kenya. The study-specific objectives were to: determine the influence of profitability, establish the influence of investment opportunities, assess the influence of Sacco size, and evaluate the influence of nonperforming loans on dividend payout in Kenyan DT-SACCOs. The research design adopted for this study was descriptive. All 166 Saccos in Kenya were targeted by the researchers. Taro Yamane was used to sample 62 DT-Saccos. Secondary data was obtained using a secondary data disk. Descriptive statistics included the use of mean, standard deviation, frequency, and percentages. Besides, inferential analysis including correlation and linear regression analysis were used. Data was presented on tables and narratively. The study also revealed on profitability a  $\beta$ = 0.889, t=6.217 and associated p-value of 0.001. The study also revealed on investment opportunities a  $\beta$ = 0.895, t=3.653 and associated p-value of 0.001. The study revealed on asset size a  $\beta$ = 0.802, t=3.783 and associated p-value of 0.001. The study finally, revealed on non-performing loans a  $\beta$ = -0.911, t=3.438, and associated p-value of 0.001. The study concluded that profitability investment base and asset size have a positive and significant influence on the dividend payout in deposittaking Saccos in Kenya. The study however concluded that non-performing loans have a negative and significant influence on the dividend payout in Kenyan deposit-taking Saccos. The study recommended for measures to be put in place that ensure that profits increases to have a higher payout of dividends in the DT- SACCOs in Kenya such as reduction in the costs of operations and costs of production to increase in profits. The study also recommended for the DT-SACCOs to diversify more into many projects because with more projects and higher investments there is more dividend payout among SACCOs in Kenya. The study also recommended for the SACCOs to acquire more property, recruit more members into the SACCOs which would mean more asset base and ultimately more dividend payout because dividend and asset size had a positive relationship. Finally, the study also recommended for measures and controls to be taken on nonperforming loans such as loan risk controls, appraisal before awarding loans, robust measures to be taken on loans recovery to reduce non-performing loans because higher non-performing loans would lead to lower dividend payouts among deposit taking SACCOs in Kenya.

# TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
ABBREVIATIONS AND ACRONYMS	x
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background Information	1
1.2 Statement of the Problem	
1.3 Objectives of the Study	11
1.4 Research Hypotheses	
1.5 Significance of the Study	
1.6 Scope of the Study	13
CHAPTER TWO	14
LITERATURE REVIEW	14
2.1 Introduction	14
2.2 Theoretical Framework	14
2.3 Empirical Review	19
2.4 Conceptual Framework	32
2.5 Operational Framework	
CHAPTER THREE	35
RESEARCH METHODOLOGY	35
3.1 Introduction	35
3.2 Research Design.	35
3.3 Target Population	35
3.4 Sample Size and sampling Procedure	36
3.5 Data Collection Procedures and Instruments	36
3.6 Pre-Test Study	37

3.7 Data Analysis and Presentation	38
CHAPTER FOUR	41
RESULTS AND DISCUSSIONS	41
4.1 Introduction	41
4.2 Descriptive Statistics	43
4.3 Results of Hypothesis Testing	58
CHAPTER FIVE	68
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	68
5.1 Introduction	68
5.2 Summary of the Findings	68
5.3 Conclusions of the Study	69
5.4 Recommendations of the Study	70
REFERENCES	72
APPENDICES	81
Appendix I: Secondary Data Collection Form	81
Appendix II: Deposit Taking Saccos Registered by SASRA	83
Appendix III: Research Permit	89
Appendix IV: Research License	90

# LIST OF TABLES

Table 4.1: Response Rate	41
Table 4.2: Reliable Tests	42
Table 4.3: Kaiser-Meyer-Olkin (KMO) and Bartlett's Test	43
Table 4.4: Return on Assets (ROA) in Percentage	44
Table 4.5: Return on Equity (ROE) in Percentage	45
Table 4.6: Return on Investment (ROI) in Percentage	46
Table 4.7: Net Profits in Millions	
Table 4.8: Number of Projects in which the Saccos have invested	49
Table 4.9: The Total Value of Projects Invested	
Table 4.10: The Asset Base of the Saccos	51
Table 4.11: Total Number of Members in a Sacco	52
Table 4.12: The Growth Rate of the Saccos' Membership	53
Table 4.13: Amount of Non-Performing Loans	55
Table 4.14: Number of Non-Performing Loans	56
Table 4.15: Average Amount of Dividend Paid Annually	57
Table 4.16: Checking for Normality	59
Table 4.17: Levene Test Results	
Table 4.18: Autocorrelation Test	60
Table 4.19: Correlation Analysis	61
Table 4.20: Collinearity Statistics	64
Table 4.21: Model Summary	
Table 4.22: ANOVA Results	65
Table 4.23: Regression Coefficients	66

# LIST OF FIGURES

Figure 2.1: Theoretical Framework	. 19
Figure 2.2: Conceptual Framework	. 33
Figure 2.3: Operational Framework	. 34
Figure 4. 1: Linearity Test	. 63

# ABBREVIATIONS AND ACRONYMS

**CBK:** Central Bank of Kenya

**CRBs:** Credit Reference Bureaus

**EBIT:** Earnings before Interest and Tax

**EPS:** Earnings per Share

**FMBs:** Microfinance Banks

GCC: Gulf Co-operation Council

**MRPs:** Money Remittance Providers

**NACOSTI:** National Commission for Science Technology and Innovation

**NSE:** Nairobi Security Exchange

**ROA:** Return on Asset

**ROE:** Return on Equity

**SPSS:** Statistical Package for Social Sciences

SSA: Sub-Saharan Africa

**UAE:** United Arab Emirates

**UK:** United Kingdom

**US:** United States

.

#### CHAPTER ONE

# **INTRODUCTION**

#### 1.1 Background Information

Dividend Policy applies to the Board of Directors 'formal or inferred decisions on the sum of the corporate shareholders' residual earnings. Management takes the practice of making decisions on dividend payments or in other words, the cash distribution amount and trend over time for shareholders. As such, companies should ensure that they make the appropriate decision on the payment of dividends since it is part of the primary funding choices of a company. Profits are a significant source of funds for any given company (Husain & Sunardi, 2020).

Among the theories of corporate finance, dividend policy is a core theory that has attracted a lot of attention over the years. Dividend policy has been described as a puzzle and numerous scholars have over the years tried to research this area in an attempt to solve the puzzle (Subba, 2015). Despite the numerous efforts carried out by researchers and scholars to explain this issue, dividends remain one of the hardest puzzles in corporate finance (Husain & Sunardi, 2020).

In advanced economies, both creditors and the management of the company have carefully determined whether to pay dividends or maintain them as retained income (Laurence & Jun, 2015). A lot of research, including Al-Najjar (2016) and Gizelle et al. (2013), carried out studies of the dividend policy and offered empirical proof of dividend policy determinants. However, the variables shaping dividends policy are not undisputed. There is also an unanswered issue as to why businesses pay dividends from their profits. This is called the financial literature dividend puzzle (Hussein et al., 2016). There have been several theories to shed some light on this mystery, but there is still a question.

Dividend policy continues to be a contentious topic since the work of Choi and Doowon (2014), some of the questions still not answered; what dictates the policy on dividends? Is the policy on dividends decided on an objective basis? The dividend payment found was made among several investigators, (Febriela &Sylvia ,2014; Vivek et al. 2015).

It is also difficult to balance multiple competing factors in the real world to determine the correct payout strategy. The important elements cannot be defined without difficulty, but their interactions are complex and there is no simple response (Dewasiri et al., 2019). Chintal et al. (2015) concluded that much more empirical and theoretical dividend work is needed before consensus can be achieved. However, an analysis of dividends payouts in developing countries like Kenya is currently absent in the literature, and no study was produced to answer the dividend problem in Kenya, this study provided more insights into the dividend policy debate. This study aimed at identifying the determinants of dividend payment policies among Saccos in Kenya, and to check whether the potential determinants of dividend payments found in the theoretical and empirical literature are more perplexing and can also be used as a guide in determining dividends for directors of trade Saccos.

The first to use Lintner's model in a developing country has been Samuel et al. (2016). From 1949 to 1981 they studied the component of dividends in the Indian economy. The study revealed that the Indian dividend behavior is well explained by Lintner's Model. Moreover, Indian companies claim that even though their income rates are small and they will obtain external funding (borrowing), they will pay dividends. The dividend conduct of companies listed on the Kuala Lumpur Bond (now Bursa Malaysia), was investigated by John and Greg (2016), they found that the decisions of companies on dividends relied partly on their current income and past dividends.

The dividend strategy of eight emerging markets was analyzed in Chia et al. (2013) and compared to an estimated 99 US firms. They found that emerging companies exhibited dividend conduct close to those of US firms in the sense that market-to-book, debt and income ratios explain dividends. However, the extent of variable sensitivity varies from country to country. Between 1989 and 2004, Biswajit and Kailash (2015) studied the financial and non-financial dividend policy of Omani companies. The findings indicate that the dividend strategy of financial and nonfinancial companies affects productivity, size, and corporate risk. Government ownership, debt, and age, however, had a clear influence on non-financial dividend policy without any effects on financial companies. On the contrary, the expenses of companies, observable characteristics, and growth drivers seem to have no major effect on both financial and non-financial dividend strategy. Between 1989 and 2000, Al-Malkawi (2017), a business panel data collection of all publicly traded companies on the Amman Stock Exchange, analyzed the determinants of corporate dividend policy in Jordan. The results indicated that the company's age, scale, and profitability have influenced dividend policy positively and significantly using Tobit's specifications, while leverage has harmed dividend policy. Vivek and Xiaorong (2012) conducted a research project on the Kuala Lumpur stock exchange dividend policy of 300 companies. The results show that the dividend payout ratios have not significantly correlated with the use of a panel dataset by the non-financial companies listed on the Gulf Cooperations Committee (GCC) between 1999 and 2003 by Vivek and Xiaorong (2012). The results show that dividends policy is firmly and explicitly linked to government ownership, corporate size, and company profitability, but not to the leverage ratio, using a series of random-impact Tobit models He concluded that businesses pay dividends to reduce the issue of the business and protect the credibility of the businesses.

Nopphon (2013) has done an analysis in Ghana over the six years on the determinants of the dividend payout ratios. The results showed that productivity, cash flow and tax have a positive effect on a model focused on ordinary lower squares. The findings further indicated that dividend payment is negatively impacted by risk and the market-to-book value also negatively impacts sacco growth. However, only productivity, cash flow, growth in revenue, and market-to-book valuation were relevant variables in the study.

Dispersants of the dividend payout policies of Nigerian Securities and Exchange Commission companies have been studied by Pattiruhu (2020). They find that earnings impacted the payout ratio negatively while liquidity and a dividend in the previous year have had a positive effect on the payout ratio. The three factors (profit, liquidity, and dividends in the previous year) therefore led to the assumption that they were strong forecasters in the Nigeria dividend payout scheme. The dividend decisions by the fourteen Tanzanian firms listing in 1990-2006 were investigated by Nan et al. (2017). Saudi companies find that their dividend policies are more flexible as they can reduce or miss dividends when earnings are decreasing and when the loss is announced, they pay no dividends. The determinants of dividend payments are called dividend payments, productivity, and cash flows.

During the period from 2006 to 2010, in Ethiopia, Hyang et al. (2014) carried out an empirical analysis of dividend payment determinants in six private banks. By using the Lintner model, it was noticed that the company's size and the ratio of dividend payout, liquidity, and dividend payouts had a positive connection. There was no correlation, however, between productivity, growth, and leverage. There was no relationship. He concluded that Ethiopia's banks considered conflicts among agencies, dividends, and cash for the past year when making dividend payment decisions. Same survey on seventeen banks in Ghana (1999–2003) Nopphon (2013) conducted in a five-year

room. Results demonstrate a positive effect on Ghana's banking's dividend policy on profitability, leverage, improvements in dividends, and collateral efficiency. They found that maturity of a firm as well as its growth affected the dividend payment significantly. However, the flow of cash had a negative and limited influence on the policy of dividends.

#### 1.1.1 Sacco's in Kenya

The critical role played by DT-Saccos in availing of loan facilities to Kenyans, and the mobilization of savings for national development in an environment that can be trusted cannot be understated. The sector of financial intermediation that includes the creation of wealth, access and mobilization of savings is heavily impacted by DT-Saccos. Following Kenya's Vision 2030 economic blueprint, the country targets to reach a double-digit rate of economic growth. DT-Saccos play a critical role in achieving this goal (Masika & Simiyu, 2019). According to Buluma and Kung'u et al. (2017), DT-Saccos are designed to provide a relatively low and stable source of funding by having small deposits and saving accounts that have a solid base. They also have low costs of administration.

SACCOs have the opportunity and ability to reach people in areas that are not attractive to commercial banks such as rural or poor areas that do not make a business case for the banks. Consequently, the growth in the SACCO subsector during the year 2018 depicts the hitherto unraveled contribution of the DT-Saccos to the country's overall economic growth (Nduati, et al. 2020). According to Onsarigo (2018) SACCOs provide a system where savings are encouraged and also provides loans and credit facilities thereby ensuring that the members of the Saccos are enabled and empowered.

The range of financial services and other business solutions that Kenyan SACCOs offer to members as well as the regulatory regime qualifies it to be described as a two-tiered system. Some Saccos are referred to as back-office activities (BOSA) since they do not handle cash transactions. However, such Saccos provide a limited scope of financial services and are identified by law as non-DT-Saccos. However, they are also registered, supervised, and managed under the same Cooperative Societies Act, CAP 490, as the DT-SACCOs, but they are not required to register with SASRA or any other government body. The DT-Saccos, in addition to providing the usual services of savings and credit, also provide other banking services like money deposits, utility, and loan payments services and they also partner with commercial banks to offer other channels such as quasi banking services (commonly known as automated teller machines, ATMs) and FOSA. The SACCO Societies Act of 2006 licenses and supervises the DT-Saccos (Kimani, 2018). The SASRA Report of 2019 indicates that Kenya is ranked among the few countries in the African continent that has a vibrant Sacco sector which commands 67% of the assets and 64% of the deposits in the continent. However, in terms of the percentage of the population that uses the Sacco sector, Kenya is at 21% compared to South Africa at 22.9%. In addition, the membership in this sector has also reduced significantly over the years. The 2013 financial access survey estimated that the use of Saccos has decreased since 2005, from 13.7% in 2009 to 13.1% in 2013 (Financial Sector Deepening Kenya, 2013). DT-Saccos accounts for 79% and 77.5% of the value of the assets and the deposits respectively of the entire Saccos sector highlighting the important fact that there is growth potential in the DT-SACCO business (Masika & Simiyu, 2019).).

