RELATIONSHIP BETWEEN DIVIDEND PAYOUT AND EFFICIENCY OF SAVINGS AND CREDITS COOPERATIVE SOCIETIES IN NAIROBI COUNTY, KENYA

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A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF BUSINESS ADMINISTRATION, FACULTY OF BUSINESS AND MANAGEMENT, UNIVERSITY OF NAIROBI

NOVEMBER 2021

DECLARATION

I declare that this project is an original work that has not been presented for any other degree or to any other University.

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Supervisor's Declaration

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

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ACKNOWLEDGEMENT

DEDICATION

This research project is dedicated to my family and friends.

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ABBREVIATIONS

BOSA　　　　　　　　　Front Office Savings Account

DRIP　　　　　　　　　Dividend Re-investment plan

FOSA　　　　　　　　　Front Office Savings Account

SACCO　　　　　　　　Savings and Credit Cooperative Society

SASRA　　　　　　　　SACCO Societies Regulatory Authority

ABSTRACT

In the past few years, there has been the collapse of SACCOs, with members losing all their savings. Thus, the study sought to determine the relationship between dividend payout and the performance (efficiency) of SACCOs in Nairobi County. The theories that were deemed relevant to anchor the study included The MM Dividend Irrelevance Theory, The Bird-In-The-Hand Theory and The Tax Preference Theory. The study adopted a descriptive design. The target population was 46 SACCOs in Nairobi County registered under SASRA. The study adopted a census since the population was relatively small. Secondary data was collected on five years'years' averages from the year 2016 to 2020. The study found the average efficiency score on savings and credits cooperative societies in Nairobi County between 2016 and 2020 was around 66.62%. The study further found the average efficiency of the SACCOs in 2016 was 65.76%, 59.97% in 2017, 66.26% in 2018, 65.77% in 2019 and 68.07% in 2020. The most inefficient year of SACCOs was 2017 and this could have been due to the elections in the country. The study found that a positive and significant relationship exists between dividend payout and performance (efficiency). The study concluded that dividend payout could explain 60.53% of the variations in performance (efficiency). Notably, it was found a unitary change in the dividend payout would change the efficiency of savings and credits cooperative societies in Nairobi County by 2.039 units when other factors are held constant. The study concluded that dividend payout is a matter of considerable importance to management and SACCO members and economists seeking to understand and appraise the functioning of the SACCOs in the country. The study recommended that managers of the SACCOs in Nairobi County need to dedicate adequate time to designing a dividend policy that will enhance firm performance and, therefore, shareholder value. Managers need to consider factors such as borrowing by members, income from investments and membership growth, members deposits, borrowing from financial institutions, interest on borrowing, human resources and operating expenses since it affects the efficiency of the institutions. The management of the SACCOs could use the study findings as the starting point to understand how industry factors influence the dividend payout ratios of their firms. Further, it is recommended that the SACCOs should pay dividends to ensure that they have a positive outlook in the future.

CHAPTER ONE

NTRODUCTION

1.1 Background of the Study

Dividend payout ratio is the proportion of the net income paid out to shareholders as a reward to shareholders. The portion of the net income retained after dividends have been paid is utilized by the organization in investing in its key operations (Warner, 2019). Management decision on the dividend payout ratio is informed by the priorities of the organization where a high growth organization will pay a lower percentage of dividends and retain a large portion of the net income for reinvestment and the reverse for a slow growth organization. An organization's efficiency is its ability to achieve an expected output levels given a certain level of inputs (Bulaki, 2019). The main reason why SACCOs exist is to take deposits from members and offer credit to the same members at a lower interest rate compared to other financial institutions (Njagi etal, 2012). The parameters used in measuring performance of a SACCO are its loan portfolio, profitability and growth in membership. Whether or not the policy a SACCO adopts has an effect on its growth is what this study seeks to determine.

There are two main theories that explain dividend payout, Dividend irrelevance theory and dividend relevance theories (Bulaki, 2019). According to the dividend relevance theory, payment of dividends affects the firm's value while the dividend irrelevance theories argues that payment of dividends does not have an effect on a firm's value (Aldin, 2010). The main dividend irrelevance theory is MM Dividend irrelevance theory that states that in a world of efficiency payment of dividends does not affect the value of a firm (Ang, 2011). Some of the dividend relevance theories include bird in hand theory which argues that stakeholders generally avoid risks and choose current

dividends to future capital gains (Menamin, 2017) and tax preference theory which argues that investors prefer lower payout at present to benefits from low tax rate on capital gains in the future (Smirnov, 2019).

The dividend payout policy of the organization is key in informing an investor's decision about how well investing in the organization will meet their investment goals. Investors and shareholders investigate organisation's dividend payout to see if the management has a balance in paying a sufficient dividend and retaining enough for reinvesting Khadija et al. (2017) . Operational efficiency of an organization is key to its growth and survival. Contrary to this, in the Kenyan context SACCOs are faced with numerous operational challenges. The government's realization of their significant role in financial penetration has offered their support and even regulated the sector (Simon, 2018). This study seeks to determine the effect dividends payout has in improving the Efficiency of SACCOs.

1.1.1 Dividend Payout

This is the strategy that organisations use formulate a way of rewarding its shareholders by payment of dividends (Chen, 2019). It basically involves a decision on how much should be returned to shareholders and how much a company should retain for reinvestment. (Warner, 2019). Management decision on the dividend payout ratio is informed by the priorities of the organization where a high growth organization will pay a lower percentage of dividends and retain a large portion of the net income for reinvestment and the reverse for a slow growth organization (Gitman & Hennessey, 2004). A good balance of dividend payment and retention is critical to the survival and growth of any organization. Payment of dividends affects the organisation's liquidity and

therefore needs to retain and reinvest a good portion of the net income in its key operations while at the same time paying an amount that is acceptable to dividend investors (Andaje, 2015).

Payment of dividends is taken to signal good financial performance of the organization. A dividend payout policy provides investors with information that guides their decision making and equally informs the market of future expectations. When an organization has a well-defined policy, it acts as a commitment to its shareholders of regular returns from their investment (Bragg, 2018). The dividend policy in place should ensure a balance where shareholders are satisfactorily rewarded and a good portion retained as an investment to key operations and enable it adapt to the changes in its environment. When organizations pay dividends as promised through their policy, it signals its ability to meet its targets and its ability to achieve the goals set and therefore win shareholders confidence where the reverse would turn them down (CFI, 2015). Some of the common dividend policies include, stable dividend, constant dividend and residual dividends policies.

Under the stable policy, the organization has a predetermined percentage of its annual profits that it pays out as dividends. The goal of this policy is to attract the risk averse investors by promising them a predictable return from their investment (CFI, 2015). With the policy the organization has the obligation of paying dividends irrespective of the profits made in the financial year to the point where if no profits are made in a financial year the organization will pay dividends from its retained earnings (Shma, 2012). Other than paying dividends in line with the short term performance of the organization, this policy focuses on long-term forecasts with the hope of growing the dividend at a stable rate into the future (Warner, 2019). In practice, companies pay a minimum percentage of profits as dividends and maintain this amount over the long term.

With the constant policy, an organization commits to payment of a fixed percentage of its annual profit as dividends. Through this policy investors experience fluctuations in the dividends they receive in accordance to the earnings of the organization (Bragg, 2018). However in years when a company makes profits that are higher than normal, the extra profits are not distributed to shareholders as divided but are withheld as retained earnings (CFI, 2015). Dividends are highly volatile and therefore shareholders cannot plan ahead. Firms prefer the constant policy since it reflects their ability to pay dividends (Dharal, 2012). Adoption of the constant dividend policy is risky since it may adversely affect the organisation's liquidity in periods where profits decline to a level that is lower than normal.

Under the residual dividend policy, dividends are paid on what remains after a company has financed its capital expenditure and working capital. Under the policy the company's pays only what it can afford (Chen, 2019). Earnings to shareholders are highly volatile since they are dependent on the company's performance and spending requirements (Warner, 2019). In making a dividend decision, the board of director's review optimal capital budgeting, which are given priority in financing, the remainder of which is paid out as dividends (Bulaki, 2019). The policy works best for organizations whose investors are risk takers and can take the uncertainty of capital gains in the future than payment of current dividends.