#### 1.1.2 Sacco's Overview

Results from the concentration of banks measured by the World Bank by the accounting of the portion of assets owned by the three biggest banks in each region, and which to a large extent indicates a national banking sector's level of competitiveness indicate that the US banking industry remains at a concentration of 35.41 percent in 2014, with Germany being the most competitive

sector in the G7 economies. The second to sixth places in Japan, the UK, Canada, France, and Italy are 57.43%, 62.68%, and 63.11% respectively, with banks of 43.9%. One clear explanation of this concentration phenomenon may be that some states have a more competitive environment than others in the banking industry and that the trend could have triggered a general decrease in competition. The concentration of markets shifts in competitive conditions, and harder competition will lead to weaker banks (who are less appealing to customers) due to concentrated markets being connected to tough competition (Mbugua et al., 2020).

In the last 3 decades after a long time of underperformance, African banking sectors have undergone major reforms. Banks have been on the rise in terms of their numbers in several African nations, major rises in cross-border rates, and major rise of small-capital banks, which have attracted recapitalization programs (e.g. Ghana, Siert Leone, and Nigeria) due to these reforms. Banks in the markets located in the African sub-region are monopolistically competitive given that the average equity to assets ratio of banks in southern and West Africa is approximately 15% while that of banks in North and East Africa is 16%. Except for North Africa, African banks show higher competitiveness at interest-generating activities relative to overall banking activities. The level of competition in African banking markets is close to the level of competition in other emerging markets but typically far below developed countries' levels. The five-bank ratio for the African region as a whole is 77,29 percent. less efficient banks may be driven out of the market as a result of stiff competition and would result in increased concentration in the banking market(Brian, 2016).

During the past three decades, many countries in Sub-Saharan Africa (SSA) have liberalized their financing structures, reforming a significant number of government commercial banks, creating a favorable climate for greater entry into international banks, and permitting domestic financial firms

to acquire international actives. Available evidence indicates that competition in the banking sector has generally increased relative to countries with less open financial sector regimes in developed countries in which financial sector reforms have been introduced (Njuguna, 2014). Studies have shown that changes in the financial sector have intensified competitive strains in the banking sector in eastern African countries. Performance for international banks and the privatization of banks are robust (Mbugua et al., 2020). But this proof is not true. Other studies have shown that there are minimal benefits of competitiveness reforms, with often liberalization leading to financial crises (Brian, 2016).

The Kenyan financial sector is a very diversified sector that is made up of deposit-taking institutions such as deposit-taking Savings and Credit Co-operatives (DT-Saccos), banks, microfinance banks as well as mortgage finance companies. The sector is also made up of non-deposits-taking institutions which include industries such as the capital markets industry, pensions industry, insurance industry, Development Finance Institutions (DFI) as well as other enablers and providers of the infrastructure of financial markets (Njenga, 2019).

Like other industries in the Kenyan market, the financial sector is supervised by several bodies that are given the authority to regulate and supervise the operations of key players in this sector. These bodies include the Sacco Societies Regulatory Authority (SASRA), the Insurance Regulatory Authority (IRA), the Capital Markets Authority (CMA), the Retirement Benefits Authority (RBA), the Central Bank of Kenya (CBK) as well as other government agencies. 68% of the assets in the financial sector were from the banking sector which includes micro-finance banks, commercial banks as well as mortgage finance companies as of December 2018 (Kavulya et al., 2018).

In Kenya, Saccos are institutions that are owned by their members and offer facilities of savings and credit to their members (Kemboi, 2019). The fundamental role of any Sacco is, therefore, to economically benefit and to promote the social-economic wellbeing of its members. For the longest period, the main goals for Saccos have been to offer service efficiency, provide good leadership and good reputation and ensure organizational growth that can serve their members. As of May 2018, the Sacco movement in Kenya had a membership of over 9 million in 13,000 cooperative societies. The DT-Sacco subsector by this period had mobilized over KShs. 640 Billion in deposits and savings. Several academic research studies have been undertaken to try to understand the dividend payout among DT-Saccos in the country (Lari, 2017).

Mbugua and Kinyua (2020) in their study found out that the day to day cost of running DT- Saccos is set to increase significantly with the implementation of the new set regulations by the regulators which in effect threaten the low-interest rates enjoyed by these Saccos and that have survived for a very long period thereby giving Saccos a competitive edge over commercial banks in the money lending business. This effectively means that with the increased cost of doing business for the Saccos, profitability will be affected adversely, and thus the need for diverse dividend policies to be set.

Mbaka (2018), in his research study also asserts that for DT-Saccos to compete healthily with other financial institutions such as commercial banks, their dividend payout policies must be unrivaled as they are among the key decisions that determine how profits will be shared. Such information would result in an increase in the development of various lending as well as saving products. This is mostly a result of Saccos trying to gain a competitive edge over commercial banks since both institutions serve the same market pool. Saccos can gain a competitive edge over commercial banks by maintaining their low-interest rates. These rules and regulations mean that DT-Saccos

will have less money remaining for lending to members, and therefore negatively impact their overall income. DT-Saccos may end up closing or merge due to the stiff competition that they face from banks as well as the introduction of new regulations and rules governing the sector which seem to be harsh on DT-Saccos. As such, DT-Saccos are expected to innovate ways that can be used to cut operating costs of the Saccos. Changing times has seen the dividends offered by Saccos decline at a fast rate. Implementation of the Sacco regulations means that the amount of shares that a member has paid for will be considered when determining the rebates to be earned instead of the member's savings (Mutua &Murigi, 2019).

Similar to banks and other listed companies, Saccos are not allowed to pay dividends to their members in case the Sacco has negative capital (Kavulya, 2017). The newly enacted Sacco regulations of 2010 have strict corporate benchmarks, which may impact dividend payout. These include sanctions on the administrative authority such as prohibiting actions such as paying dividends, acquisition of property, or aggressive expansion.

#### 1.2 Statement of the Problem

The dividend payout policy adopted by SACCOs differs from one institution to the other since each Sacco makes an independent decision on the amount, the time, and how dividends will be paid out to its shareholders. Even though SACCOs work in the same environment, the dividend paid out by a given institution differs from one SACCO to the other (Kamau, 2017). The most common problem in Kenyan Saccos is the question of how these institutions set their dividends and the reason why they pay these dividends. It is therefore, clear that there lacks a consensus regarding the Kenyan dividend policy. As a result, this area of corporate finance has a lot of contested disputes. In addition, the fact that there exist several issues that affect the dividend policy

and that there is no law that demands certain companies to pay a given percentage of their profits as dividends to their shareholders can also be attributed to the lack of consensus.

Shibutse et al. (2019), concluded that dividend policy remains a puzzle. Kiswili (2021) revealed that despite the several attempts made to research the dividend puzzle that is identified in (Njeje et al., 2018), the studies are yet to arrive at an unequivocal solution. Besides, in prior studies on dividend policy, a majority were carried out in developed countries, emerging markets, Europe, Asia Africa (Brůha & Kočenda, 2018). Local studies focused on listed agricultural firms Kariuki, (2021) and all listed firms at NSE (Kavulya et al., 2018). From the reviewed studies, it is evident that there exist limited studies focusing on listed firms in the SACCOs in the Kenyan context. It is against this background that this study embarked to fill the existing gaps by seeking to establish the determinants of dividend payout policy among SACCOs in Kenya.

#### 1.3 Objectives of the Study

# 1.3.1 General Objective

The general objective of this study was to establish the determinants of dividend payout in DT-Sacco's in Kenya.

### 1.3.2 Specific Objectives

The specific objectives of the study were:

- To determine the influence of profitability on dividend payout in deposit-taking Saccos in Kenya.
- ii. To establish the influence of investment opportunities on dividend payout in deposit-taking Saccos in Kenya.
- To assess the influence of Sacco size on dividend payout in deposit-taking Saccos in Kenya.

iv. To evaluate the influence of non-performing loans on dividend payout in deposit-taking Saccos in Kenya.

### 1.4 Research Hypotheses

H<sub>01</sub>: Profitability does not significantly influence dividend payout in deposit-taking Saccos in Kenya

H<sub>02</sub>: Investment opportunities do not significantly influence dividend payout in deposit-taking Saccos in Kenya

H<sub>O3</sub>: Sacco size does not significantly influence dividend payout in deposit-taking Saccos in Kenya H<sub>O4</sub>: Non-performing loans do not significantly influence dividend payout in deposit-taking Saccos in Kenya.

# 1.5 Significance of the Study

The results of this study were beneficial to various stakeholders in the Saccos business, key among them being:

### 1.5.1 Management of Deposit Taking Saccos

SACCOs manager in Kenya, but also microfinance institutions across the country, would have substantial research results, findings, and recommendations. They can appreciate their organizations' insights into their results, as demonstrated by the study's explicative variables. The results allow management to make important dividend payment decisions to boost profitability and maintain the competitive advantage of the company at Saccos.

### 1.5.2 Investors in Deposit Taking Saccos

The investors included in the study can have an understanding of the primary determinants affecting their firms' dividend payments and invest based on their observations. To build an atmosphere that enables citizens and small companies to benefit from Sacco's businesses in the

region, policy ties and proposals for policy-orienteering by the government and regulators at Saccos will be presented.

#### 1.5.3 Scholars and Researchers

Study findings and observations suggesting significant expertise and gaps in science would attract scientists and researchers. Extracts from the thesis are published in leading academic journals and are used by researchers and scholars in library systems of the University. Researchers and scholars may benefit from the analysis, as it adds to the existing information about the determination of dividends.

#### 1.6 Scope of the Study

#### 1.6.1 Data for the Study

The study aimed at establishing the explanatory variables affecting dividend payout in DT-Saccos in Kenya. Secondary data from financial reports filed by these Saccos at SASRA were utilized to collect data for the study.

The objectives of the study that point out the explanatory variables under study limited the scope of analysis (non-performing loans, profitability, asset size, investment opportunities). While many firm characteristics may influence dividend payout in DT-Saccos, the study focused on the characteristics that have been used by earlier scholars, are consistent with the available theories, and could be determined from the financial statements.

The period for undertaking the research study was from January 2021 to August 2021. This is following the acceptable guidelines of conducting a credible research study which postulates that a study should be conducted in its current period and should also go far back to be able to capture the context of the events that may have had an impact on the previous studies (Rahi, 2017).

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presented a look at the theoretical analysis and previous empirical reviews done on similar studies, and a conceptual framework that indicated how the selected independent variables of profitability, investment opportunities, Sacco size, non-performing loans, and inflation affected the dependent variable.

#### 2.2 Theoretical Framework

## 2.2.1 Dividend Relevancy Theory

The theory on dividend relevance was brought forward by Brennan (1971), where he posited that the financial decisions taken by a company are primarily divided into two key categories: Investment and financing decisions. Although investment decisions include the form and amount of assets the organization wants to hold, funding decisions are about attracting the required funds to finance these assets. Activities are funded by equity or debt. However, dividend decisions are called a funding decisions, since they affect the amount of profits allocated by a corporation to the shareholders and the reinvestment profits. The Corporate Dividend Policy refers to a judgment on the allocation or retention for potential reinvestments of a portion of the profit to shareholders. Dividend policy includes components, including the average income to be paid over time and the need for the company to sustain a consistent increase in dividends. This indicates that the decision by a financial institution on the amount and the time when dividends should be paid relies on the institution's dividend policy (Morni et al., 2019).

Determining the payments of dividends is not easy, since the willingness of the corporation to maintain profit and invest in productive investment opportunities is likely to affect the wealth of shareholders. Therefore in Islam (2019) conclude that the decisions on dividends and funding are interrelated and can not be isolated. For starters, it means fewer earnings for investment into successful ventures, if a business wishes to pay dividends. This move could push the company externally to raise funds. It is therefore not surprising that the policy on dividends is considered by most managers as a factor that would affect the wealth and corporate value of shareholders. Thus, the value of a company is influenced heavily by its dividend policy.

The theory of dividend pertinence is no new issue. The present value of the upcoming dividend and the share's sale price determines the share value. Dividends and earnings affect an action price (Budagaga, 2017). Supporting the argument, Lizardo (2020) who developed a model that focused on the allocation of dividends to corporate value noted that dividend policy is important element in assessing the company's worth.

With a high dividend payment and a low dividend yield, share rates will grow. An optimal dividend strategy can therefore be introduced to increase the company's value, although it is still unclear how to value maximization can be accomplished. The dividend importance theory applies to the current studies as it notes that investors consider dividend payments a significant factor in determining the reliability of a business' earnings. Thus, the organization is likely to perform well, regular and strong corporate dividend policies show. High dividend payments are also a measure of the company's overall financial health (Udobi & Iyiegbuniwe, 2018). The main aim of this study was to assess how benefit levels impact the Saccos' dividend payout policy in Kenya. In terms of income, the theory told the element. This hypothesis is important to the study as it may highlight the value of analyzing the company's profit levels before contemplating paying dividends.

#### 2.2.2 Dividend Preference Theory

According to the theory of the bird-in-the-hand by Miller and Modigliani, investors prefer dividends (secure) to the profits that they have retained. Dividends are preferred more by many investors as compared to capital gains as they consider dividends as some cash flow, compared with unpredictable capital gains for the future, if all the other variables are similar, as suggested by Brian (2016), and Booth and Zhou (2017). In the case of all studies that claim that dividends have a positive connection with the valuation of the company, the word 'bird in the hand' is the main phrase, which is why the valuation of the business is a symbol for dividend payments. The word "the bird in your hand is worth more than two in the bush," is based on the expression. The idea is articulated financially that investors are better positioned to invest in securities that pay current dividends than to invest in inventories that store profits in the future and pay dividends. You claim that when the payout ratio is increased, there is a decrease in the value of capital gains and dividends (Lucky & Onyinyechi, 2019).

If the dividend ratio rises, investors are worried that the potential capital profits of a corporation are decreased because the residual income of the company's reinvestment of the company is decreased. Whether or not dividends are higher, uncommented will remain and it is not relevant in this case. It is crucial that investors also feel they are so that their expectations for dividends are affected. In addition, the company earns a greater rating from rating agencies when making dividend payments than the company that pays no dividends. The company will be able to collect finance from capital markets more easily with a better rating as credit institutions willing to offer to lend to the company because the distribution of dividends shows the company can fulfill its obligations. In addition, in some situations, the firm will borrow and enjoy better facilities at discounted rates (Chelimo & Kiprop, 2017). Kent et al. (2013) argued that the valuation of the

company continues to increase for companies making dividend payments. The element of the organization size is told by theory. Theory assists the investigator in understanding how to calculate the amount of dividends paid out by the size of the company.