1.1.2 Efficiency of Savings and Credit Cooperatives

 SACCOs are discretionary micro financing corporations. They are communal financial institution owned and managed by members who come together as a result of having common financial goals. The main goals of operating SACCOs are mobilizing savings from the members, investment and

offering credit to the members at lower rates in comparison with other financial institutions and evens goes further to offer other financial services (Chege, 2016). SACCO's main objective of mobilization of financial resources from members is creating a pool from which loans are advanced to the members and to finance various development activities (Mumanyi, 2014). In Nairobi there are 46 Saccos licensed to take deposits (Matara, 2020).

The efficiency of a Sacco is its ability to accomplish given tasks and meet the expected levels of accuracy where the errors are very minimal, completeness where they meet all the specifications, cost where tasks are done within a budget and speed where tasks are completed within the set timelines and in so doing relieving itself of all liabilities (Mburu, 2010). Some indicators of an efficient Sacco include growing membership, growth in member deposits, growing loan portfolio, adoption of technology, management competency, growth in size of the SACCO and ability to frequently pay dividends (Mulwa, 2013). Measurement of efficiency is important to help keep track of changes in the organization over time against set objective and as well guide management in making decisions to propel the organization to its future (Goodluck and Lebitso, 2019).

In evaluating how a Sacco is efficient, qualitative and quantitative measures are used. Qualitative measures are those that are not expressed in monetary terms. These include but not limited to number of new products, customer satisfaction, quality in service, loan disbursements, growth, debt collection, continuity and stability of the firm (Andaje, 2015).Quantitative measures use monetary measures. They include dividend payment, profitability of the firm, loan portfolio, membership and expenditure levels. A Sacco should be in a position to strike a balance between the qualitative measures and the quantitative measures (Ajiambo, 2013).

1.1.3 Dividend Payout and efficiency

Irrespective of a SACCO's dividend policy, the bottom line is that management's intention is to pay dividend to shareholders and the same time retains some fund for future development of the company. To achieve this the SACCO should be able to earn more from interest on loans to members and other investments to finance its operating activities and have a surplus that it distributes as dividends in accordance with the policy in place (Mutisya, 2015). The ratio of dividend payment is dependent on the type of investors, that is how much preference they have on dividend payment, and the availability of investment opportunities.

Shareholder's attention is captured by firms that are able to pay dividends and avail some share of the profits to financing conducive investment projects to earn future capital gains. When an organization has achieved this balance, it leads to an increase in memberships and deposits which subsequently leads to a raise in the stock price (Sehran, 2017). Constant payment of dividends signifies good performance of an organization which encourages accelerated savings which later translates to good performance of the organization by making funds available to loan to members and also finance operations (Mburu, 2010).

Dividend payout and its impact on firm's efficiency is founded on two theories that is the dividend irrelevance or dividend relevance theory. Modigliani and Miller is the main proponent of the dividend irrelevance theory. He argues that in an efficient world one without taxes, transaction cost and information is available to all investors, payment of dividends does not have any effects on the cost of capital (Aldin, 2010). Scholars have critiqued the irrelevance theory over the years and developed the dividend relevance theories that claim payment of dividends have an impact to the cost of capital. Some of the dividend relevance theories are the bird in the hand theory, clientele

effect theory, tax preference theory, information signaling theory and agency theory Shisia et al (2014).

Farrukh et al (2017 F. e.) concluded that dividend policy was relevant in determining the wealth of shareholders. They gave recommendations that organizations should adopt dividend policies that are relatively stable and ensure that they are well managed so that they meet the objectives of the organization and at the same time of the shareholders. Due to the information signaling effect of dividends they also recommended adequate disclosure on payment of dividends so that potential investors are well informed in making their investment decisions depending on the goals they have.

1.1.4 Savings and Credit Cooperatives in Kenya

SACCOs in Kenya are registered with the Co-operative Societies Act. Currently there are 172 SACCOs in the country (Matara, 2020). They are classified as either deposit taking or non-deposit taking. Those that are deposit taking offer both front office (FOSA) and back office (BOSA) products while non deposit taking SACCOs only offer back office (BOSA) products (Mburu, 2010). SACCOs with FOSA products are regulated by SASRA while those with BOSA products are regulated by the ministry of industrialization.

SACCOs in Kenya are in three categories which are employee based, community based and transport based. According to the Kenya economic report SACCOs are wide spread in the country. However as compared to the banking sector whose asset base as at 2020 was about 5,000 billion SACCOs asset base is about 522 billion. SACCOs are especially attractive to those who cannot access bank loans due to lack of collateral, their low income and the high regulation in the banking sector (Mwaura, 2011).

Factors that determine the performance of SACCOs include dividend payment, innovativeness, customer satisfaction, loan disbursements, stability, effectiveness, marketing and continuity of the various organizations affected Yacine et al (2019). Kenyan SACCOs mainly adopt a residual dividend policy where dividends are paid on what is left after financing the positive NPV projects. Additionally, dividends are paid on an annual basis (Chege, 2016).

1.2 Research Problem

Dividend policy determines the portion of shareholder's earnings which should be distributed among shareholders. A well-defined dividend policy followed without default enables financial planning to the shareholders and also helps an organization to balance between capital expenditure and dividend payout (Ajiambo, 2013). Firms' good performance and increased shareholder's wealth can be improved by having in place a dividend policy that ensures significant stability and adequate retention for reinvestment (2017 F. e.).

Different SACCOs have different dividend payment options depending on their preference of retaining their profit or distributing it to shareholders. Globally SACCOs strive to have a consistency in their way of paying dividends in a bid to attract a certain type of investors whose investment goals they can easily meet (Mbiti, 2010). In the Kenyan context, the regulatory requirements in paying of dividends are that if a SACCO pays dividends whatever is left is sufficient to finance the recurrent expenditure and that dividends payment shouldn't be more than the income because dividend payment has an effect on the SACCO's cash flow available for investment and lending to its members. In the past few years there have been collapse of SACCOs with members losing all their savings. This notwithstanding the board of directors ensures year after year the shareholders get some dividends even if it goes to the extent of borrowing to pay

dividends. The question to be asked therefore was does dividend payout affect the performance (efficiency) of SACCOs in Nairobi County?

1.3 Research Objectives

To determine the relationship between dividend payout and efficiency of SACCOs in Nairobi County

1.4 Value of the Study

The information obtained will add to the existing literature on SACCO efficiency and dividend policy. It will encourage further studies in the area becoming a reference point for researchers. To the policy makers it will help in formulating policies which will help in growth and development of SACCOs and eventually to the country's economic development. The SACCO's management will use this study to understand dividend policy and its effects on performance. This will help them in policy formulation as a way of improving performance. To the members of the SACCO the study will be useful in informing their investment decisions.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter involved a synthesis of the existing literature work on the topic of dividend payment and efficiency of a firm. In the chapter relevant theories are discussed and also an empirical review of researchers who have attempted to fill the gap.

2.2 Theoretical Framework

Theories of dividend policy are dividend irrelevance and the dividend relevance theories. This section involves a discussion of those theories.

2.2.1 The MM Dividend Irrelevance Theory

This theory was developed by Modigliani and Miller in 1961 (Ani, 2016). The theory argues that dividend policy is irrelevant since it has no effect to the value of a firm in a world that is perfect. It defines a perfect world as one where information flows freely and is accessible to everyone, there are no taxes and no transaction costs (Ang, 2011). From the theory if an investor has an expected level of dividends and end up getting more than that they can reinvest the surplus to the company and if they get less they can sell part of their stock to create their expected cash flow (Ani, 2016).

If the greatest concern of an investor is getting high returns, then they can achieve this by reinvesting their dividends or by selling off their shares. They create their own dividend policy through the selling and buying of shares with no transaction costs such as brokerage costs involved.

A firm's dividend policy is a financial decision where a decision is made by the board of directors whether to pay out dividends or retain and reinvest the earnings. Investors are not only want high returns whether they come in the form of dividends or capital gains and are not interested on whether dividend is declared or not and whether low or high dividends are paid (Bulaki, 2019).