#### 2.2.3 Dividend Signaling Effect Theory

The works of Miller and Modigliani (1961) on dividend signalling theory posited that businesses that lower dividends and give investors the pessimistic message that future earnings will be lower than current earnings (Hussein et al., 2016). The theory of Signaling notes that managers have in their company knowledge that they can not, or do not plan to pass on better expectations of potential earnings to shareholders, for example. The most cost-efficient way of reducing investor confusion regarding its value is to accept corporate dividends as management. Choi and Doowon (2014) indicate the lack of knowledge on the performance of businesses outside investors, so a dividend is a symbol of the anticipated cash flows. Dividends thus serve as a guarantee that future cash flows of companies will be positive.

The idea is that certain signs will indicate whether potential cash flows should be expected to increase or decrease. The explanation is that companies that rely on high future cash flows would prefer to provide the investors with this knowledge as it will most probably increase the company's stock value. However, at the same time, each company wants to raise its market value so the signs are that bad companies can not emulate them (Godager & Lia, 2019).

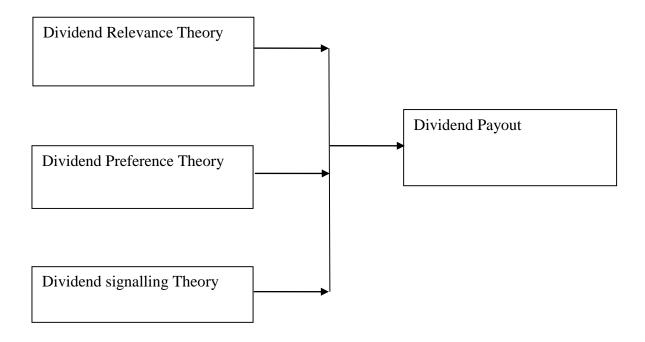
The reason as to why some businesses insist on paying dividends is best explained by signaling. In most cases the value of capital gains is more than that of dividends to shareholders because of the higher tax rates; dividends ads also can be used to demonstrate the trust of management in the company's anticipated prospects. Dividend research done by Brian (2016) shows that, in cases of a higher asymmetric level of information, the effect of signaling through dividend payments is

greater. They demonstrate that the degree of asymmetric information is positively connected by signaling by dividends.

However, the reason that the dividends aren't effective at describing potential earnings is found by Laurence and Jun (2015). If the impact of asymmetric dividend information is high, smaller companies that pay dividends over the larger ones should be reflected. Often, managers oppose a cut in dividend payments based on their view of potential profits on dividend announcements. Therefore, the investors do not earn dividend omissions well. Investors see dividend raises as a positive indicator and reductions as negatives. In addition, the results of dividend-signaling are much stronger when dividend taxes are high (Godager & Lia, 2019). The dividend policy selection determines whether the dividend signal gives investors information. Managers may create a policy to pay dividends as a fixed percentage of profits, which removes the signaling effect. As a symbol of the potential prospects of the company, investors can no longer count on improvements in dividends, as managers no longer adjust their dividends to reflect their expectations of earnings. The theory tells the liquidity variable of the company.

Figure 2.1:

Theoretical Framework



Surce: Author (2021)

## 2.3 Empirical Review

# 2.3.1 Profitability

Profitability was considered by previous researchers as one of the key factors in the dividend payment scheme. There are mixed reports on performance relationships and dividend payments. Hussein et al. (2016) maintained, as per its pecking order theory, that profitability is strongly negative, with dividend payments substantially associated, suggesting that businesses invest in their properties instead of paying dividends to shareholders. The higher the equity return the greater the benefit retained the lower the dividend paymentDoowon (2014). The more the retained income is paid. There are plenty, unlike this.

Febriela and Sylvia (2014) have claimed, if big and profitable, that businesses are more likely to increase their dividends. Their research has shown that the dividend payout ratio is positively

impacted by profitability. Profitable businesses that have more stable net profits have an increase in their cash flows and will therefore pay more dividends. The company earnings ratio in GCC countries tends to be an exceptionally powerful and statistically meaningful determinant of the payout ratio of dividends in Vivek and Xiaorong (2012). This variable's slope coefficient was 2.89, meaning that a 1-unit rise in the profitability of a firm would raise the payout ratio to 2,89 units. Moreover, in terms of business profitability, the elasticity of the dividend payout ratio showed a 10% rise in company profitability contributing to an improvement of about 5.8% in the payout ratio for dividends. This follows on from the finding that businesses usually pay a higher dividend ratio when company profitability increases.

Hussein et al. (2016) analyzed the profitability of the ROE companies between 2005 and 2009, which is negative with respect to dividend payments, which shows that the rentability of more profitable firms is lower than that of the ROE firms. ROA and EPS calculate profitability is negatively related to the ratio of dividend payments but not statistically important. The results showed that the earnings per share were significant and had a favorable relation to dividends per share.

Febriela and Sylvia (2014) researched Saudi Arabia stock exchange firms. Thus, dividends per share rise as businesses increase their profitability. An analysis of industrial companies listed on the Amman Stock Exchange showed that profitability indicated by profit by share (EPS) has the greatest impact on dividends and it has been a sign for Hussein et al.(2016) in their research on the factors that influence the decisions on the dividend policy adopted by a company.

The findings of John and Greg's research (2016) showed that EPS had a detrimental impact on the payment strategy of the dividend. The results of the study were from Bangladesh. While EPS can also be in the comparison of stock prices, it has not shown how the stock is priced on the market.

The fundamental analysis then uses the P / E ratio to determine the price the market will pay for the profits of a business. The company's EPS was believed that the lower payout ratio would be high and that it would have a negative sign based on the forecast. As such, a high payout ratio indicates that the company is less confident that it can find other ways to put the money earned to better use.

Kapoor et al. (2010) researched the usage of the EBIT separated by Total Assets for benefit calculation. Another tool used for calculating benefits is the return on equity (ROE) (Al-Shubiri, 2011). Al-Shubiri (2011) added that ROE is one of the best ways to justify a company's earnings as it shows that the company can raise cash internally. Patra (2019) thought the payment pattern of a business affected the profits of the current year. The payout rate of dividends is dependent on a company's projected future earnings. Marisetty (2020) noted that benefit after tax was the principal factor in paying for the dividend, stressed that profitability was important in dividend payment and suggested a higher chance of paying dividends for more lucrative companies and highly liquid companies.

Puspitaningtyas (2019 analyzed Kuala Lumpur financial markets and established the moving dividends among the major market players. They found that the company's dividend decision is primarily connected to income earned during the current financial year and to the dividends given in previous periods. In addition, they concluded that companies have potential long-term forecasts of dividends that depend significantly on the capacity of the organization to forecast their revenues. Swarnalatha and Babu (2017) examined the shifts and transition in the issuance of dividends for different companies from emerging and third world nations. They correlate that companies in developed and third countries have shown dividend behaviors similar to companies' actions in advanced countries. Saleh (2019) led an inquiry into the conduct and determinants of dividends in

financial institutions listed in Indian securities trading firms. They found that earnings in previous periods, projected earnings in the current period, and estimated earnings for future periods had a beneficial influence in deciding the dividend strategy to be used in the organization's management process. More data showed that there was a major negative association between cash balances and potential cash flows compared with dividend payments. There were no relevant positive impacts on company emissions of dividends on macroeconomic conditions, such as taxes, inflation rates, tax regime, and the share prices of listed securities.

Tahir et al. (2020), which were researched over 10 years beginning in 1997 to 2006, investigated a correlation between the growth in Sri Lanka's banks and profitability. They noted that, besides operating profit, revenues in companies are linked positively to the profitability ratios. Equity returns (ROE) and the number of bank depositors are also associated favorably with profitability ratios. Kusuma et al. (2018) found that dividend policy, in particular, profitable ratios calculated by the return on the property of a company, affects the efficiency of the company. This clearly shows that a dividend policy continues to affect profitability when a business has a dividend policy. The dividend fluctuations in Manager et al. (2008) were of the view that positive or negative changes in the company's the profit/share income (EPS) are in combination with the positive or negative changes predicted.

Dividend rises are directly linked to projected income growth in each of the following 2 years after the dividend adjustment. Growing dividend payments are a sign of management trust in future profits which are large enough to sustain higher dividend payments. Anwer et al. (2020) determined how profits related to the ratio of dividend payout, which is consistent with the assumption that dividend-paying businesses are more optimistic that their high payments can be sustained.

Adam et al. (2020) found that dividend payment decisions by Ghana Stock exchange companies have a huge effect on growth, cash flow, profitability, and investment opportunities for firms. For a long time, profits have been known as the primary determinant of the company's dividend payment capacity. Kim and GU (2009) noted the key factors in identifying dividend payments in current year and past year earnings. The dividends issuers have a linear relationship to the revenues generated by a firm.

Iskandar (2017) carried out a definitive and thorough dividend investigation into North America's banking and manufacturing firms. The findings of their analysis indicate that the dividend payment in both financial and manufacturing sectors has been influenced by market growth, capital structures, and potential incomes. Government shares in companies, age, and debt have major effects on dividend distribution in non-financial and industrial sectors. Evans (2019) has to some extent identified that shareholders' costs for monitoring and supervising management output and earnings growth appear to play a less significant role in distributing dividends from organizations, across industries, in developed countries.

Innocent et al. (2020) evaluated the factors that affect the payout ratio of the dividend. The results showed that stable earnings and disseminating information to shareholders over considerable periods were factors that affected dividends, while investment and growth opportunities, external funding borrowing, and systemic risk had a limited impact on dividend payments. do Carmo et al. (2019) studied the effect on dividend payments of very little investment opportunity and high profitability and found that dividends will most likely be paid when profits are so high with little investment opportunities. Jaar et al. (2018) researched through logit regression the effect on the dividend payout ratio of investment potential, profitability, duration, and life cycle and agency

problems. Their study results found that the dividend payout ratio has a beneficial impact on life cycles, the reduction of companies, firm scale, profitability, and growth opportunities.

# 2.2.2 Investment Opportunities

Nan et al. (2017) argue that the position on the liquidity of the payments for dividends is a significant determinant. The liquidity of any given company often determines its ability to pay dividends. Payment of dividend is more reliant on cash flows that reflect the dividend payment capacity of the company. Low liquidity means a lower dividend because of the cash shortage. The importance of liquidity as a key consideration of the dividend policies is not endorsed by Olarewaju et al. (2019) in their analysis by UAE companies and finds that this decision to pay the dividends is negligible.

In its study of dynamics and dividend policy determinants for Ellahie and Kaplan (2021)demonstrate the exchange between Karachi and non-financial firms in the stock. The market liquidity of companies has a positive effect, indicating that companies paying more dividends with improved market liquidity. The scale is very poor and substantial and shows that big corporations do not pay dividends to the shareholder, but invest in their properties.

Liquidity allows businesses, by maintaining a mix of liquid assets, to survive harsh economic times. Working capital management thus allows seniors to maintain a guaranteed degree of liquidity and investment channels in which idle resources can be invested temporarily. Kim and Gu (2009) have shown that the ongoing viability of the undertaking does not depend on its asset's cash valuation, but on its asset's operating cash flows and should therefore be given sufficient considerations to ensure that the present maturity of its obligations is met promptly.

Liquidity is considered a central factor in the allocation and preparation of dividends. Financially and in particular for this study, it can be calculated by dividing existing assets separated by local

banks' current liabilities (Silva, 2019). Comprises that have better access to capital markets are more likely than companies restricted to accessing capital to offer dividends to their shareholders (Hos, 2006). Nugraha et al. (2020) demonstrated in discussing cash flow management that companies with consistency in cash flows have a better chance of dividends for both ordinary and preferential shareholders, which is a return to their investment. Investors not keen to take chances are primarily interested in dividend distributions.

The allocation of dividends depends not just on a company's performance but also on the working capital that remains after payment for current obligations (Evans, 2019). Jaara et al. (2018) indicated that when the cash flow is more than the cash dividend, the Company will have the remaining cash, and when the cash dividend is higher than the cash flow, then it means that the Company requires funding to fulfill the cash dividend requirement. Drechsler et al. (2018) has shown that an organization's cash flows directly affect the dividend distribution of many organizations of different regions.

Sondakh (2019) submitted that companies that pay dividends based on generated cash flows, which in part implies a company's ability to offer dividends. They argue, however, that earnings are no reasonable measures of a company's potential to dividend because they fall under accounting standards, such as depreciation, even products that do not require cash movement. Chen et al. (2020) states that dividends are paid after a company considers its profitability and must dissipate the illusion that large profits can be charged for high dividends. He claimed that profit and cash are not equal and therefore, not only the operating income but its capacity to pay dividends should be expressed in the sum of dividends that are paid.

Harlina and Khoiruddin (2018) pointed out that it is necessary for financial and investment managers to bear in mind the cash flow situation, as it is closely related to the management of a

company in an enterprise. Ellahie and Kaplan (2021) shown that companies paid out about 40 percent of their income as dividends, on average, in their study of the dividend payout ratio determinants for companies in terms of market capitalization listed on the Malaysian market in securities, and has observed that the relationship between the liquidity and the payout of dividends is powerful.

The treatment of liquidity includes reducing the possibility of default on bonds and balance between liabilities and short-term assets (Jovković et al., 2021). Investors use liquidity management positions to assess the efficiency of a firm before they channel their assets. They are used to show whether a corporation will satisfy its commitments in the short term. Otherwise, the organization will be forced to find funds elsewhere to continue to operate.

Companies can pay dividends only if a company can produce cash inflows from its operation. Kenya's banking sector is not confined geographically but goes beyond other countries, so banks are required to pay dividends as a sign of liquidity to their investors. Investments with higher liquidity usually trade premiums in comparison with low liquidity investments (Murimi & Mungai, 2021). Vasiljeva (2017) praised in particular the financial sector for the economy of the United Arab Emirates, which was able to face the challenges of the financial crash across different continents. The crisis has prompted financial institutions to collect capital to counter liquidity crises. Until choosing alternative means, most corporations increased their equity through their shareholders.