According to the theory, the value of a firm is dictated by the ability to generate earnings and minimize the risks of its operations. This means that the organization is able to increase its cash flow earnings while minimizing its risk moving into its future. Therefore a firms value can be established by how optimal its able to realise returns from its assets and not no how the earnings are shared between dividends and reinvestment (Javed, 2019)

Organisations make dividend decisions hand in hand with investment and financing decisions. There are instances where the management may see opportunities that are likely to earn high returns into the future and therefore opt to retain a higher percentage of the profits and pay less divided. In that case payment of dividends becomes a result of capital budgeting decisions. If by paying less dividends and retaining more for reinvestment leads to a decline in the cost of stock, it cannot be explained whether the decline was caused by the dividend or the investment decision. In instances where a firm finances its investments through borrowing and releases cash flow available to payment of dividends, if the cost of stock rises it isn't clear if the rise was a result of the dividend or the financing decision (Ani, 2016). Critics to the theory argue that the perfect world that the theory assumes does not exist in reality. According to the critics both the company and investors pay taxes and also incur cost of floatation and transaction cost (Bulaki, 2019). According to this theory the expected outcome of the study is therefore that dividend policy has no effect to the value of the firm.

2.2.2. The Bird-In-The-Hand Theory

Myron Gordon and John Lintner developed the theory as a way of critiquing the Modigliani-Miller dividend irrelevance theory (Chaw, 2015). The theory argues that investors do not like risks and would prefer current dividends that are almost assured to future capital gains which comes with uncertainty. The theory supports dividend relevance in that dividend payments reduce investor uncertainty about future cash flows and as a result the value of stock rises. The reasoning behind this theory is that investors would prefer what is presently available to them "bird in hand" and not high returns promised in the future "two in the bush" (Menamin, 2017).

The present certain dividend is wat investors would choose even if they are promised higher returns in the future since those high returns would come with some level of uncertainties. The investment environment is one of imperfect information and therefore the value of dividends is different from that of capital gains. A high dividend payout ratio, which is what investors seek, reduces the cost of capital and consequently leads to increase in share price (Nizar, 2010).

From the theory, firms value dividends and capital gains differently. Investors behavior is usually determined by the dividend payment rate and not the capital gains in the future. Where high capital gains are promised means the investment is riskier and therefore investors would demand high discounting rate which consequently increases the cost of the stock. As a result, Gordon and Lintner argued that in cases where the current dividend is reduced by 1% organisations should increase the future capital gains by a rate higher than 1% (Smirnov, 2019).

The theory presumes that the capital structure of organisations is such that they are solely financed through equity and investment projects are financed through retained earnings. Other than equity

and retained earnings other sources of financing are not available to the organisations. Additionally the theory assumes existence of a constant growth in earnings with a constant retention ratio and that the organization's cost of capital is also constant and is higher that the growth rate (Smirnov, 2019). In support of the bird in hand theory the Gordon growth model to show the relationship between dividend and value of the firm was developed.

Critics to the theory argue that in reality, investors are indifferent on dividend payment or capital gains. All that matters to investors is the total returns and not the proportions of dividends and capital gains. According to the critics, investors are likely to reinvest their dividends by buying stock of the same or other companies. As a result, the firm gets back what was paid out as dividends. According to the critics the value of the firm is determined by its ability to generate earnings and manage business risk. Form this theory, the conclusion of the study is expected to be that SACCO performance is related to its dividend policy.

2.2.3. The Tax Preference Theory

This theory was developed by R.H. Litzenberger and K. Ramaswamy. Its argument is that investors are attracted to organisations that pay low dividend and reinvest more to earn capital gains in the future as a way of tax planning. Through the capital gains investors defer the present payment of taxes on dividends to the future. In addition, the rate of tax on capital gains is lower as compared to that of dividends. In the unfortunate event that the investor passes on those who inherit the stock do not pay capital gains when selling it (Smirnov, 2019).

In addition to this, unlike dividends whose tax payment cannot be postponed and is paid every year upon payment, capital gains are only taxed once when the investor is selling off the stock. With

capital gains annual returns are reinvested without subjecting them to taxation and therefore grows frees of tax enabling an investor realise higher growth of their returns eventually unlike if they received dividends (Aldin, 2010). The argument for reinvestment over dividends is that organisations have more funds for growth and expansion of their key operations unlike those that endeavor to grow their dividends. Consequently, the growth in the firm leads to an increase in the value of their stock (Warner, 2019).

Time value of money argues that the value of money today is more than its value in the future and as such the value of present dividends would be higher than that of capital gains in the future (CFI, 2015). However, the tax preference theory argues against the time value of money by claiming that capital gains received in the future will be taxed at a later date than dividends received today and therefore capital gains have reduced tax-adjusted cost of capital than dividend (Bulaki, 2019). As a result, an investor who follows this theory invests in an organization with the goal of growing their money for a given period free of taxes and only pays the tax once they are ready to sell off the stock (Aldin, 2010).

In conclusion due to the higher tax rate on dividends as compared to capital gains, investors will demand higher rates of returns as the dividend yield increases. The recommendation from this theory is for organisations to decrease the dividend payment rate so as to realise growth in the value of the firm (Menamin, 2017). From this theory we would expect the conclusion of the study to show a strong positive relationship between dividend policy and SACCO performance.

2.3 Determinants of Efficiency of a Sacco

Some of the measures of SACCO's performance include dividend policy, growth of the loan portfolio, adoption of technology, growth in membership and its size.

2.3.1 Dividend Policy

Dividend policy determines the proportion of a company's profits that should be distributed to shareholders. Dividend policy affects a firm's performance by increasing the return on assets which translates to growth in profitability (Andaje, 2015). In addition, dividends reduce investors' uncertainty, as a result they accept a lower rate of discounting the firm's future earnings and consequently increasing the firm's value. Also dividend policy has the ability of informing shareholders level of investment in the firm which has an effect on performance (Kamran, 2019). When a firm's policy is known investors are able to make their investment decisions based on their varied investment goals.

2.3.2 Loan Portfolio

The main source of income to a SACCO is the interest earned from loans advanced to members. A well performing SACCO should have the ability to mobilise high deposits from its members and advance a large proportion of the same as loans. The management should understand the characteristics of its membership to come up with appealing loan products. They should also have the right credit policy to guide repayment of the loans to avoid loss of money through dishonored loans (Ajiambo, 2013).In advancing loans, Cash flow is paramount so that at no one point is there

a demand for loans that exceed the available cash flow from member's deposits. In addition adequate assessment of the credit worthiness of borrowers should be undertaken so as to minimize credit risk (Cirindi, 2017).

2.2.3 Membership

A large number of loyal customers is an indicator of a well performing firm. A firm should have the ability to translate the membership into income. In the case of a SACCO they should be in a position to mobilize high level savings from members and also come up with innovative products that persuade the members to take up loans. For continuous growth the number of members joining the SACCO should always be higher than those exiting. There should also be growth in the level of deposits by existing and new members. Member's loyalty can also be built when they can link their growth to their membership to the SACCO. Membership size and their characteristics can help in forecasting cash flows and enable management plan for better ways to grow it which generally improves their financial performance (Simon, 2018).

2.3.4 Size

The size of a SACCO is mainly determined by its capital base from capital investment, its quality of employees, membership and innovativeness Yacine et al (2019). A large firm's benefits from economies of scale in its operations and also has easy access to credit since its seen as one with ability to pay back. Capital investments form the asset base of the organization which are important for it allows the organization to generate revenues, which consequently leads to the growth of the organization and ensures it's a going concern moving into its future. From the organization's asset base investors are able to gauge the returns to expect. An organization' s

management should be able to identify the optimum point in which the assets are able to give the highest returns.

2.4 Empirical Literature Review

In his study (Lincoln, 2015) concluded that dividend policies that led to increase in dividend yield had led to growth in membership and consequently increased SACCO's capitalization. descriptive research design was used in the study to evaluate the effects of dividend payment rate and how it impacts on savings and investment within SACCOs. The target population was SACCOs operating within Nairobi County. The sample was thirty (30) SACCOs which had been licensed by the ministry of Industrial and Enterprise Development. Random sampling sample design was employed in coming up with the sample. Secondary data collected from audited financial statements of the sampled SACCOs for a period of five years. Correlation between the variables also was calculated using the linear regression analysis. Regression model was used to establish the causal relationship. The gap in the study was that the sample used against the population of the study was significantly small and may not have been a representative of the population.

In her study on (Andaje, 2015) concluded that the relationship between net profit after tax and total assets, dividends and revenue is a positive one. Both secondary and primary data was collected from a sample of 179 SACCOs. Primary data was collocted by use of questionnaires while the secondary data was form the audited financial statements. Descriptive statistics was used in coming up with an understanding of the data by organizing and summarizing it. To make valid conclusions from the study inferential statistics were used. Correlation analysis was used to

determine the strength of relationship between the variables while regression analysis was used to establish the direction of the relationship between the dependent and independent variables.