Jaara et al. (2018), concluded that shifts in cash flows of organizations had a significant influence on distributing dividends, in researching the distribution of dividends and issuance of telecommunications enterprises in the Taiwanese securities market between 2005 and 2010. They also pointed out that firms producing higher sales that resulted in positive profits would declare

their investors' dividends. Gaponenko et al. (2018) found the potential for paying dividends to be positively correlated with liquidity. The study indicated that a company that pays dividends often has a liquid market. In addition, companies that have greater shareholders' control have a stronger relationship between dividends and liquidity. John and Greg (2010) researched the dividend policy of the Indian Paper industry where the findings of this study indicated that dividend payout was negatively affected by liquidity since cash on hand decreases when dividends are paid out to investors which are mainly done through cash.

#### 2.2.3 Sacco Size

The size of a company was seen as a factor in deciding a company's dividend policy. The findings showing the negative and important relationship between pay-out dividends and size are analyzed by Biswajit and Kailash (2015). This finding suggests that large corporations would tend to pay lesser dividends; thus, we can not dismiss the zero-size hypothesis that Vivek and Xiaorong (2012) conducted a study focusing on companies listed on the Amman Stock Exchange for the 2005-2009 period have a negative relationship with dividend payouts. The findings of this study indicated that the size of a firm positively influences decisions on dividend payment. As such, diversification is more practiced in Jordan by large companies as compared to small ones and therefore less likely to be vulnerable to financial problems, and the likelihood of these firms to pay dividends to their shareholders' increases. The transaction cost principle of the dividend strategy supports this relationship.

Pinto and Rastogi (2019) examined the factors that impact the distribution of dividends in financial institutions in the financial market of Australia. Their findings showed that a firm's capital structure, expansion opportunities, and earnings influenced dividend payment directly whereas debt levels and dividend payment had an inverse relationship. Boloupremo and Ogege (2018) in

their comprehensive study on Savings and Credit Cooperative institutions pointed out that levels of capital structure, shareholding by the government, and net earnings of a company had a direct impact on the issuance of dividends but parameters of debt levels hurt dividends distributed to shareholders. They argued that several organizations pay dividends to send a signal to the market that the companies are performing well and investors' return is guaranteed.

Bui and Nguyen (2021) investigated the factors impacting on dividend distribution of the manufacturing sector in India between the periods 2000 and 2005. During his research, he discovered that the distribution of dividends was directly impacted by the composition of shareholders' funds, dividends that were issued in the prior year, percentage of retained earnings, earnings yield, and changes in revenue collection by the firm. On the other hand, cash flow hurt issuance of dividend in that the more the cash outflows the lesser funds the company have to issue dividends. Evans (2019) in their research concentrated on banks in the United States between the years 1990 and 1995. It was revealed that the only variable that influenced the ratio of dividend payout significantly was the size of the banks. They were involved in further research and emphasized that the majority of the banks sampled paid dividends as a way of mitigating any conflict that may arise between the investors and management.

In addition, Nopphon (2013) analyzed the strategy of dividends between the Greek companies not only in terms of net distributed profits but also concerning the changes in the dividend and size of a company. Nopphon (2013) suggests in his analysis that large businesses have a greater chance of maturity, hence easier access to capital markets and more dividends. For years 2005 to 2009, Biswajit and Kailash (2015), which studied the size of the business, concluded that the company's dividend payment in the UAE is substantially and positively linked. As with previous reports, this study suggests that bigger corporations pay more dividends than smaller companies. Capital

markets are easily accessed by large corporations and therefore they do not rely on internal funds more often, which would result in greater dividend payment capabilities.

Richard et al. (2014) indicated that among the factors that influence the dividend policy of a firm, the size of the firm is a statistically important factor. This result indicated that a positive correlation between the ratio of dividend payout and the size of the firm. The value of this coefficient was very poor. It is visible. The explanation is that the units of the variable of company size in US \$1000 are high. This result, however, shows that the dividend ratio with the firm size increases. Nopphon (2013) has researched dividend payout factors for Karachi Stock Exchange's coted nonfinancial firms. From the regression results, it was shown that the scale of the study firm has had a substantial effect on its dividend payment from the 6 explanatory variables. The likelihood was at the likelihood stage of 5 percent. Thus the scale of the dividend payout in Pakistan plays a major role. T-Statistics also had a value more than the t-statistics tabled which strengthened the likelihood significance amount. Thus, if the size of the company increases by 1%, up to approximately 5% of the dividend payments will be calculated. The size was found to be optimistic concerning the dependent dividend payment variable. The results show that payment and size are negatively correlated and important. The result shows that larger companies tend to pay lower dividends; Biswajit and Kailash (2015) are showing Karachi's stock market for non-financial firms in their research on the factors that determine the dividend policy as well as the dynamics of the dividend policy in Pakistan. The results show that the relationship between payment and size is negative and important. As a consequence, big corporations tend to pay lesser dividends.

#### 2.2.4 Non-Performing Loans

The research on the effect of the leverage on dividend policy was conducted on the Tehran Stock Exchange (Nurchaqiqi & Suryarini, 2018). The study aimed to analyze how financial leverage

influenced the dividend policy focusing on 33 food companies listed in Tehran's Stocks with 242 statistics 'from 2003 to 2010.'The study took a descriptive approach for analysis. The results showed that companies in the food industry had a favorable influence on dividend yield and income shift variables, but the debt rate does not have a major dividend per share relationship. The relationship is only optimistic if the debt rate is smaller than the return on dividends. When the debt rate exceeds dividend return, the ratio is negative. The study suggested that managers would give shareholders a constructive and efficient solution by decreasing the time of debt payment and checking this case by properly handling the receipt accounts and executing current debt well. Managers will have the potential to provide shareholders with a sustainable and stable return by reducing their leverage and the dividend policy would be well handled.

Pattiruhu (2020) noted a close connection of the dividend payment decision to the ratio of the total controlling capital, the company's size, its profitability, its rate of growth, cash in hand and leverage, and the background on payment of dividends. The dividend payment provides an occult ability to handle the accumulation of the profits; it increases the leverage over the retained income by the money managers, which can be used for better investments but can also be disbursed without careful supervision. The leverage (Lev) also has an impact on companies' dividend behavior, given that the leverage is high and thus investment in the business in the cash flow modes is comparatively riskier. Khuzaini et al. (2017) reported negative effects of leverage on dividend payments and found that certain businesses that have higher leverage in the past usually pay lower dividends to escape the higher costs of growing their external resources.

Hongli et al. (2019) sought to determine the effects on the management of Stock market corporations of the incremental increase in financial leverage and shows no significant relationship between high financial leverage benefit value management and companies involved in the

increased financial leverage. In general, the financial flexibility of companies' lists in Stock is not an important factor in dividends which is not consistent with the current research findings. In addition, Motavassel et al. (2012) submitted that an ROE and ROA rate is efficient for Stock Cost adjustments, but it has no significant financial contribution. They also studied that the effects of the impact of the financial relationship vary with other industries at the level of industrial separation.

The research on the efficiency of ETFs of dividends has been carried out by Chen and Kien (2019). The primary goal of the analysis was to identify the spillages and leverage impact of high-yield and low-yield ETF returns and return volatility on market indexes and vice versa. During the trial, the EFTs and their stock index were priced regularly from the Yahoo Finance website. The results of the research showed that the return spillover effect was more observed in a low-income dividend group, with ETFs more prevalent in a high-income dividend group. For the leverage effect, the negatively asymmetric volatility effect was more common when the positively asymmetric effect was contrasted with both ETFs and the market index. The study also revealed that, as a key financial decision, the dividend payment policy will affect the stakeholder interests and the potential growth of an organization. It has been concluded that, for ETFs with low yield dividends, the spillover effect of returns is more prevalent, whereas in ETFs with high yield dividends the dominance of the return volatility spillover effect was observed.

Shafana and Safeena (2019) looked at Pakistani manufacturing companies' imperial influence in their dividend payment actions. The study focused on how Pakistani manufacturing companies' dividend payment patterns was influenced by leverage. Sample samples were taken from 44 firms from five separate industries with a daily history of dividend payment. Data for these undertakings was used in the analysis from 2006 to 2011. The results showed that leverage has a major negative

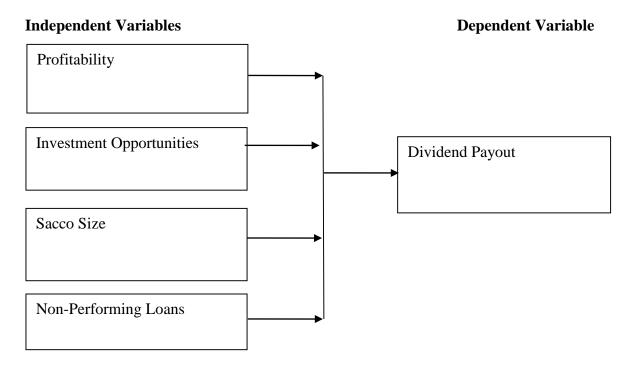
effect on the sampling companies' dividend payment trend. The dummy variable employed for the identification of the industry-specific leverage effect on dividend payments indicates that the influence of dividend leverage in sugar and textiles is different from that of other sectors. The study further showed that firm value depends solely on the profitability of its assets and the associated risk. Managers recognize several factors that affect the corporate dividends policy during the marking of the dividend policy. The key factor of all is leverage. The study concluded that the leverage amount adversely impacts the pattern of payment in sampled businesses. In the process of determining whether to employ the debt in equity structures and formulating a dividend strategy, it was also recommended that the management should decide diligently.

### 2.4 Conceptual Framework

Conceptual framework in figure 2.2 is a model showing how the dependent variable is related to the independent variables. The dividend payout policy in this study is the dependent variable, while the independent variables include profitability, investment opportunities, SACCO size, and non-performing loans.

Figure 2.2:

Conceptual Framework



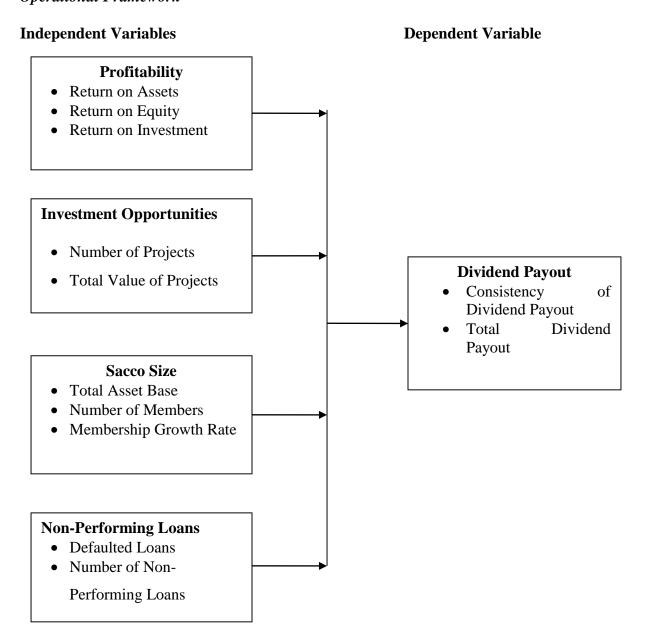
Source: Pinto and Rastogi (2019)

# 2.5 Operational Framework

Figure 2.2 presented the operationalization of variables that indicated how the different variables of the study were measured through their corresponding indicators or constructs.

Figure 2.3:

Operational Framework



Source: Pinto and Rastogi (2019)

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter discussed how data is collected and evaluated to meet the goals of this study and integrates the research process. It identified the aspects of research design, target population, techniques for sampling, and testing instruments and methodologies for data analysis. The research methodologies are further advanced by McNichols and Stubben (2018) to explain the methods and techniques applied to the research analysis.

### 3.2 Research Design

This study adopted a descriptive research design. The descriptive survey includes clearly described problems and specific goals and questions, and the generalization, concepts, or hypotheses of universal validity. According to Tobi and Kampen (2018), the approach of descriptive surveys contains questions on a specific topic to a broad population. Information from a sample population is gathered at a certain point in time as opposed to the whole population. This design helps the investigator to build opinions and knowledge about dividend policy payment financial determinants among business Saccos in Kenya.

## 3.3 Target Population

The population refers to all the observation units in any area of investigation, also called the universe (Pradhan et al., 2021). The population is the aggregate total or the entirety of those persons who comply with or agree to the same conditions (Rahi, 2017). The research focused primarily on the determinants of Saccos deposit dividend payments. The Sacco category may be defined as two-tiered, taking into account the number of financial services available to the members and the regulatory framework, as laid down in the SASRA by December 2019.

Sacos (Saccos), typically referred to as non-deposit companies, offers a restricted selection of savings and credit products compared to Saccos, which are still licensed and regulated by the state under the Cooperative Societies Act (CAP 490). The conventional Savings and credit cooperative companies (Saccos). Deposits and payment services are among the basic baking services offered by DT-Saccos. In addition, they offer services such as FOSA as well as basic saving and credit products, and is approved and regulated according to the 2008 Sacco Societies Act. According to SASRA (2019), there are 166 approved deposits are taking Sacco which was considered as the target population.

### 3.4 Sample Size and sampling Procedure

A sample shares similar characteristics with the entire population, According to Sim et al. (2018), it is important to consider a representative sample to obtained non-biased results. Therefore, the study used the Taro Yamane formula for probabilistic sampling to obtain a representative sample. The formula is as follows:  $n=N/[1+N(\epsilon^2)]$ . Where N is the population targeted by this study,  $\epsilon$  is the margin of error and n is the size of the sample that was considered in the study at 10%. Therefore, execution of the formula gave the following results:

n=166/ [1+166(0.1\*0.1)] =166/2.66=62.40 which is 62 deposits taking Sacco. The SACCOs were further identified through a random number generator using SPSS, to identify the actual 62 SACCOs in Kenya (see the list in appendices V).

#### 3.5 Data Collection Procedures and Instruments

#### 3.5.1 Data Collection Procedures

The research involved the compilation of secondary data from the DT-Saccos financial statements submitted to the business registrar. The SASRA regulatory reports and the Annual Financial Performance Statements for the DT-Saccos were used to provide more secondary data on the

dependent variables. Moyo (2017) notes that secondary research data is the type of data obtained from data retained by government bodies or data from studies already submitted by other scholars. Moyo (2017) argued that secondary data are information collected and found in the ethnographic, census, and comparative researchers and histories. The idea behind relying on the secondary data is because it being cost-effective and the researcher with timely finish the research.

#### 3.5.2 Data Collection Instruments

Secondary data was obtained using a data collection sheet/form on the value of the total sales, value of the net asset, value of the total pre-tax benefit, value of the total Member savings/deposits of the sampled Saccos. As reported to the regulatory authority, SASRA, the secondary data was obtained through internal Sacco's financial documents and the annual report.