In their study Wambui et al (2021) concluded that capital structure had a positive and significant influence on how SACCOs perform financially and therefore the capital mix needs to be handled carefully. A census study was conducted targeting the 239 SACCOs in Mombasa at the time that did not accept deposits from members. Primary and secondary data was used where questionnaire aided un collecting the primary data and collection forms aided the gathering of secondary data. Multiple regression model was used to examine the influence and the direction of the association among capital structure and SACCOs' financial performance. Stratified sampling accompanied by purposeful sampling was used in this analysis. Stratified sampling was used since the SACCOs were in various sub-counties and each county needed to pick a sample. The gap in the study is that the multiple regression model used does not clearly explain the variables used in showing the relationship.

In his study (Nalwa, 2015) concluded that there was a positive relationship between how SACCOs managed their cash and their growth. The parameters that were used in measuring the growth of a Sacco included the level of profit and its growth over time, the asset base of the organization and the market share it occupied. On the other hand, cash management practices studied included how an organization did its cash planning, how the budgeted for the cash and the controls in place to avoid loss of cash. Population of the study was 169 matatu SACCOs in Thika. Descriptive research design was used to help in understanding the data. Primary data was collected by use of questionnaires. A sample of 34 matatu SACCOs was selected by use of stratified and Random sampling techniques. To determine the direction of relationship between the dependent and

independent variables regression analysis was performed. The gap in the study was that the population of the study of 169 SACCOS was relatively small and the researcher ought to have done a census.

Shibutse etal (2019) on his study on DPS and CCS concluded that payment of dividends significantly affects the performance of an organization. The main theories under which the research was based were the free cash flow capital structure and the pecking order theory. Mixed research design were used where both primary and secondary data was collected for a period of five years from the year 2013 to 2017. The sample of 174 DPS and CCS was used where stratified and purposive sampling techniques were applied in coming up with the sample. Descriptive statistics were used to better explain the data set which were obtained by use of a regression model. Recommendations of the study was that each DPS and CCS should focus on proper management of its assets and liabilities so as to ensure that the liquidity levels at any given time are adequate to meet cash demands that may arise. Additionally, the management should ensure that the dividend policy they come up with has a balance so that sufficient amount is retained to finance high return investment that would require internal financing.

In their study Mudassar et al (2015) concluded that the ratio at which dividends are paid out negatively affects the earnings of the organization in the following year. The study applied logarithmic regression to come up with the relationship. This study covered a time span of thirteen years from the year 1996to 2008. This time period was chosen due to the high economic changes that were happening in Pakistan in that era with the country experiencing a high economic growth at the start which was followed by a downturn. Variables used in measuring Firm's performance

were earning per share and return on assets. The gap in this study is that it's not industry specific and the sample selection method was not documented.

In their study among firms in Nigeria Nwekemezie et al (2019) concluded that the dividend policy of a firm has a positive effect on the value of the firm. Dividends were also found to have an effect on the firm's leverage and its profitability. Variables that were studied to draw this conclusion included profit levels, the firm's leverage ratio, dividend policy, size of the firm and its cash holding policy. Secondary data from financial statements was collected for a ten years' period spanning from 2007 to 2016. Panel ordinary least square regression techniques was used in analyzing the collated data. Recommendation of the study was that managers who wished to raise a firm's value should work on maximizing the profit after tax and also ensure the leverage level of the firm is well managed.

In her study in Mwanza Tanzania (Magambo, 2016) concluded that the dividend policies adopted by firms are a product of the firms after tax profit, its level of liquidity and shareholders' fund. Among these factors profitability was found to be the most significant indicator of the dividend policy a firm will adopt. Secondary data was collected from audited financial statement for a period of eight years from the year 2005 to 2012 from the sampled companies. Purposive sampling technique was used to select the sample of 23 firms. The criteria applied in sample selection was firms that regularly prepared their financial statements, firms that were making profit, firms with a history of payment of dividends and that had been in operation for at least ten years. Correlation and regression analysis were used to determine the nature and direction of relationship between the dependent and independent variables. The recommendations of the study were that a firm's

management should adopt a dividend policy that is in line with their prevailing financial performance especially one that is in line with their profits.

Yasir et al (2017) in Pakistan came up with the findings that dividend payout ratio has insignificant effects on firm profitability but has significant effects on growth. Firm with higher profitability will pay less in dividend to the shareholders and their motive will be to keep more in retained earnings. A sample of 20 firms that regularly paid dividends was selected for data collection. Secondary data was collected for a period of seven years spanning from 2008 to 2014 from the annual financial reports of the firms sampled. Dividend payout ratio was taken as independent variable, firm size and leverage as a control variables and profitability and growth as dependent variables of the study.

(Zalelem, 2021) concluded that financial leverage corporate tax rate, cash balance and extent of shares distributed are significant in determining dividend payout ratio in Ethiopia. Nine years Panel, 2010-2018, data was obtained from audited financial statements The study used six independent variables such as financial leverage, profitability, age of firm, corporate tax rate, operating cash and extent of shares distributed and one dependent variable which is dividend payout ratio. Both descriptive and inferential statistics were used in the interpretation of findings of the study. Random effect regression was used to investigate the impact of determinant factors on the dividend payout policy. Correlation was also conduct to understand the relationship between dependent and independent variables.

2.5 Conceptual Framework

The conceptual framework is summarized in Figure 2.1
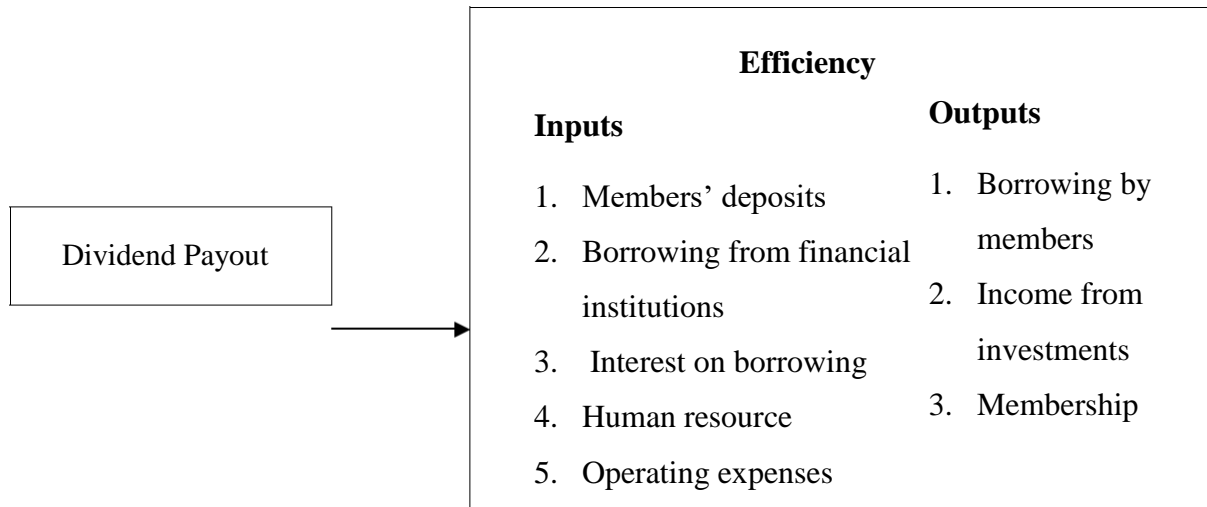
Figure 2.1: Conceptual framework

2.6 Summary of Literature Review and knowledge gaps

From the studies reviewed in the literature there do not seem to be a consensus on whether dividends payout have an effect on the efficiency of a firm or not. However, from the literature, Dividend payouts seems to have information contents which may work for or against the financial health of the SACCO depending on the preference of the investors on dividends or capital gains. In Kenya the co-operative movement is one of the most organized social forces through strong and established regulators. This study seeks to determine if there exist a relationship between dividend payout and efficiency of SACCOs.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The focus of this chapter included the research design, study population, unit of study, method of data collection, data collection and data analysis.