Bammann et al. (2019) affirm that secondary research may also use the data from a previous study to test new theories or address questions of research and explore new connections. Secondary data is used strategically to develop interpretation skills, verbal coherence, and realistic validity of the findings of the analysis.

### 3.6 Pre-Test Study

Bammann et al. (2019) indicate that a pilot study is a pre-test or a small-scale version test that is made in the preparation for a major investigation. Pre-test allows a researcher to remove any ambiguities in the questions asked by using a questionnaire. Sumadi and Ismanto (2021) advise the test sample size to be used that the sample size is appropriate for the taking and use of test analysis for research purposes to be arrived at using the following formula margin of error, % (N-n), where N is the entire population, n is the sample size. Therefore pretest sample size was 5% (166-62) =5 firms.

#### 3.6.1 Validity Tests

validity test is used to determine the degree to which data analysis findings display the observed phenomenon. The question is whether the data collected in the analysis correctly reflects the variables of the sample. Construction validity is the degree of practical and correct reflection or theoretical representation of data from an instrument (Invernizzi et al., 2020). The validity of the study was improved by discussing with DT-Sacco management the secondary data before disseminating them.

#### 3.6.2 Reliability Tests

According to Bull et al. (2019), reliability mainly relates to how often identical outcomes could be obtained by the Research Instrument conducted more than once. To test reliability, the analysis uses the Cronbach Alpha Coefficient internal consistency technology. The internal accuracy of the data can be calculated by correlating the findings obtained from the same analysis instrument with the values obtained at other times. According to the rule used in reliability tests, an absolute value that is above 0.7 is appropriate for the data under review.

### 3.7 Data Analysis and Presentation

Data analysis is the use of judgment to interpret the collected data to identify clear trends and summarize relevant data found during the investigation. Usually, a large volume of data obtained in the analysis and questions and theories of research cannot be addressed by an easy survey of numerical information and thus data must be processed and evaluated in an organized and consistent manner (Polit & Beck, 2003).

Statistical methods were used to evaluate quantitative data. Statistical analytics cover a wide variety of approaches, from basic methods that we routinely use, such as calculating an average to complicated and advanced methods. Polit and Beck (2003) state, that, while some analytical

methods are formidable, it is reasonably easy to understand the basic principles of statistical

research, and computers have removed the need to get stuck with complex mathematical

procedures.

The researcher determined the statistical value of the estimated correlations, such as the interval

of trust, and that the true relationship is very similar to the estimated. Regression analysis also is

important to measure the effects on a single dependent variable of multiple combined variables. In

addition, multiple regressions are also necessary to minimize the risk of omitted variables bias in

simple regression, even if the researcher seeks to determine the impact of a single independent

variable. A multiple regression study requires a complex combination in a single regression

equation of several explanatory variables. When using multiple regression models for analysis, one

can establish how multiple explanatory variables affect the dependent measure (Greco et al., 2018).

To determine the significance of the study's hypotheses, the model of multiple regression of the

following form was used:

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

Where:  $\beta 0$ ,  $\beta 1$ ,  $\beta 2$ ,  $\beta 3$ ,  $\beta 4$ , and  $\beta 5$  are coefficients;

**Y** is the Dividend Payout

**X1** is Profitability;

**X2** is Investment Opportunities;

**X3** is Sacco Size;

**X4** is Non-performing Loans;

 $\varepsilon$  represents the error term

39

### 3.8 Ethical considerations

In carrying out the study the researcher made sure that research ethical practices were followed to ensure that no psychological or physical harm is caused to the respondent. The researcher presented the NACOSTI license and research permit to the respondents while collecting secondary data, once consent was granted the researcher went ahead to obtain the data. Besides the researcher assured the respondents and institutions heads that the data was to be used solely for academic purposes, therefore guaranteeing the respondents' confidentiality with the way data was handled.

#### **CHAPTER FOUR**

#### RESULTS AND DISCUSSIONS

#### 4.1 Introduction

Chapter four of the study presents data on the findings guided by the four research objectives. The study presents descriptive statistics as well as the hypothesis test results. The presented results are backed up with discussions from the literature reviewed to show where the results converge or diverge with other scholars and theories.

#### **4.1.1 Response Rate**

The study sought to collect data from a sample of 62 deposit-taking SACCOs in Kenya. The study was able to collect data that could be analyzed from 50 SACCOs which represented an 80.6% response rate of the remaining 19.4% the data obtained was missing a lot of crucial information and therefore not found fit for further analysis. The findings are in agreement with Fowler (2014), who noted that a response rate of above 70% is excellent for further analysis.

Table 4.1:

Response Rate

Response	Frequency	Percent (%)
Responded	50	80.6
No response	12	19.4
Total	62	100.0

Source: Research Data (2021)

### **4.1.2** Reliability and Validity Test

### 4.1.2.1 Reliability Tests

Reliability tests were conducted through the Cronbach alpha test. The set criteria were to accept indicators whose Cronbach value was over 0.7. The results of the study are presented in table 4.2.

Table 4.2:

Reliable Tests

Variable	Cronbach alpha value	Number of items
Profitability	0.873	4
Investment opportunities	0.789	2
Sacco size	0.815	3
Nonperforming loans	0.787	2
Dividend payout	0.771	1

Source: Research Data (2021)

Table 4.2 revealed that Cronbach value associated with profitability was 0.873, which was adequate for further study. An example of an indicator sought was 'return on asset' or 'return on equity'. Investment opportunities was also associated with a Cronbach alpha value of 0.789, which was adequate for further study, an example of indicator sought was the investment base and the number of projects. The study also sought to establish the Cronbach value associated with noperforming loan indicators, the study revealed that Sacco size was associated with a Cronbach value of SACCOs size was 0.815, non-performing loans revealed a Cronbach value of 0.787, which revealed that the indicators were adequate for further studies. Dividend payout revealed a Cronbach value of 0.771 which revealed that the indicators associated with dividend payout was adequate for further studies, an example of indicator values on dividend payout was the amount of dividend paid. Similarly, Jensen and Johnson (2014), revealed that reliability tests can be used in testing the internal consistency of a research instrument.

## 4.1.2.2 Validity Tests

Validity tests were conducted to ascertain construct validity through Kaiser-Meyer-Olkin, KMO test, and Bartlett's test of sphericity. The data under review is said to be suitable for regression analysis if the outcome of the test is 0.5 or higher. In addition, these tests help determine whether

the population from which samples were obtained has equal variances. The test results are as shown in Table 4.3.

Table 4.3:

Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

Factors	KMO	Bartlett's Tes	st of Sp	hericity	Determinant
	Test	Approx.	df	Sig.	_
		Chi-Square			
Profitability	0.802	510.767	49	0.001	0.034
Investment Opportunities	0.759	382.052	49	0.000	0.186
Sacco Size	0.825	622.734	49	0.002	0.006
Non-Performing Loans	0.853	848.875	49	0.010	0.242
Dividend payout in DT-Saccos	0.781	656.712	49	0.006	0.236

Source: Research Data (2021)

Table 4.3 shows that the sampling adequacy was acceptable after obtaining significances of Bartlett's test which were less than 0.05 (p<0.1). This further indicates that the sample is factorable. In addition, a value greater than 0.5 was obtained from the KMO test of all the variables of the study (Profitability (0.802), Investment Opportunities (0.759), Sacco Size (0.825), Non-Performing Loans (0.853), and dividend payout in DT-Saccos (0.781)). This implies that the data was suitable for regression analysis.

# **4.2 Descriptive Statistics**

Descriptive statistics were carried out on the study variables that included profitability, investment opportunities, Sacco size, non-performing loans as well as dividend payout. Among the descriptive statistics conducted in the study included percentages, mean, frequencies, and standard deviation.

### **4.2.1 Descriptive Statistics for Profitability**

This section of the study sought to determine the profitability of the Saccos in terms of the profitability measures such as the Return on Assets (ROA) in percentage, Return on Equity (ROE)

in percentage, Return on Investments (ROI) in percentage as well as the net profit in millions. The results of the study are indicated in the following sub-headings.

### 4.2.1.1 Return on Assets in percentage

This part of the study sought to establish how profitable the Saccos are relative to their total assets. As such, the Return on Assets, ROA is given as; ROA = Net Income/Total Asset. The results of the study are indicated in Table 4.4 below;

Table 4.4:

Return on Assets (ROA) in Percentage

ROA %	Frequency	Percent
2.00-4.00	3	6.0
4.01-6.00	16	32.0
6.01-8.00	25	50.0
8.01-10.00	5	10.0
10.01-12.00	1	2.0
Total	50	100.0

Source: Research Data (2021)

Table 4.4 above indicated that the majority of the Saccos had their Return on Assets between 6.01 and 8.00 as shown by 50.0%, this was followed by Saccos whose Return on Assets ranged between 4.01 and 6.00 as shown by 32%, this was followed by Saccos whose Return on Assets ranged between 8.01 and 10.00 as shown by 10%, this was followed by Saccos whose Return on Assets ranged between 2.00 and 4.00 as shown by 6%. Only 2% of the Saccos had their Return on Assets ranging from 10.01 to 12.00. In addition, the majority of the Saccos had their average Return on Assets ranging between 6.00 and 7.00 as shown by a mean of 6.37 indicating that they were profitable. The findings are in agreement with Hargrave (2021), who argued that ROAs above 5% is considered good while a ROA above 20% is considered excellent. The findings are also in agreement with a study carried out by Husna and Satria (2019) on how the value of a firm is affected by the return on assets, debt ratio, and current ratio indicated that the return on assets

influences the current ratio, the dividend payout ratio as well as the debt to asset ratio. However, the study indicated that the return on assets had a positive effect on the firm's value.

## 4.2.1.2 Return on Equity in percentage

This part of the study sought to establish how profitable the Saccos are relative to their total equity. As such, the Return on Equity, ROE is given as; ROE = Net Income/ Capital. The results of the study are indicated in Table 4.5 below.

Table 4.5:

Return on Equity (ROE) in Percentage

ROE	Frequency	Percent
3.00-6.00	6	12.0
6.01-9.00	28	56.0
9.01-12.00	15	30.0
12.01-15.00	1	2.0
Total	50	100.0

Source: Research Data (2021)

Table 4.5 above indicated that the majority of the Saccos had their Return on Equity ranging between 6.01 and 9.00 as shown by 56%, this was followed by Saccos who had their Return on Equity ranging between 9.01 and 12.00 as shown by 30%, this was followed by Saccos who had their Return on Equity ranging between 3.00 and 6.00 as shown by 12%. Only 2% of the Saccos had their Return on Assets ranging from 12.01 to 15.00. The table indicated that the minimum ROE was 3.51 while the maximum was 13.78. In addition, the majority of the Saccos had an average ROE ranging between 8.00 and 9.00 as shown by a mean of 8.28. According to Fernando (2021), Saccos should strive to maintain an average or slightly above average ROE using the ROE of their peer group as the benchmark. On the other hand, having an extremely high ROE (above 20%) may be attributed to risk from having an income that is more than the equity. The findings are in agreement with Kazmierska-Jozwiak (2015) who carried out a study on the determinants of

the dividend payout if financial companies and indicated that the dividend payout ratio of a financial company is negatively influenced by its ROE in that the profitable companies do not pay dividends to their shareholders more often given that they tend to keep their profits as sources of capital for expansion. However, to the shareholders and investors, a higher ROE implies that they should expect bigger dividend payouts as well as bigger returns on their investments.

#### 4.2.1.3 Return on Investment in percentage

This part of the study sought to establish the profitability or the efficiency of the Saccos' investments. As such, the Return on Investment, ROI is given as; ROI = Net Income /Total Investment or Cost of Production. The results of the study are indicated in Table 4.6 below;

Table 4.6:

Return on Investment (ROI) in Percentage

ROI category (%)	Frequency	Percent
6.00-12.00	6	12.0
12.01-18.00	33	66.0
18.01-24.00	10	20.0
24.01-30.00	1	2.0
Total	50	100.0

Source: Research Data (2021)

Table 4.6 above indicated that the majority of the Sacco had their return on investment ranging between 12.01 and 18.00 as shown by 66%, this was followed by Saccos who had their return on assets ranging between 18.01 and 24.00 as shown by 20%, this was followed by Saccos who had their return on assets ranging between 6.00 and 12.00 as shown by 12%. Only 2% of the Saccos had their return on investment ranging from 24.01 and 30.00. In addition, the table indicates that the minimum ROI was 6.75 with the maximum being 26.50. The majority of the Saccos had their average ROI ranging from 15.00 to 16.00 as shown by a mean of 15.92. According to Speights (2021), most companies target to achieve an ROI of 10% or more when considering long-term

investments. Furthermore, Fernando (2021) indicates that a high ROI implies that the investment returns of the Saccos compare in a favorable way to its cost. This indicates that most Saccos considered in this study had relatively profitable investments. The findings are in agreement with a study carried out by Sariand Ernayani (2017) on the effects of ROI and debt ratio on dividend payouts which indicated that ROI and the payment of dividends are significantly and positively correlated.

#### 4.2.1.4 Net profits in millions

This part of the study sought to determine the actual profit, in millions, accrued by the Saccos after the payment of the expenses that were not included in the calculation of the gross profit. As such, the net profit is obtained as;

Net profit = Total Revenue – Total Expenses

The results of the study are indicated in Table 4.7 below;

Table 4.7:

Net Profits in Millions

Profit category in Millions	Frequency	Percent
0-100	4	8.0
101-200	9	18.0
201-300	11	22.0
301-400	9	18.0
401-500	9	18.0
501-600	4	8.0
601-700	2	4.0
701-800	2	4.0
Total	50	100.0

Source: Research Data (2021)

Table 4.7 above indicated that the majority of the Saccos had their net profits ranging between 201,000,000 and 300,000,000 as shown by 22%; this was followed by Saccos that had their net

profits ranging from 101,000,000 to 200,000,000, from 301,000,000 to 400,000,000 as well as from 401,000,000 to 500,000,000 as shown by 18% for each category; this was followed by Saccos that had their net profits ranging between 501,000,000 and 600,000,000 as shown by 8%; this was followed by Saccos that had their net profits ranging from 601,000,000 to 700,000,000 as well as from 701,000,000 to 800,000,000 as shown by 4% in each category. The table further indicates that the minimum net profit recorded by the Saccos was 47,000,000 with the maximum being 764,000,000.