3.2 Research Design

Research design are the techniques that a researcher chooses in bringing together various components of the study in a systematic and objective manner ensuring that the research problem is sufficiently addressed. The design provides a framework on how data is collected, measured and analyzed. This study adopted a descriptive design. Descriptive design is used to describe and measure a market phenomenon at a point in time. The researcher does not attempt to manipulate the phenomena being studied but rather observes and measures as it occurs (Rockinson, 2012). Descriptive research design was therefore useful in gaining knowledge of the population's behavior by observing and measuring a selected sample and drawing inference from it.

3.3 Population

Population is that group about whom you want to be able to draw conclusions. It represents all the items in the area of enquiry. Usually, a population is made of a group of individuals who share demographics that are similar such as age, profession, gender, which sets them apart from another population (Ajiambo, 2013). Members of a population have access to common resources and experience similar constraints from the environment in which they exist. SACCOS in Nairobi are an eminent body of the cooperative sector, providing financial services to its members within a

regulatory regime. They range from financial cooperatives which are those that engage in financial generating investments and non-financial cooperatives which are majorly agricultural. Nairobi County has the highest number of SACCOs in the country (Mburu, 2010).The study population under this study was 46 SACCOs in Nairobi County registered under SASRA, publishes their financial statements and also pays dividends regularly.

3.4 Sample Design

Sample design is a road map that provides the basis on which components of a sample is selected (William, 2004). A sample is a group of items from the population that is that is usually selected for puposes of measurement and whose findings are generalised to the populations (Trochim, 2006). The rationale of use of a sample is when the population is large and where it wouldn't be practical to study all the items in that population The conclusions drawn out from the sample measured are held to be true and representative of the whole population. There are 46 SACCOs registered with SASRA in Nairobi County. The study adopted a census since the population was relatively small. Data was collected on five years' averages from the year 2016 to 2020.

3.5 Data Collection

Data collection methods are the methodical approaches a researcher uses in gathering and measuring information on specific variables that are of interest to them. The data is collected in an accepted and orderly manner that enables the researcher to get answer to the research questions they wished to answer, confirm if the assumptions of the study hold and interpret the outcomes (Nalzaro, 2012). The choice of a method chosen by a researcher is informed by its ability to collect rich information, reliable data which is useful for statistical analysis so that data-driven decisions can be made for the particular research. This study used secondary data. Secondary data is one that

is already gathered from primary sources and documented. The secondary data was obtained from statements of financial performance and the statement of financial position of audited financial statements from the SASRA website which is the regulators. SASRA regulates the deposit taking SACCOs (FOSA). The secondary data collected was sufficient in providing measures of variables and achieving the objectives of the study. The sample was informed by empirical studies done in the same topic.

3.6 Data Analysis

Data analysis involves systematic application of statistical and logical techniques in the process of ensuring data captured by the data collection instruments is correct, transforming it to a state that it can be analysed, and modeling it for ease of interpretation and to help management draw useful information from it while making business decisions.

3.6.1 Pilot Study

Pilot study sought to determine the validity of data collection instruments. validity has to do with accuracy. A data collection instrument can be reliable but not valid. Validity ensures that a data collection instrument measures what it's expected to measure so that the results represent the real characteristics of the physical or social world. To warrant validity of the data collection instrument, the study sought the project supervisor's expert opinion and consult other scholars who have excelled in the topic. A pilot study was undertaken involving 2 SACCOs to ensure that the instrument is simple and has the ability to collect the intended variables. Additionally, the sample collected consisted audited financial statements by a registered audit firm which have undergone the review of the regulator and are posted at the regulator's website.

3.6.2 Analytical Model

The DEA model was used in coming up with the inputs and outputs for the study. DEA model helps determine the efficiency of firms in producing certain level of outputs while spending a given amount of inputs or less (Vinceva, 2005). The inputs that the model used was member's deposits, borrowings from other financial institutions, interest from member's borrowings, human resource and other operating expenses. The output of the model was membership growth, the level of borrowing by members and income earned from investment. The following output oriented linear programming model was used

$$\text{Max} \quad = \frac{\sum_{=1}}{\sum_{=1}}$$

Subject to

$$\frac{\sum_{=1}}{\sum_{=1}} =< 1 \quad \text{for i= 1,2,3.......N} \quad \text{and} \qquad \text{and} \ >=0$$

Where;

M= Output of every SACCO after using N different inputs

N= Input used by every SACCO in producing M different outputs

= Weight of Output

= Weight of Input

= The amount of ^{h}output for ^{h}SACCO

= The amount of ^{h}input for ^{h}SACCO

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The study used the tobit regression analysis in testing the relationship between the variables. Tobit model is usually applied in explaining the relationship between a censored non-negative continuous dependent variable and an independent one. The following tobit regression model was in the form of;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where Y= Efficiency of a SACCO

β_0=Y Intercept
β_1 = Dividend pay-out (Dividend pay-out ratio)

ε=Error term

3.6.3 Significance Test

The t-test was used to test the statistical significance. The t-test was applied to test the statistical significance of regression coefficients at a 95% confidence level, where significant differences was recorded at $p < 0.05$. A t-test is a type of inferential statistic used to determine if there is a significant difference between the means of the groups, which may be related to certain features (Jeanmougin, De Reynies, Marisa, Paccard, Nuel & Guedj, 2010). A t-test allows the testing of an assumption applicable to a population. Thus, the study deemed the t-test to be satisfactory in testing the statistical significance.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

The chapter presents the results of the study based on the research objective. The study sought to determine the relationship between dividend payout and efficiency of SACCOs in Nairobi County. The chapter commences with the presentation of the response rate. Afterward, the descriptive statistics, results of efficiency and correlation analysis are also discussed. Moreover, the chapter presents the discussion of the relationship between dividend payout and efficiency and finally is the summary of the chapter. The study results are presented in tables.

4.2 Response Rate

The study conducted a census. The entire target population was included in the study. Thus, the 46 SACCOs in Nairobi County were included in the study. The importance of conducting the census is that it gives an overall overview for the entire population for policy formulations. The conducting of the census provides a suitable database for comparisons among the unit of analysis. Thus, study results were deemed decisive for generalization purposes for the case of the other SACCOs in the country.

4.3 Descriptive Statistics

The study examined the descriptive statistics of the variables and the study findings are demonstrated in Table 4.1

Table 4.1: Descriptive Statistics

Variable	Observation	Mean	Standard deviation	Minimum	Maximum
Members' deposits	230	2.36E+08	6.14E+07	9.35E+07	3.45E+08
Borrowing from financial institutions	230	1.67E+07	4726073	8597782	2.47E+07
Interest on borrowing	230	1755889	498008.5	905988.7	2606070
Human resource	230	256	124	93	812
Operating expenses	230	6164093	3090829	960924.2	1.99E+07
Borrowing by members	230	3.63E+07	1.82E+07	5665521	1.17E+08
Income from investments	230	8215098	4061886	2979994	2.57E+07
Membership growth	230	7.659854	1.962741	1.00789	9.977795
Dividend Payout ratio	230	0.3271914	0.041548	0.17878	0.475214
Efficiency	239	.7363053	.1048982	.3859515	.878213

The results presented in Table 4.1 show the minimum members' deposits from the savings and credits cooperative societies in Nairobi County between 2016 and 2020 has been Ksh 9.35E+07 with a maximum of Ksh 3.45E+08. The mean score of members' deposits in the same period

between 2016 and 2020 was Ksh 2.36E+08, with a standard deviation of Ksh 6.14E+07. The results implied the members' deposits from the majority of the SACCOs have been around Ksh 2.36E+08 between 2016 and 2020. Further, the minimum borrowing from financial institutions between 2016 and 2020 has been Ksh 8, 597, 782 with a maximum of Ksh 2.47E+07. The mean score of the borrowing from financial institutions was found to be Ksh 1.67E+07 with a standard deviation of Ksh 4,726,073. The results signified the borrowing from financial institutions by most of the SACCOs has been approximately Ksh 1.67E+07.

The minimum interest on borrowing was Ksh 905, 988.7 with a maximum of Ksh 2, 606, 070. The mean score was Ksh 1, 755, 889 with a standard deviation of Ksh 498, 008.5. The results implied the interest on borrowing from financial institutions by most of SACCOs was found to be around Ksh 1, 755, 889 between 2016 and 2020. The least number of employees (human resource) from the savings and credits cooperative societies in Nairobi County between 2016 and 2020 was found to be 93, with the most being 812. The mean score was 256, with a standard deviation of 124. The minimum operating expenses was found to be is Ksh 960, 924.2 with a maximum of Ksh 1.99E+07. The mean score of the interest on borrowing was found to be Ksh 6,164,093 with a standard deviation of Ksh 3,090, 829. The results implied the operating expenses by most of SACCOS was found to be around Ksh 6,164,093 between 2016 and 2020. It was found that the minimum borrowing between 2016 and 2020 has been Ksh 5, 665, 521 with the maximum been Ksh. 1.17E+08. The mean score of borrowing by members in the same period between 2016 and 2020 was found to be Ksh 3.63E+07 with a standard deviation of Ksh 1.82E+07. The results implied that the borrowing by members in the period between 2016 and 2020 has been around Ksh 3.63E+07.

The study results show the minimum income from investments between 2016 and 2020 has been Ksh. 2,979,994 with a maximum of Ksh. 2.57E+07. The mean score was found to be Ksh. 8, 215, 098 with a standard deviation of Ksh. 4, 061, 886. This signified the income from investments among most of the savings and credits cooperative societies in Nairobi County between 2016 and 2020 has been around Ksh. 8, 215, 098. The study results presented in Table 4.1 shows that the minimum membership growth among the savings and credits cooperative societies in Nairobi County between 2016 and 2020 was 1.00789%, with a maximum of 9.977795%. The mean score of membership growth was 7.659854% with a standard deviation of 1.96274%. The results intimated membership growth among most of the savings and credits cooperative societies in Nairobi County between 2016 and 2020 had been around 7.659854%. The study results show the minimum dividend ratio of the firms between 2016 and 2020 has been 0.17878 with a maximum of 0.475214. The mean score has been 0.3271914 with a standard deviation of 0.041548. In addition, the study results explicate the majority of the firms had been having an efficiency of around .7363053(mean) with a minimum of .3859515 and a maximum of .878213

4.4 Efficiency

The study sought to examine the output-oriented efficiency scores with constant returns to scale for 46 SACCOs between 2016 and 2020 using the DEA model. DEA is a non-parametric technique that assigns an efficiency score ranging from 0 to 1 (0% to 100%) to the decision-making units. The outputs in the study included borrowing by members, income from investments and membership growth, while the input consisted of members' deposits, borrowing from financial institutions, interest on borrowing, human resources and operating expenses. The efficiency value was measured on a scale of 0 to 1 (0% and 100%). The study results are summarized in Table 4.2

Table 4.2: Constant Returns to Scale (CCR) Efficiency Scores (2016-2020) output oriented

SACCO	2016	2017	2018	2019	2020	Average	Rank
Acumen Sacco Society Ltd	0.9130	0.6624	0.5405	0.5890	0.7504	**0.6911**	16
Afya Sacco Society Ltd	0.5955	0.6643	0.6782	0.6004	0.6912	**0.6459**	24
Airports Sacco Society Ltd	0.6307	0.6843	0.6468	0.7138	0.7417	**0.6835**	17
Ardhi Sacco Society Ltd	0.5682	0.6955	0.5133	0.4895	0.5179	**0.5569**	40
Asili Sacco Society Ltd	0.7199	0.5561	0.7635	0.7106	0.8022	**0.7105**	13
Chai Sacco Society Ltd	0.8888	0.5312	0.9321	0.5051	0.9302	**0.7575**	7
Chuna Sacco Society Ltd	0.4895	0.7930	0.4905	0.7390	0.6739	**0.6372**	27
Comoco Sacco Society Ltd	0.4650	0.4848	0.4362	0.5421	0.5227	**0.4902**	43
Elimu Sacco Society Ltd	0.8839	0.6102	0.7233	0.7490	0.6484	**0.7230**	11
Fundilima Sacco Society Ltd	0.4866	0.6010	0.6727	0.4862	0.6188	**0.5731**	39
Harambee Sacco Society Ltd	0.4834	0.5311	0.7504	0.6677	0.8394	**0.6544**	22
Hazina Sacco Society Ltd	0.7138	0.5320	0.7250	0.6427	0.6264	**0.6480**	23
Jamii Sacco Society Ltd	0.6486	0.4239	0.6291	0.6050	0.6714	**0.5956**	34
Kencream Sacco Society Ltd	0.4810	0.4910	0.4183	0.5274	0.4878	**0.4811**	44
Kenpipe Sacco Society Ltd	0.6085	0.6624	0.5405	0.5766	0.5257	**0.5827**	37
Kenversity Sacco Society Ltd	0.6458	0.6826	0.7343	0.7240	0.8196	**0.7213**	12
Kenya Bankers Sacco Society Ltd	0.7883	0.8647	0.7540	0.7542	0.8714	**0.8065**	3
Kenya Police Sacco Society Ltd	0.4794	0.5786	0.6040	0.7109	0.6489	**0.6044**	33
Kimisitu Sacco Society Ltd	0.4687	0.6385	0.6875	0.6320	0.4789	**0.5811**	38
Kingdom Sacco Society Ltd	0.7504	0.5885	0.7414	0.8301	0.7414	**0.7304**	10

Magereza Sacco Society Ltd	0.7895	0.6907	0.8969	0.7490	0.7489	**0.7750**	5
Maisha Bora Sacco Society Ltd	0.5870	0.5462	0.6937	0.6297	0.6407	**0.6195**	31
Mwalimu National Sacco Society Ltd	0.7630	0.7432	0.7459	0.7589	0.7559	**0.7534**	8
Mwito Sacco Society Ltd	0.7499	0.5231	0.6104	0.8072	0.6677	**0.6717**	19
Nacico Sacco Society Ltd	0.6590	0.6349	0.6092	0.5051	0.5304	**0.5877**	35
Nafaka Sacco Society Ltd	0.6285	0.6127	0.6872	0.6724	0.6250	**0.6452**	25
Nation Sacco Society Ltd	0.5311	0.5527	0.6355	0.7042	0.7175	**0.6282**	30
NSSF Sacco Society Ltd	0.6413	0.6416	0.7451	0.6454	0.6956	**0.6738**	18
Nyati Sacco Society Ltd	0.5540	0.5066	0.5031	0.5853	0.5912	**0.5480**	42
Safaricom Sacco Society Ltd	0.8626	0.7694	0.8169	0.8977	0.8177	**0.8328**	2
Sheria Sacco Society Ltd	0.8087	0.4881	0.9838	0.7495	0.9101	**0.7880**	4
Shirika Deposit Taking Sacco Society Ltd	0.4001	0.4550	0.4757	0.4894	0.5643	**0.4769**	45
Shoppers Sacco Society Ltd	0.6376	0.6939	0.5489	0.5389	0.7389	**0.6316**	29
Stima Sacco Society Ltd	0.7379	0.4894	0.8490	0.8399	0.7934	**0.7419**	9
Taqwa Sacco Society Ltd	0.7420	0.8940	0.4684	0.6930	0.6894	**0.6974**	15
Telepost Sacco Society Ltd	0.8535	0.6391	0.5314	0.6787	0.6556	**0.6717**	20
Tembo Sacco Society Ltd	0.9687	0.4510	0.6891	0.4426	0.6396	**0.6382**	26
Ufanisi Sacco Society Ltd	0.6749	0.7049	0.6437	0.6012	0.7082	**0.6666**	21
Ukristo Na Ufanisi Wa Anglicana Sacco Society Ltd	0.6580	0.3298	0.7284	0.6918	0.7539	**0.6324**	28
Ukulima Saco Society Ltd	0.5791	0.3801	0.3714	0.4400	0.5005	**0.4542**	46

Unaitas Sacco Society Ltd	0.6878	0.5763	0.7506	0.7466	0.7469	**0.7017**	14
United Nations Sacco Society Ltd	0.7474	0.4399	0.7467	0.7363	0.3925	**0.6126**	32
Ushuru Sacco Society Ltd	0.6906	0.7319	0.8147	0.7723	0.8191	**0.7657**	6
Wana-anga Sacco Society Ltd	0.6598	0.7817	0.4495	0.4495	0.4415	**0.5564**	41
Wanandege Sacco Society Ltd	0.5390	0.4749	0.5293	0.6848	0.6939	**0.5844**	36
Waumini Sacco Society Ltd	0.8786	0.5596	0.9732	0.9487	0.8658	**0.8452**	1
Average	**0.6576**	**0.5997**	**0.6626**	**0.6577**	**0.6807**	**0.6517**	

Based on the results presented in Table 4.2, the average efficiency score on savings and credits cooperative societies in Nairobi County between 2016 and 2020 was found to be 65.17%. This implied that most of the savings and credits cooperative societies in Nairobi County scored an efficiency of 65.17% on the relationship between output (borrowing by members, income from investments and membership growth) and input (members' deposits, borrowing from financial institutions, interest on borrowing, human resource and operating expenses) between 2016 and 2020. The average efficiency of the SACCOs in 2016 was 65.76%, 59.97% in 2017, 66.26% in 2018, 65.77% in 2019 and 68.07% in 2020. The most inefficient year of SACCOs was 2017 and this could have been contributed by the fact that it was the electioneering period. The most efficient SACCOs with an efficiency of above 80% included Waumini Sacco Society Ltd, Safaricom Sacco Society Ltd and Kenya Police Sacco Society Ltd with an efficiency score of 84.52%, 83.28% and 80.65%, respectively but did not operate on the frontier. The most efficient SACCO, Waumini Sacco Society Ltd, with an average of 84.52% between 2016 and 2020, can be used as the

benchmark by other SACCOs, particularly inefficient ones (SACCOs with less than 50% efficiency).