The findings are in agreement with Murphy (2021) who revealed that determining the net profit of any financial institution e.g., a Sacco, helps to evaluate the financial health of the institution. In addition, it helps the investors determine whether the management of the institution is generating adequate revenue from its sales and at the same time managing its operating and overhead costs. The findings are also in agreement with Kitur (2014), who sought to determine how dividend payouts are impacted by profit margins where researcher indicated that the amount of dividend paid depends on the profit margin i.e., dividend payouts and profit margins are positively correlated.

### **4.2.2 Descriptive Statistics for Investment Opportunities**

This section of the study sought to establish the investment opportunities of the Saccos in terms of the number of projects as well as the total value of the projects invested by Sacco. The results of the study are indicated in the following subheadings.

#### 4.2.2.1 Number of Projects

This part of the study sought to establish the total number of projects in which each Sacco had invested. The study's findings are indicated in Table 4.8 below.

Table 4.8:

Number of Projects in which the Saccos have invested

number of projects	Frequency	Percent
0-3	29	58.0
4-7	17	34.0
8-11	3	6.0
12-15	1	2.0
Total	50	100.0

Source: Research Data (2021)

Table 4.8 above indicated that the majority of the Saccos had invested in several projects which were not more than 3 as shown by 58%, this was followed by Saccos that have invested in projects ranging from 4 to 7 as shown by 34%, this was followed by Saccos that have invested in projects ranging from 8 to 11 as shown by 6%. Only 2% of the Saccos had invested in several projects ranging from 12 to 15. The table further indicated that the least number of projects in which a single Sacco has invested in was 2 with the maximum being 13. Majority of the Saccos had their average number of projects ranging from 4 to 5 as shown by a mean of 4.12. The findings are in agreement with Kenton (2021) who indicated that the number of investment projects undertaken by a company depends on several factors such as the cost of capital, the duration of the investment, interest rates, and economic growth in terms of the changes in demand. In addition, these factors should be considered to determine the best manner of investment to maximize the investors' utility.

## 4.2.2.2 Total Value of Projects

This part of the study sought to determine the total value of the projects in which each Sacco had invested. The results of the study are indicated in Table 4.9 below.

Table 4.9:

The Total Value of Projects Invested

Investment base category in Millions	Frequency	Percent
0-500.000	31	62.0
500.001-1000.000	12	24.0
1000.001-1500.000	4	8.0
1500.001-2000.000	2	4.0
2000.001-3500.00	1	2.0
Total	50	100.0

Source: Research Data (2021)

Table 4.9 above indicated that the majority of the Saccos had their investment base not more than 500,000,000 as shown by 62%, this was followed by Saccos that had their investment base ranging from 500,000,001 to 1,000,000,000 as shown by 24%, this was followed by Saccos that had their investment base ranging from 1,000,000,001 to 1,500,000,000 as shown by 8%, this was followed by Saccos that had their investment base ranging from 1,500,000,001 to 2,000,000,000 as shown by 4%. Only 2% of the Saccos had their investment base ranging from 2,000,000,001 to 3,500,000,000. The table further indicates that the least recorded investment base for a Sacco was 48,124,000 with the maximum being 3,154,560,000. The majority of the Saccos had their investment base ranging from 500,000,000 to 600,000,000 as shown by a mean of 525,970,000. The findings are in agreement with Adams (2017) who sought to establish how the investment base of various financial institutions including Saccos is affected by various factors indicated that most institutions rely on good investments to increase their long-term growth. As such, factors influencing the investment base such as the expected returns from the projects, the availability of funding, government laws and regulations as well as the availability of skills and expertise should be well considered.

### **4.2.3 Descriptive Statistics for Sacco Size**

This section of the study sought to determine the size of the Saccos in terms of their asset base, number of their members as well as the growth rate of their members. The results of the study are indicated in the following subheadings.

#### **4.2.3.1** Asset Base

This part of the study sought to determine the total number of assets held by each Sacco. The results of the study are indicated in Table 4.10 below.

Table 4.10:

The Asset Base of the Saccos

<b>Asset Base in Millions Category</b>	Frequency	Percent
0-5000	33	66.0
5001-10000	9	18.0
10001-15000	4	8.0
15001-20000	2	4.0
20001-25000	1	2.0
25001-30000	1	2.0
Total	50	100.0

Source: Research Data (2021)

Table 4.10 above indicated that the majority of the Saccos had their investment base ranging from 0 to 5,000,000,000 as shown by 66%, this was followed by Saccos that had their investment base ranging from 5,001,000,000 to 10,000,000,000 as shown by 18%, this was followed by Saccos that had their investment base ranging from 10,001,000,000 to 15,000,000,000 as shown by 8%, this was followed by Saccos that had their investment base ranging from 15,001,000,000 to 20,000,000,000 as shown by 4%, this was followed by Saccos that had their investment base ranging from 5,001,000,000 to 10,000,000,000 as well as from 25,001,000,000 to 30,000,000,000 as shown by 2% in each category. The table further indicates that the minimum recorded asset base

for a single Sacco was 287,000,000 and the maximum being 25,121,000,000 with the majority of the Sacco having an average asset base ranging from 5,001,000,000 to 6,000,000,000 as shown by a mean of 5,416,890,000. The findings are in agreement with Hayes (2019) who indicated that even though financial institutions make changes on their asset base by buying and selling assets, having huge changes in the asset base may affect the institution's valuation. In addition, physical assets are used by lenders as collateral to recoup the money lent by the sale of the assets in case of a default.

#### 4.2.3.2 Number of Members

This part of the study sought to establish the total number of Sacco members of each Sacco. The results of the study are indicated in Table 4.11 below.

Table 4.11:

Total Number of Members in a Sacco

Number of Members	Frequency	Percent
1000-20000	41	82.0
20001-30000	3	6.0
30001-40000	3	6.0
40001-50000	2	4.0
70001-80000	1	2.0
Total	50	100.0

Source: Research Data (2021)

Table 4.11 above indicates that the majority of the Saccos had a total membership ranging from 1000 to 20,000 members as shown by 82%, this was followed by Saccos whose membership ranged from 20,001 to 30,000 members as well as from 30,001 to 40,000 members as shown by 6% in each category, this was followed by Saccos with a total membership ranging from 40,001 to 50,000 members as shown by 4%. Only 2% of the Saccos had a total membership of 70,0001 to 80,000 members. In addition, the table indicated that the minimum total membership recorded for

a Sacco was 1203 members with the maximum being 78,864 members. The majority of the Saccos had a total membership ranging from 13,000 to 14,000 members as shown by a mean of 13,149.48. The findings are in agreement with Chelang'at and Muturi (2015) who carried out a study on the factors affecting Sacco membership in the country indicated that Saccos face many challenges as compared to commercial banks and hence affecting the membership of these Saccos. In addition, the study indicated that absolute income has a positive influence on the membership of Saccos. However, the poor rating of financial services offered by Saccos and an increase in the membership cost have negative effects on the membership of the Saccos.

## 4.2.3.3 Membership Growth Rate

This part of the study sought to establish at what rate does the membership of the Saccos grows in terms of new members. The results of the study are indicated in Table 4.12 below.

Table 4.12:

The Growth Rate of the Saccos' Membership

Member growth % category	Frequency	Percent
3.0-6.0	34	68.0
6.1-9.0	8	16.0
9.1-12.0	5	10.0
12.1-15.0	2	4.0
18.1-21.0	1	2.0
Total	50	100.0

Source: Research Data (2021)

Table 4.12 above indicates that the majority of the Saccos had a membership growth rate ranging from 3.0% to 6.0% as shown by 68%, this was followed by Saccos who had their membership growth rate ranging from 6.1% to 9.0% as shown by 16%, this was followed by Saccos who had their membership growth rate ranging from 9.1% to 12.0% as shown by 10%, this was followed by Saccos who had their membership growth rate ranging from 12.1% to 15.0% as shown by 4%.

Only 2% of the Saccos registered a membership growth rate of 18.1% to 21.0%. The table further indicates that the least recorded membership growth rate was 3.0% with the maximum being 19.5%. The majority of the Saccos had an average membership growth rate ranging from 6.0% to 7.0% as shown by a mean of 6.180.

The findings are in agreement with Gachara (2018) who conducted a study on the factors influencing the growth of Saccos indicated that the quality of services offered in the Saccos influences the membership growth rate since some commercial banks offer better services than the Saccos. In addition, the study indicated that quality of services, loan portfolio management, and the ability to cope with competition from commercial banks are some of the leading factors that influence membership growth. Furthermore, the findings are in agreement with Motompa (2016) who indicated that Saccos should come up with new products such as instant loans to attract a higher membership growth rate.

## **4.2.4 Descriptive Statistics for Non-Performing Loans**

This section of the study sought to evaluate the non-performing loans in the Saccos in terms of the amount of the non-performing loans as well as that of the non-performing loans. The results of the study are indicated in the following subheadings.

#### 4.2.4.1 Amount of Non-Performing Loans

This part of the study sought to determine the amount of money in millions held up in non-performing loans. The results of the study are indicated in Table 4.13 below.

Table 4.13:

Amount of Non-Performing Loans

Non-performing loan in Millions	Frequency	Percent
0-200.0	39	78.0
200.1-400.0	6	12.0
400.1-600.0	1	2.0
600.1-800.0	2	4.0
800.1-1000.0	1	2.0
1000.1-1200.0	1	2.0
Total	50	100.0

Source: Research Data (2021)

Table 4.13 above indicated that the majority of the Saccos had non-performing loans ranging from 0 to 200,000,000 as shown by 78%, this was followed by Saccos that had non-performing loans ranging from 200,100,000 to 400,000,000 as shown by 12%, this was followed by Saccos that had non-performing loans ranging from 600,100,000 to 800,000,000 as shown by 4%, this was followed by Saccos that had non-performing loans ranging from 400,100,000 to 600,000,000, from 800,100,000 to 1,000,000,000 as well as from 1,000,100,000 to 1,200,000,000 as shown by 2% in each category. The table further indicates that the least amount of non-performing loans recorded for a single Sacco was 3,200,000 with the maximum being 1,042,000,000. The majority of the Saccos had non-performing loans ranging from 100,000,000 to 200,000,000 as shown by a mean of 166,170,000. The findings are in agreement with Kiprotich et al. (2017) who carried out a study on the factors influencing non-performing loans in Saccos indicated that factors such as the age group of borrowers, their gross salary, and employment issues such as interdiction influence the amount of non-performing loans in Kenyan Saccos.

### 4.2.4.2 Number of Non-performing loans

This part of the study sought to determine the total number of non-performing loans in each Sacco.

The results of the study are indicated in Table 4.14 below.

Table 4.14:

Number of Non-Performing Loans

Number of non- performing loans	Frequency	Percent
0-50	14	28.0
51-100	20	40.0
101-150	8	16.0
151-200	5	10.0
201-250	2	4.0
251-300	1	2.0
Total	50	100.0

Source: Research Data (2021)

Table 4.14 above indicates that the majority of the Saccos had a total number of non-performing loans ranging from 51 to 100 as shown by 40%, this was followed by Saccos that had a total number of non-performing loans ranging from 0 to 50 as shown by 28%, this was followed by Saccos that had a total number of non-performing loans ranging from 101 to 1500 as shown by 16%, this was followed by Saccos that had a total number of non-performing loans ranging from 151 to 200 as shown by 10%, this was followed by Saccos that had a total number of non-performing loans ranging from 201 to 250 as shown by 28%. Only 2% of the Saccos had non-performing loans ranging from 251 to 300. The table further indicated that the least recorded number of non-performing loans in a Sacco was 46 with the maximum being 299. The majority of the Saccos had an average number of non-performing loans ranging from 90 to 100 as shown by a mean of 94.76. The findings are in agreement with Manyuanda (2017) who sought to determine how the performance of Saccos in Kenya is impacted by non-performing loans where the

researcher indicated that the size of the Sacco and the number of non-performing loans influence the return on assets of the Sacco. As such, Saccos should formulate a referencing solution to deal with defaulters to reduce the number of non-performing loans.

## 4.2.5 Dividend Payout

This section of the study sought to determine the dividend payout in the Saccos in terms of the average amount of dividends that are paid to the shareholders annually. The results of the study are indicated in the following subheading.

## 4.2.5.1 Average Amount of Dividend Paid Annually

This part of the study sought to determine the average amount of dividends paid to the shareholders annually. The results of the study are indicated in Table 4.15 below.

Table 4.15:

Average Amount of Dividend Paid Annually

Dividend paid in Millions	Frequency	Percent
100-200	16	32.0
201-300	21	42.0
301-400	9	18.0
401-500	3	6.0
501-600	1	2.0

Source: Research Data (2021)

Table 4.15 above indicated that the majority of the Saccos paid annual dividends ranging from Kshs 201,000,000 to 300,000,000 as shown by 42%, this was followed by Saccos that paid annual dividends ranging from 100,000,000 to 200,000,000 as shown by 32%, this was followed by Saccos that paid annual dividends ranging from 301,000,000 to 400,000,000 as shown by 18%, this was followed by Saccos that paid annual dividends ranging from 401,000,000 to 500,000,000 as shown by 6%. Only 2% of the Saccos had paid annual dividends ranging from 501,000,000 to

600,000,000. The table further indicated that the minimum amount of annual dividends paid by a Sacco was 118,000,000 with the maximum being 600,000,000. The majority of the Saccos had paid an average annual dividend ranging from kshs 200,000,000 to 300, 0000, 0000 as shown by a mean of 261,700,000.

The findings are in agreement with Njuguna and Jagongo (2015) who indicated that the dividend payout decision in financial institutions including Saccos is made by considering factors such as the current and future profitability of the institution, the financing requirements, the availability of profitable investments and the institutions cashflow position should be considered. However, the size of the institution and the period it has been in existence have no significant effect on the dividend payout. In addition, the findings are in agreement with Mbuki (2010) who indicated that the level of risk involved in the Sacco influenced negatively the dividend payout ratio.

## 4.3 Results of Hypothesis Testing

### 4.3.1 Basic Diagnostic Tests for Statistical Assumptions

Under this section diagnostic tests for testing the regression assumptions are presented. The tests are assumptions of linear regression. It is important to conduct the diagnostic test to ascertain that the data is fit for linear regression. These tests include normality, heteroscedasticity, autocorrelation, multicollinearity, and sampling adequacy. Before a complete regression analysis can be performed, the assumptions concerning the original data must be made. Ignoring the regression assumptions may contribute to wrong validity estimates. When the assumptions are not met one may be reporting incorrect findings.