4.5 Correlation Analysis

The correlation analysis is used to show the association between the independent and dependent variables. The association can be positive, negative, or no association. The study conducted a correlation analysis to examine the association between dividend payout and efficiency. The study results are presented in Table 4.3

Table 4.3: Correlation Analysis

		Efficiency	Dividend Payout
Efficiency	Pearson Correlation	1.000	
	Sig. (2-tailed)		
Dividend Payout	Pearson Correlation	.7780*	1.000
	Sig. (2-tailed)	0.000	

The correlation results depicted in Table 4.3 establish a positive and significant association between dividend payout and efficiency (r=.7780, p=.000). The results indicate that dividend payout and efficiency move in the same direction. An increase in dividend payout will increase the efficiency, while a decrease in dividend payout will decrease the efficiency. Investors are

willing to continue investing in companies that have well dividend payout since it shows the institutions are making profits and can pay back any investments. Investors shy away from companies with a reducing dividend payout because it shows the company is not generating enough revenue to pay out the investors. The study results agree with the findings of Shibutse et al. (2019), who noted that payment of dividends significantly affects the performance of an organization. Moreover, Kanakriyah (2020) reported that dividend policy explains a lot of a company's financial performance, meaning that the dividend policy has a statistically significant impact on company financial performance. In addition, Matendechere (2015) showed the extent of the relationship between dividends and firm performance is significant.

4.6 Relationship Between Dividend Payout and Efficiency

The study used the Tobit model to examine the relationship between dividend payout and efficiency. The study results presented the coefficient of determination (Pseudo R squared) and Tobit regression coefficients. To generate a Tobit model in Stata, the lower limit was 0 and the upper limit was 1. The range of possible efficiency of the SACCOs was between 0 and 1. Moreover, Tobit regression does not have R-squared that is found in OLS regression, and thus Pseudo R squared was used to examine the percentage that dividend payout explains efficiency. The results are shown in Table 4.4

Table 4.4: Relationship Between Dividend Payout and Efficiency

Efficiency	Coef.	Std. Err.	z	P>z
Dividend payout	2.039	0.072	28.360	0.000
constant	0.069	0.025	2.770	0.006

Coefficient of Determination (Pseudo R squared) = 0.6053

0 left-censored observations

230 uncensored observations

0 right-censored observations

The model is;

Y=0.069+2.039X

Where Y is efficiency and X is the dividend payout

The study results presented in Table 4.4 show that dividend payout, measured using the dividend payout ratio, is satisfactory in explaining the efficiency of the savings and credits cooperative societies in Nairobi County. The coefficient of determination, also known as the Pseudo R squared, was 0.6053 (60.53%). This implied that dividend payout explains 60.53% of the variations in efficiency. In addition, the study results showed that dividend payout is positively and significantly related to efficiency (β=2.039 p=0.000). The results implied that a unitary change in the dividend payout would change the efficiency of savings and credits cooperative societies in Nairobi County

by 2.039 units when other factors are held constant. The constant 0.069 implies that without the dividend payout, the efficiency of the firms is 0.069 units. The 0 left-censored observations showed that none of the savings and credits cooperative societies in Nairobi County had an efficiency of less than 0 (0%) and also none of the institutions had an efficiency of more than 1(100%) as supported by 0 right-censored observations. Thus, the SACCOs' efficiency ranged between 0(0%) and 1(100%).

The study results concur with Andaje's (2015) findings, which indicated the relationship between net profit after tax and total assets, dividends and revenue is positive. In addition, Shibutse et al. (2019) noted that payment of dividends significantly affects the performance of an organization. Moreover, Nwekemezie et al. (2019) found that the dividend policy has a positive effect on the firm's value. In addition, Kanakriyah (2020) reported that dividend policy explains a lot of a company's financial performance, meaning that the dividend policy has a statistically significant impact on company financial performance. Moreover, Matendechere (2015) showed that the relationship between dividends and firm performance is significant. In addition, it was reported by Mamaro and Tjano (2019) that a positive relationship exists between dividend payout and financial performance. Notably, a positive relationship is found between dividend payout with net profit margins, leverage and growth.

4.7 Summary of the Chapter

The study presented the descriptive statistics of members' deposits, borrowing from financial institutions, interest on borrowing, human resources, operating expenses, borrowing by members, income from investments, membership growth, dividend payout ratio and efficiency. The descriptive statistics was based on the mean, standard deviation, minimum value and maximum.

The study presented the output-oriented efficiency scores with constant returns to scale for 46 SACCOs between 2016 and 2020 using the DEA model. The outputs in the study included borrowing by members, income from investments and membership growth, while the input consisted of members' deposits, borrowing from financial institutions, interest on borrowing, human resources and operating expenses. The efficiency value was measured on a scale of 0 to 1 (0% and 100%). The correlation results depicted a positive and significant association between dividend payout and efficiency (r=.7780, p=.000). It was found that dividend payout, measured using the dividend payout ratio, is satisfactory in explaining the efficiency of the savings and credits cooperative societies in Nairobi County. The coefficient of determination, also known as the R square, was 0.6053 (60.53%). In addition, the study results showed that dividend payout is positively and significantly related to efficiency (β=2.039 p=0.000). The results implied that a unitary change in the dividend payout would change the efficiency of savings and credits cooperative societies in Nairobi County by 2.039 units when other factors are held constant. The results of the study were presented using the tables.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter presents the summary of the findings, conclusion and recommendations. Each section is comprehensively detailed. In the last section of the chapter, the limitations of the study and suggestions for further research is also presented.

5.2 Summary

Based on the descriptive statistics, it was found the members' deposits from the majority of the SACCOs have been around Ksh 2.36E+08 (mean score) between 2016 and 2020. Further, the borrowing from financial institutions by most of the SACCOs has been approximately Ksh 1.67E+07 (mean score). It was found the interest in borrowing by most of the SACCOs has been around Ksh 1, 755, 889 (mean score) between 2016 and 2020. The least number of employees (human resource) from the SACCOs between 2016 and 2020 was found to be 93, with the most being 812. The operating expenses by most of SACCOS was found to be around Ksh 6,164,093 (mean score) between 2016 and 2020. Further, the study revealed the borrowing by members between 2016 and 2020 has been around Ksh 3.63E+07 (mean score). It was found the income from investments among most of the SACCOs between 2016 and 2020 has been around Ksh. 8, 215, 098 (mean score). The study established that membership growth among most of the SACCOs between 2016 and 2020 had been around 7.659854% (mean score). The study explicated the majority of the firms had been having an efficiency of around .7363053 (mean) with a minimum of .3859515 and a maximum of .878213.

The study found most of the savings and credits cooperative societies in Nairobi County scored an efficiency of 66.62% on the relationship between output (borrowing by members, income from investments and membership growth) and input (members' deposits, borrowing from financial institutions, interest on borrowing, human resource and operating expenses) between 2016 and 2020. The average efficiency of the SACCOs in 2016 was 65.76%, 59.97% in 2017, 66.26% in 2018, 65.77% in 2019 and 68.07% in 2020. The study results showed the most inefficient year was 2017 and this could have been contributed by the elections. The study find the most efficient SACCOs with an efficiency of above 80% included Waumini Sacco Society Ltd, Safaricom Sacco Society Ltd and Kenya Police Sacco Society Ltd with an efficiency score of 84.52%, 83.28% and 80.65%, respectively but did not operate on the frontier. The most efficient SACCO, Waumini Sacco Society Ltd, with an average of 84.52% between 2016 and 2020, can be used as the benchmark by other SACCOs, particularly inefficient ones (SACCOs with less than 50% efficiency).