### **4.3.2 Normality Test**

The testing for normality in this study was conducted using the Kolmogorov Smirnov test and Shapiro Wilk test. Testing for normality findings is illustrated in Table 4.16.

Table 4. 16:

Checking for Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Profitability	0.183	49	0.021	0.907	49	0.610
Investment Opportunities	0.171	49	0.016	0.902	49	0.530
Sacco Size	0.172	49	0.009	0.812	49	0.080
Non-Performing Loans	0.138	49	0.011	0.917	49	0.262
Dividend payout in DT-Saccos	0.139	49	0.017	0.872	49	0.439

Source: Research Data (2021)

Thus, Table 4.16 indicates that using both tests of normality, which is Kolmogorov Smirnov test and Shapiro-Wilk tests, the p-value for both tests, is greater than 0.05, thus the study rejected Ho and a conclusion was made that data on both the dependent and the independent factors were normally distributed and as a result, it helps to predict dependent variables. The findings are in agreement with Park (2015) that if the Sig. value of the Shapiro-Wilk Test is greater than 0.05, the data is normal. If it is below 0.05, the data significantly deviate from a normal distribution.

#### 4.3.3 Heteroscedasticity

This test checks whether the variance of the dependent variable varies across the data (test the assumption of equal variance). To test for heteroscedasticity, the Levene test was used where if P-value< 0.05 is an indication of the presence of non-uniform variance. The test results were as shown in Table 4.17.

Table 4. 17:

Levene Test Results

	Levene Statistic	Df1	Df2	Sig.
Profitability	0.183	1	49	0.021
Investment Opportunities	2.171	1	49	0.014
Sacco Size	3.172	1	49	0.031
Non-Performing Loans	4.238	1	49	0.003
Dividend payout in DT-Saccos	2.331	1	49	0.034

Source: Author (2021)

From the findings, the p-value for all the variables (Profitability, Investment Opportunities, Sacco Size, Non-Performing Loans, and dividend payout in DT-Saccos) was less than 0.05 hence the null hypothesis for equal variances was rejected. This further shows that the data set had no heteroscedasticity and is, therefore, suitable for modeling the regression equation

#### **4.3.4** Autocorrelation Test

If the errors are correlated with one another, it would be stated that they are 'serially correlated'. A test of this assumption is therefore conducted. The first test was Durbin-Watson which is shown in the regression output of the model. The Autocorrelation Test results were presented in Table 4.18.

Table 4.18:

Autocorrelation Test

Model	Durbin-Watson		
1	$2.000^{a}$		

Source: Research Data (2021)

According to Bhattacherjee (2012), the Durbin Watson statistic is a number that tests for autocorrelation in the residuals from a statistical regression analysis that is always between 0 and 4. A value of 2 means that there is no autocorrelation in the sample. Values approaching 0 indicate positive autocorrelation and values toward 4 indicate negative autocorrelation. The value of

Durbin-Watson for the model as per the findings was 2.000. Thus, the null hypotheses were rejected for the model so there is no problem of autocorrelation.

## **4.3.5** Test for Independence

The test for independence was done using correlation analysis. The results were as shown in Table 4.19.

Table 4. 19:

Correlation Analysis

		Dividend payout in DT-Saccos	Profitability	Investment Opportunities	Sacco Size	Non-Performing Loans
Dividend payout in DT-	Pearson Correlation Sig. (2-tailed)	1				
Saccos Profitability	Pearson Correlation Sig. (2-tailed)	.895** .005	1			
Investment	Pearson Correlation	.833*	.431**	1		
Opportunities	Sig. (2-tailed)	.018	.002			
Sacco Size	Pearson Correlation	$.849^{*}$	.485**	.959**	1	
	Sig. (2-tailed)	.013	.000	.000		
Non-	Pearson Correlation	855*	.159	.242	.196	1
Performing	Sig. (2-tailed)	.024	.270	.090	.172	
Loans	D (2001)					

Source: Research Data (2021)

The correlation analysis results between the dividend pay-out in DT-Saccos and profitability shows a positive coefficient of 0.895, with a p-value of 0.005. It indicates that the result is significant at  $\alpha = 5\%$  and that if the profitability increases it will have a positive impact on the dividend payout in DT-Saccos. The correlation results between investment opportunities and

dividend payout in DT-Saccos also indicate the same type of result where the correlation coefficient is 0.833 and a p-value of 0.018which significant at  $\alpha = 5\%$ .

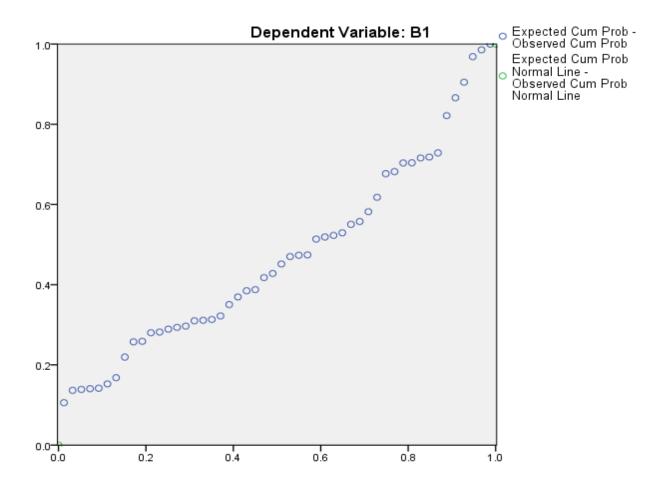
The results also show that there is a positive association between Sacco size and dividend payout in DT-Saccos where the correlation coefficient is 0.849, with a p-value of 0.013. Also, there was a negative association between non-performing loans and dividend payout in DT-Saccos where the correlation coefficient is -0.855, with a p-value of 0.024. Nevertheless, the positive relationship indicates that when the practice of the aforementioned factors is in place, the levels of dividend pay-out in DT-Saccos increase.

### 4.3.6 Linearity Test

The linearity test aims to determine if the relationship between independent variables and the dependent variable is linear or not. It is a requirement in correlation and linear regression analysis. Here, if the value sig. deviation from linearity>0.05, then the relationship between the independent variables is linearly dependent.

Figure 4. 1:

Linearity Test



From Figure 4.1, the majority of the points seemed to be aligned in a straight line. This implied that all the variables exhibited linearity and that they were significant since their p-values were greater than 0.05.

#### 4.3.7Test for Multicollinearity

To establish whether multicollinearity levels would pose a challenge to the data analysis, collinearity diagnostics were conducted to generate the Variance Inflation Factor (VIF) value and tolerance levels. Multi-collinearity occurs when the independent variables are not independent of

each other. Collinearity (also called multicollinearity) refers to the assumption that the independent variables are uncorrelated. Multi-collinearity occurs when several independent variables correlate at high levels with one another, or when one independent variable is a near-linear combination of other independent variables. The study utilized Collinearity Statistics to find out whether the independent variables are adequately correlated to show a substantial causal correlation. The results for the multicollinearity test were presented in Table 4.20.

Table 4.20:

Collinearity Statistics

	Collinearity	Collinearity Statistics		
	Tolerance	VIF		
Profitability	0.927	1.079		
Investment Opportunities	0.466	2.146		
Sacco Size	0.603	1.658		
Non-Performing Loans	0.638	1.567		

Source: Research Data (2021)

Results in Table 4.19 show that, based on the coefficients output, Profitability had a VIF value of 1.079, Investment Opportunities had a VIF value of 2.146, Sacco Size had a VIF value of 1.658, Sacco Size had a VIF value of 1.567. The VIF values for all the variables were less than 10 and a tolerance greater than 0.1 implied that there were no Multicollinearity symptoms as indicated by Bryman (2012).

#### 4.3.8Regression Analysis

Multipleregression analysis was conducted to determine the relationship between profitability, investment opportunities, SACCO size, and non-performing loans and dividend payout in DT-Saccos in Kenya. The results are as presented in Tables 4.21, 4.22, and 4.23.

Table 4. 21:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.855	0.730	0.706	2.271
Source: Resea	rch Data (202	1)		

Table 4.21 is a model fit that establishes how fit the model equation fits the data. The adjusted R2 was used to establish the predictive power of the study model and it was found to be 0.706 implying that 70.6% of the variations in dividend payout in DT-Saccos in Kenya are explained by changes in profitability, investment opportunities, SACCO size, and non-performing loans.

Table 4. 22:

ANOVA Results

Model		Sum of Squares	Df	Mean Square	F	Sig
	Regression	671.009	4	167.752	30.487	2.69E-12
1	Residual	247.606	45	5.502		
	Total	918.615	49			

Source: Research Data (2021)

The overall F statistics, (F = 30.487, p<2.69E-12<0.05), indicated that there was a statistically significant relationship between profitability, investment opportunities, SACCO size, and non-performing loans and dividend payout in DT-Saccos in Kenya. Their null hypotheses were therefore rejected and it was concluded that profitability, investment opportunities, SACCO size, and non-performing loans significantly influence dividend payout in DT-Saccos in Kenya.

Table 4.23:

Regression Coefficients

		ndardized fficients	Standardized Coefficients	T	Sig
	В	Std. Error	Beta	•	
(Constant)	0.897	0.198		4.530	.000
Profitability	0.889	0.143	0.859	6.217	.000
Investment Opportunities	0.895	0.245	0.838	3.653	.000
Sacco Size	0.802	0.212	0.796	3.783	.000
Non-Performing Loans	-0.911	0.265	-0.855	3.438	.001

The study found that if all independent variables were held constant at zero, then the dividend

Source: Research Data (2021)

The regression equation obtained from this outcome was: -

#### $Y = 0.897 + 0.889X_1 + 0.895X_2 + 0.802X_3 - 0.911X_4 + \epsilon$

payout in DT-Saccos in Kenya will be 0.897 which is significant since p=0.000 is less than 0.05. From the findings the coefficient for profitability is 0.889 which is significant since p=0.000 is less than 0.05, meaning that when a unit change in profitability changes leads to 0.889 units change in dividend payout in DT-Saccos in Kenya. The null hypothesis was therefore rejected and it was concluded that profitability significantly influences dividend payout in DT-Saccos in Kenya. The study further found that a unit change in investment opportunitieschanges would lead to a 0.895 unit change in dividend payout in DT-Saccos in Kenya. The variable was significant since p-value=0.000<0.05. The null hypothesis was therefore rejected and it was concluded that investment opportunities significantly influence dividend payout in DT-Saccos in Kenya. The findings are in agreement with Velnampy and Nimalathasan (2008) when they analyzed Kuala Lumpur financial markets and established the moving dividends among the major market players. They found that the company's dividend decision is primarily connected to income earned during the current financial year and to the dividends given in previous periods. In addition, they

concluded that companies have potential long-term forecasts of dividends that depend significantly on the capacity of the organization to forecast their revenues.

The study further found that a unit change in SACCO Size would lead to a 0.802 unit change in dividend payout in DT-Saccos in Kenya. The variable was significant since p-value=0.000<0.05. The null hypothesis was therefore rejected and it was concluded that Sacco Size significantly influences dividend payout in DT-Saccos in Kenya. The findings are in agreement with Vivek and Xiaorong (2012) who concurred that there is an important positive relationship between firm size and dividend payment decision among Jordan firms. This means that large Jordanian companies appear to be more diversified than smaller firms and therefore less likely to be vulnerable to financial distress, and more able to pay dividends to the shareholders. The transaction cost principle of the dividend strategy supports this relationship.

The study further found that a unit change in non-performing loans would lead to a -0.911 unit change in dividend payout in DT-Saccos in Kenya. The variable was significant since p-value=0.001<0.05. The null hypothesis was therefore rejected and it was concluded that Non-Performing Loans significantly influences dividend payout in DT-Saccos in Kenya. The findings are in agreement with Higgins (2015) and McCabe (2017) who concurred that there is negative effects of leverage on dividend payments and found that certain businesses that have higher leverage in the past usually pay lower dividends to escape the higher costs of growing their external resources.

Overall, Investment Opportunities had the greatest influence on dividend payout in DT-Saccos in Kenya, followed by Profitability, then Sacco Size, while Non-Performing Loans had the least influence on dividend payout in DT-Saccos in Kenya. All the variables were significant at a 0.05 significance level.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### 5.1 Introduction

Chapter five presented the summary of key findings of the study, conclusions made from the findings, and the recommendations of the study

#### **5.2 Summary of the Findings**

#### **5.2.1 Profitability**

The study revealed that the majority of the Saccos had their Return on Assets between 6.01 and 8.00 (50.0%), majority of the Saccos also had their Return on Equity ranging between 6.01 and 9.00 (56%), majority of the Sacco also had their return on investment ranging between 12.01 and 18.00 (66%), finally the majority of the Saccos had their net profits ranging between 201,000,000 and 300,000,000 (22%). The study also revealed on profitability a  $\beta$ = 0.889, t=6.217 and associated p-value of 0.001.

#### **5.2.2 Investment Opportunities**

The majority of the Saccos had invested in several projects which were not more than 3 (58%). Besides, the majority of the Saccos had an investment base of not more than 500,000,000 (62%). The study also revealed on investment opportunities a  $\beta$ = 0.895, t=3.653 and associated p-value of 0.001.

#### **5.2.3 SACCOs Size**

The majority of the Saccos had their asset base not more than Kshs 5,000,000,000 (66%,), majority of the Saccos also had a total membership ranging from 1000 to 20,000 members (82%), besides, majority of the Saccos had a membership growth rate ranging from 3.0% to 6.0% (68%). The study revealed on asset size a  $\beta$ = 0.802, t=3.783 and associated p-value of 0.001.

#### **5.2.4 Non-Performing Loans**

The majority of the Saccos had non-performing loans ranging from 0 to 200,000,000 (78%), majority of the Saccos had a total number of non-performing loans ranging from 51 to 100 (40%). The study revealed on non-performing loans a  $\beta$ = -0.911, t=3.438, and associated p-value of 0.001. Finally, the majority of the Saccos paid annual dividends ranging from 201,000,000 to 300,000,000 (42%).

#### **5.3** Conclusions of the Study

The study concluded that profitability significantly and positively influences the dividend payout in deposit-taking Saccos in Kenya, therefore we can reject the null hypothesis that profitability does not influence dividend payout in DT-SACCOs in Kenya. The conclusions are in concurrence with the dividends preference theory that investors are more likely to invest in companies that give dividends promptly other than making profit reservations.