The correlation results showed that a positive and significant association exists between dividend payout and efficiency (r=.7780, p=.000). The results implied that dividend payout and efficiency move in the same direction; that is an increase in dividend payout will increase the efficiency, while a decrease in dividend payout will decrease the efficiency. It was found the coefficient of determination, also known as the R square, was 0.6053 (60.53%). This indicated dividend payout explains 60.53% of the variations in efficiency. In addition, the study found that dividend payout is positively and significantly related to efficiency (β=2.039 p=0.000). The results implied that a unitary change in the dividend payout would change the efficiency of savings and credits cooperative societies in Nairobi County by 2.039 units when other factors are held constant.

5.3 Conclusions

Based on the study's findings, it is concluded that the average efficiency score on savings and credits cooperative societies in Nairobi County between 2016 and 2020 has been around 66.62%. The study concludes that the average efficiency of the SACCOs in 2016 was 65.76%, 59.97% in 2017, 66.26% in 2018, 65.77% in 2019 and 68.07% in 2020. The most inefficient year of SACCOs was 2017 and this could have been due to the elections in the country. It is concluded that only three SACCOs had an efficiency of above 80% and this included Waumini Sacco Society Ltd, Safaricom Sacco Society Ltd and Kenya Police Sacco Society Ltd with an efficiency score of 84.52%, 83.28% and 80.65%, respectively. The study concludes that the most efficient SACCO, Waumini Sacco Society Ltd, with an average of 84.52% can be used as the benchmark by other SACCOs and notably the inefficient one that score an efficiency of less than 50%. Further, it is concluded that efficiency can be determined by the relationship between output (borrowing by members, income from investments and membership growth) and input (members' deposits, borrowing from financial institutions, interest on borrowing, human resource and operating expenses).

Moreover, the study concludes that dividend payout and efficiency is positively and significantly associated. Moreover, it is concluded that dividend payout can explain 60.53% of the variations in efficiency. The study concludes the dividend payout is positively and significantly related to efficiency. Notably, it was found a unitary change in the dividend payout would change the efficiency of savings and credits cooperative societies in Nairobi County by 2.039 units when other factors are held constant. The study concludes that dividend payout is a matter of considerable

importance to management and SACCO members and economists seeking to understand and appraise the functioning of the SACCOs in the country.

A certain percentage of SACCOs' earning is paid out to shareholders in the form of dividends. The main aim of dividends in a firm is shareholder wealth maximization, to increase the firm's value and signal stakeholders that the firm's finances are sound. The study concludes that a dividend is one of the significant determinants of the performance of SACCOs in Nairobi County. The study concludes that dividend payment conveys to shareholders how the company is profitable and financially strong. Based on the study results, the dividend payout ratio can predict future earnings and hence be used to determine financial performance. The increase in payout ratio signals to shareholders a long-term rise in the firm's expected earnings. The study concludes that dividend payout is one of the fundamental factors that give outsiders information concerning an organization's performance.

5.4 Recommendations

Based on the study's findings, it is recommended that managers of the SACCOs in Nairobi County need to dedicate adequate time to designing a dividend policy that will enhance firm performance and, therefore, shareholder value. Managers need to consider factors such as borrowing by members, income from investments and membership growth, members' deposits, borrowing from financial institutions, interest on borrowing, human resource and operating expenses since it affects the efficiency of the institutions. The management of the SACCOs could use the study findings as the starting point to understand how industry factors influence the dividend payout ratios of their firms. Further, it is recommended that the SACCOs should pay dividends to ensure that they have a positive outlook in the future. Moreover, it is also recommended that firms should

maintain a clear and consistent dividend policy for the dividend policy to affect the performance of the firm. Sacco dividend policies should be established to guide the organizations in surplus distributions. This will guide them on when to pay dividends, how to pay dividends and when to retain surpluses.

In addition, it is recommended that investors can use this information to make better decisions in where to invest their funds after evaluating what their interests are. SACCOs that are more efficient imply they minimize the costs while maximizing the outputs, which will translate to an increase in dividend payment. Investors need to be wise while investing to minimize the chances of investing in firms with a reducing return. The study also recommends that shareholders should also understand that when a Sacco has an unfavorable dividend payout ratio, it is due to either bad profits or investment in growth opportunity. In some cases, their dividends are deferred to increase profitability for the SACCO to have a good dividend policy in the future.

Furthermore, it is recommended that government should develop favorable policies that will ensure the SACCOs continue to thrive. The government needs to consider the net profits realized by the firms before taxing them so that the firms can remain sustainable and attract more investors based on the dividend payout ratio. The government also needs to develop a framework that will ensure the management of the SACCOs does not have complete control to minimize the chances of the self-interest and collapse of the SACCOs. The government needs to be checking now and then the efficiency of the SACCOs, given that SACCOs are critical in the growth of the economy.

5.5 Limitations of the Study

The study was limited to only SACCOs within Nairobi County. Another limitation was that efficiency was only determined using outputs: borrowing by members, income from investments

and membership growth and input: members' deposits, borrowing from financial institutions, interest on borrowing, human resource and operating expenses. The study faced limitations in that the websites of SASRA was not accessible for some times. Moreover, not all the required information was available in the published reports. However, the researcher sought information from the SACCOs' websites and also visited some of the SACCOs to access their annual financial reports.

5.6 Suggestions for Further Research

The study assessed the relationship between dividend payout and efficiency of SACCOs in Nairobi County. Therefore, another study can be conducted in the future to examine the role of internal control systems on the efficiency of SACCOs in Nairobi County. Moreover, another study can be conducted to examine factors that influence the efficiency of the SACCOs in Nairobi County other than dividend payout. Moreover, it is recommended that other studies can be conducted in counties other than Nairobi County. This will be essential in comparing the results for further identification of more research gaps for future studies.

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APPENDICES

Appendix I: List of registered SACCOS in Nairobi

	NAME
1	Acumen Sacco Society Ltd
2	Afya Sacco Society Ltd
3	Airports Sacco Society Ltd
4	Ardhi Sacco Society Ltd
5	Asili Sacco Society Ltd
6	Chai Sacco Society Ltd
7	Chuna Sacco Society Ltd
8	Comoco Sacco Society Ltd
9	Elimu Sacco Society Ltd
10	Fundilima Sacco Society Ltd
11	Harambee Sacco Society Ltd
12	Hazina Sacco Society Ltd
13	Jamii Sacco Society Ltd
14	Kencream Sacco Society Ltd
15	Kenpipe Sacco Society Ltd
16	Kenversity Sacco Society Ltd

17	Kenya Bankers Sacco Society Ltd
18	Kenya Police Sacco Society Ltd
19	Kimisitu Sacco Society Ltd
20	Kingdom Sacco Society Ltd
21	Magereza Sacco Society Ltd
22	Maisha Bora Sacco Society Ltd
23	Mwalimu National Sacco Society Ltd
24	Mwito Sacco Society Ltd
25	Nacico Sacco Society Ltd
26	Nafaka Sacco Society Ltd
27	Nation Sacco Society Ltd
28	NSSF Sacco Society Ltd
29	Nyati Sacco Society Ltd
30	Safaricom Sacco Society Ltd
31	Sheria Sacco Society Ltd
32	Shirika Deposit Taking Sacco Society Ltd
33	Shoppers Sacco Society Ltd
34	Stima Sacco Society Ltd

35	Taqwa Sacco Society Ltd
36	Telepost Sacco Society Ltd
37	Tembo Sacco Society Ltd
38	Ufanisi Sacco Society Ltd
39	Ukristo Na Ufanisi Wa Anglicana Sacco Society Ltd
40	Ukulima Saco Society Ltd
41	Unaitas Sacco Society Ltd
42	United Nations Sacco Society Ltd
43	Ushuru Sacco Society Ltd
44	Wana-anga Sacco Society Ltd
45	Wanandege Sacco Society Ltd
46	Waumini Sacco Society Ltd