The study also concluded that the investment base significantly and positively influences the dividend payout in deposit-taking Saccos in Kenya, therefore we can reject the null hypothesis that the investment base does not influence dividend payout in DT-SACCOs in Kenya. The conclusions are divergent with the dividend preference theory which stipulates that investors would wich to have the dividend amount paid promptly other than investing the profits in investments with the common phrase of 'a bird in hand is better than two in the forest'.

The study concluded that asset size significantly and positively influences the dividend payout in deposit-taking Saccos in Kenya, therefore we can reject the null hypothesis that asset size does not influence dividend payout in DT-SACCOs in Kenya. The conclusions are divergent with the dividends preference theory that an organization paying dividends is more popular than one reserving more of its profits to acquire assets for the SACCOs. The theory proponents hold that a

company acquiring more fixed assets is unlikely to pay dividends. However, according to dividend signaling effect theory, a company acquiring more liquid assets is likely to be more liquid which would mean a signal of better cashflows and most likely the company can pay dividends.

The study finally concluded that non-performing loans significantly and negatively influence the dividend payout in deposit-taking Saccos in Kenya, therefore we can reject the null hypothesis that non-performing loans do not influence dividend payout in DT-SACCOs in Kenya. The conclusions are in concurrence with the dividend signaling theory effect, which is based on the asymmetric information theory where the company continues paying dividends consistently, it acts as a signal that the company is liquid enough and is, therefore, more likely to pay dividends in the future. Where companies have their no-performing loans controlled well the companies become more liquid and are therefore more likely to pay dividends.

#### **5.4 Recommendations of the Study**

The study made both policy recommendations and recommendations for future studies.

#### **5.4.1 Policy Recommendations**

The study recommended for measures to be put in place that ensure that profits increases to have a higher payout of dividends in the deposit-taking SACCOs in Kenya. Measures to increase profitability should involve a reduction in the costs of operations and costs of production to increase profits.

The study also recommended for the deposit-taking SACCOs to diversify more into many projects because with more projects and higher investments there will be more dividend payout among SACCOs in Kenya.

The study recommended for the SACCOs to acquire more property, recruit more members into the SACCOs which would mean more asset base and ultimately more dividend payout because dividend and asset size had a positive relationship.

The study also recommended for measures and controls to be taken on non-performing loans such as loan risk controls, appraisal before awarding loans, drastic and robust measures to be taken on loans recovery to reduce non-performing loans because higher non-performing loans would lead to lower dividends payouts among deposit taking SACCOs in Kenya.

#### **5.4.2 Recommendations for Future Studies**

The study recommended for a future study to be conducted where firm characteristics are considered as a moderating variable in the relationship between the given determinants of dividend payment in the deposit-taking SACCOs in Kenya, this is because the companies had different characteristics including age, assets liquidity, and size of the firms (which was noted in the study through asset base range).

Another study can be conducted where non-deposit-taking SACCOs are considered to find out if the results of the study are similar for generalization or reveal divergent views.

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## **APPENDICES**

# **Appendix I: Secondary Data Collection Form**

Name of the SACCO	Date Licensed
SASRA Membership No	Physical Address

<b>Profitability Measures</b>	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	AVG
Return on Assets (%)											
Return on Equity (%)											
Return on Investment (%)											
Net profits											
Investment Opportunities Measures											
Number of Projects (N)											
Total Value of Projects ( '000,000 KShs)											
Sacco Size Measures											
Total Asset Base ( '000,000 KShs)											
Number of Members (N)											
Membership Growth Rate (%)											
Non-Performing Loans Measures											
Amount of Defaulted Loans ( '000,000 KShs)											
Number of Non- Performing Loans (N)											

Dividend Payout Measures						
Total Dividend Paid ( '000,000 KShs)						

# Appendix II: Deposit Taking Saccos Registered by SASRA

(As at End of December 2018)

NO	LOCATION	NAME OF DT-SACCO
1	NYERI	2NK DT-SACCO
2	NAIROBI	AFYA DT-SACCO
3	MUHORONI	AGRO-CHEM DT-SACCO
4	AINABKOI	AINABKOI DT-SACCO
5	THIKA	ALL CHURCHES DT-SACCO
6	NAIROBI	AIRPORTS DT-SACCO
7	MURANG'A	AMICA DT-SACCO
8	NAIROBI	ARDHI DT-SACCO
9	NAIROBI	ASILI DT-SACCO
10	THIKA	AZIMA DT-SACCO
11	MOMBASA	BANDARI DT-SACCO
12	KARATINA	BARAKA DT-SACCO
13	ELDORET	BARATON UNIVERSITY DT-SACCO
14	NYERI	BIASHARA DT-SACCO
15	MANYATTA	BIASHARA TOSHA DT-SACCO
16	MARSABIT	BI-HIGH DT-SACCO
17	KERUGOYA	BINGWA DT-SACCO
18	ELDAMA	BORESHA DT-SACCO
19	MERU	CAPITAL DT-SACCO
20	MERU	CENTENARY DT-SACCO
21	NAIROBI	CHAI DT-SACCO
22	NAIROBI	CHUNA DT-SACCO
23	NAIROBI	COMOCO DT-SACCO
24	NAKURU	COSMOPOLITAN DT-SACCO
25	RUNYENJES	COUNTY DT-SACCO
26	EMBU	DAIMA DT-SACCO
L	_1	I

27	MAUA	DHABITI DT-SACCO
28	KIAMBU	DIMKES DT-SACCO
29	MARARAL	DUMISHA DT-SACCO
30	KAPENGURIA	ECO-PILLAR DT-SACCO
31	EGERTON	EGERTON DT-SACCO
32	KAPSOKWONY	ELGON TEACHERS DT-SACCO
33	NAIROBI	ELIMU DT-SACCO
34	KARATINA	ENEA DT-SACCO
35	BUSIA	FARIDI DT-SACCO
36	GITHUNGURI	FARIJI DT-SACCO
37	KERUGOYA	FORTUNE DT-SACCO
38	NAIROBI	FUNDILIMA DT-SACCO
39	GITHUNGURI	GITHUNGURI DAIRY & COMMUNITY
40	NAROK	GOOD HOPE DT-SACCO
41	KERUGOYA	GOODWAY DT-SACCO
42	KISII	GUSII MWALIMU DT-SACCO
43	NAIROBI	HARAMBEE DT-SACCO
44	NAIROBI	HAZINA DT-SACCO
45	KAKAMEGA	IG DT-SACCO
46	LOITOKITOK	ILKISONKO DT-SACCO
47	KILIFI	IMARIKA DT-SACCO
48	KERICHO	IMARISHA DT-SACCO
49	MERU	IMENTI DT-SACCO
50	RUIRU	JACARANDA DT-SACCO
51	NAIROBI	JAMII DT-SACCO
52	KARURI	JOINAS DT-SACCO
53	SIRWA	KAIMOSI DT-SACCO
54	NKUBU	KATHERA RURAL DT-SACCO
55	NAIROBI	KENPIPE DT-SACCO
56	NAIROBI	KENVERSITY DT-SACCO

57	KISII	KENYA ACHIEVAS DT-SACCO
58	NAIROBI	KENYA BANKERS DT-SACCO
59	KERICHO	KENYA HIGHLANDS DT-SACCO
60	NAIROBI	KENYA POLICE DT-SACCO
61	KIMULOT	KIMBILIO DAIMA DT-SACCO
62	NAIROBI	KINGDOM DT-SACCO
63	BOMET	KIPSIGIS EDIS DT-SACCO
64	KISUMU	KITE DT-SACCO
65	KITUI	KITUI TEACHERS DT-SACCO
66	MOMBASA	KMFRI DT-SACCO
67	NANDI HILLS	KOLENGE TEA DT-SACCO
68	KORU	KORU DT-SACCO
69	MOGOGOSIEK	K – PILLAR DT-SACCO
70	KIAMBU	K – UNITY DT-SACCO
71	MACHAKOS	KWETU DT-SACCO
72	WANG'URU	LAINISHA DT-SACCO
73	MALINDI	LENGO DT-SACCO
74	MOMBASA	MAFANIKIO DT-SACCO
75	MAGADI	MAGADI DT-SACCO
76	NAIROBI	MAGEREZA DT-SACCO
77	NAIROBI	MAISHA BORA DT-SACCO
78	MURANG'A	MENTOR DT-SACCO
79	NAIROBI	METROPOLITAN NATIONAL DT-SACCO
80	MAUA	MMH DT-SACCO
81	MOMBASA	MOMBASA PORT DT-SACCO
82	KAKAMEGA	MUDETE TEA GROWERS DT-SACCO
83	KINANGOP	MUKI DT-SACCO
84	NAIROBI	MWALIMU NATIONAL DT-SACCO
85	EMBU	MWIETHERI DT-SACCO
86	MWINGI	MWINGI MWALIMU DT-SACCO

87	NAIROBI	MWITO DT-SACCO
88	NAIROBI	NACICO DT-SACCO
89	NAIROBI	NAFAKA DT-SACCO
90	NANDI HILLS	NANDI FARMERS DT-SACCO
91	NAIROBI	NATION DT-SACCO
92	EMBU	NAWIRI DT-SACCO
93	KERICHO	NDEGE CHAI DT-SACCO
94	CHOGORIA	NDOSHA DT-SACCO
95	BUNGOMA	NG'ARISHA DT-SACCO
96	ELDORET	NOBLE DT-SACCO
97	KIKUYU	NRS DT-SACCO
98	NAIROBI	NSSF DT-SACCO
99	KERUGOYA	NUFAIKA DT-SACCO
100	NDARAGWA	NYALA VISION DT-SACCO
101	MAUA	NYAMBENE ARIMI DT-SACCO
102	NYAMIRA	NYAMIRA TEA FARMERS DT-SACCO
103	NAIROBI	NYATI DT-SACCO
104	NYERI	NEW FORTIS DT-SACCO
105	KERUGOYA	OLLIN DT-SACCO
106	LITEIN	PATNAS DT-SACCO
107	ITEN	PRIME TIME DT-SACCO
108	NAROK	PUAN DT-SACCO
109	WUNDANYI	QWETU DT-SACCO
110	KOSELE	RACHUONYO TEACHERS DT-SACCO
111	NAIROBI	SAFARICOM DT-SACCO
112	NAIROBI	SHERIA DT-SACCO
113	NAIROBI	SHIRIKA DT-SACCO
114	KERICHO	SIMBA CHAI DT-SACCO
115	TIMAU	SIRAJI DT-SACCO
116	RAVINE	SKYLINE DT-SACCO

117	GITHONGO	SMART CHAMPIONS DT-SACCO
118	KAPSOWAR	SMART LIFE DT-SACCO
119	MERU	SOLUTION DT-SACCO
120	SOTIK	SOTICO DT-SACCO
121	CHUKA	SOUTHERN STAR DT-SACCO
122	NAIROBI	SHOPPERS DT-SACCO
123	KEHANCHA	STAKE KENYA DT-SACCO
124	NAIROBI	STIMA DT-SACCO
125	MBITA	SUBA TEACHERS DT-SACCO
126	MUMIAS	SUKARI DT-SACCO
127	MARALAL	SUPA DT-SACCO
128	KWALE	TABASAMU DT-SACCO
129	GITHUNGURI	TAI DT-SACCO
130	NYERI	TAIFA DT-SACCO
131	NAIROBI	TAQWA DT-SACCO
132	NAIROBI	TEMBO DT-SACCO
133	BOMET	TENHOS DT-SACCO
134	CHUKA	THAMANI DT-SACCO
135	KITALE	TRANSCOUNTIES DT-SACCO
136	CHUKA	TRANS NATION DT-SACCO
137	NKUBU	TIMES U DT-SACCO
138	OL'KALOU	TOWER DT-SACCO
139	KAPSABET	TRANS – ELITE COUNTY DT-SACCO
140	KITALE	TRANSNATIONAL TIMES DT-SACCO
141	NAIROBI	UFANISI DT-SACCO
142	NAIROBI	UKRISTO NA UFANISI
143	NAIROBI	UKULIMA SACO
144	NAIROBI	UNAITAS DT-SACCO
145	NAKURU	UNI-COUNTY DT-SACCO
146	NAIROBI	UNITED NATIONS DT-SACCO

147	NANYUKI	UNISON DT-SACCO
148	MACHAKOS	UNIVERSAL TRADERS DT-SACCO
149	CHAVAKALI	VIHIGA COUNTY FARMERS DT-SACCO
150	NYAHURURU	VIKTAS DT-SACCO
151	NYANSIONGO	VISION POINT DT-SACCO
152	NAKURU	VISION AFRICA DT-SACCO
153	KISII	WAKENYA PAMOJA DT-SACCO
154	MUKURWENI	WAKULIMA COMMERCIAL DT-SACCO
155	NAIROBI	WANA – ANGA DT-SACCO
156	OTHAYA	WANANCHI DT-SACCO
157	NAIROBI	WANANDEGE DT-SACCO
158	MOMBASA	WASHA DT-SACCO
159	NAIROBI	WAUMINI DT-SACCO
160	KAKAMEGA	WEVARSITY DT-SACCO
161	EMBU	WINAS DT-SACCO
162	NKUBU	YETU DT-SACCO
163	MOMBASA	JITEGEMEE DT-SACCO
164	KAPSABET	NANDI HEKIMA DT-SACCO
165	NANYUKI	NANYUKI EQUATOR DT-SACCO
166	MOMBASA	UCHONGAJI DT-SACCO

## **Appendix III: Research Permit**



# KENYA METHODIST UNIVERSITY

P. O. Box 267 Meru - 60200, Kenya Tel: 254-064-30301/31229/30367/31171 Fax: 254-64-30162 Email: info@kemu.ac.ke

Our ref: NAC/ MBA/1/2020/23

16th SEPTEMBER 2020

Commission Secretary, National Commission for Science, Technology and Innovations, P.O. Box 30623-00100, NAIROBI.

Dear Sir/ Madam,

RE: ABDIRAHMAN GAAL ALI (BUS-3-0178-1/2019)

This is to confirm that the above named is a bona fide student of Kenya Methodist University, undertaking masters in Business Administration. He is conducting a research titled: DETERMINANTS OF DIVIDEND PAYOUT IN DEPOSIT TAKING SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN KENYA.

We confirm that this thesis proposal has been defended and approved by the university.

In this regard, we are requesting your office to issue a permit to enable him collect data for his masters dissertation.

Dean

Any assistance accorded to him will be appreciated.

Yours faithfully,

Mars.

PROF. Evangeline Gichunge, PhD.

ASS DIRECTOR POSTGRADUATE STUDIES

Encl.

### **Appendix IV: Research License**

