DETERMINANTS OF DIVIDEND POLICY OF SAVINGS AND CREDIT CO-
OPERATIVE SOCIETIES IN KENYA

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DECLARATION
I understand, declare that this my original work and has not been presented to any institution or university other than University of Nairobi for examination

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

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DEDICATION

I dedicate this project to my friend Emmanule Muteti who have supported me throughout.
ABSTRACT

Dividend policy plays a major role in the decision-making process by financial managers. The management of a firm must decide the amount of profit to be retained in the business and then up with the ratio for allocation of dividends to each shareholder. The decision on how much profit should be retained and the amount paid in form of dividends is a vital element in dividend policy. This study sought to establish the determinants of dividend policy of SACCOs in Kenya. Specifically, the study examined the influence of financial leverage, liquidity, profitability firm size, Working capital management and investments on dividend policy of SACCOs in Kenya. The study adopts a causal research design. The population targeted by the study was SACCOs in Kenya. The study used Slovin’s formula to calculate sample size 39 164 registered SACCOs in Kenya. The study collected secondary data and data was analyzed using descriptive statistics and regression analyses. The study concluded that the determinants of dividend policy of SACCOs in Kenya are liquidity, financial leverage, profitability, firm size, working capital and investment. The dividend paid by SACCOs in Kenya increases with increase in working capital, profitability and firm size. Dividend paid by SACCOs in Kenya is adversely affected by increase in liquidity, financial leverage and investment. The study recommends that SACCOs should mitigate distress caused by high rates of financial leverage by signing of covenants on debts; SACCOs should not indulge in declaring exorbitant amounts if dividends in the effort to attract more investment at the expense of liquidity position; smaller SACCOs should come up with strategies to avoid information asymmetries which may affect the dividend payment and; further research on the influence of government regulations and organizational polices on dividend payment by SACCOs in Kenya.
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LIST OF ABBREVIATIONS

**NPV:** Net Present Value

**NSE:** Nairobi Securities Exchange

**SACCOs:** Savings and Credit Co-Operative Societies

**SASRA:** Sacco Societies Regulatory Authority

**VIF:** Variance Inflation Factor
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Dividends are the part of net earnings by a company that are appropriated the shareholders proportionate to the shares they hold in the company (Pandey, 2011). Decisions on dividend payments are made by company directors. When a company makes a profit, they must decide on what to do with those profits. They could continue to retain the profits within the company, or they could pay out the profits to the owners of the firm as dividends. Once the company decides on whether to pay dividends, they may establish a dividend structure, which may in turn impact on investors and perceptions of the company in the financial markets which bring impact on the firm’s value.

Dividend payout is the percentage of profits paid to shareholders in dividends. It is the ratio of annual dividend per share to profits per share of the firm (Brockington, 1993). Profit making organizations develop dividend policy which helps managers in the appropriation of dividends proportionate to shares capital owned by each shareholder (Pandey, 1999). Dividend policy regulates and guides a firm’s management when issuing dividends to shareholders. Large firms that have steady flow of cash and few prospects for further growth have a tendency to direct greater portion of profit earned towards payment of dividends. According to Brigham and Ehrhardt (2011), large companies can also use profit earned to buy stocks. When a firm has good prospects for growth and viable opportunities for investment, they tend to direct much of the profit earned to the new growth opportunities. Such firm minimizes the amount of dividends paid to shareholders.

Dividends can be paid in different forms including cash payments, payments in terms of stock and payment in form of property (Kisaka, Kitur and Mbithi, 2015). Dividends paid in cash are made by apportioning cash to the shareholders. Payments in terms of stock are made by adding
more shares to the shareholders in line with the shares owned by each shareholder. Payment of dividends in form of property is actualized through physical assets such as equipment and land. According to Banarjee (2008), property dividends can also be in form of inventories.

Perspectives on dividends differ in terms of conservatives, those in the middle and radical groups (Anupam, 2012). Those holding conservative view of dividends attribute increase in the firm value to the dividends paid to shareholders. The middles groups opine that firm value does not change with payments of dividends. Contrary to conservatives, persons who hold the radical view argue that payment of dividends lowers firm value. Payment of dividends may differ from one country to another (Chay and Suh, 2008). The difference is orchestrated by variations in policies and laws regulating business, difference in tax policies and the regulations that govern policies on dividends.

1.1.1 Dividend Policy

Dividend policy plays a major role in the decision-making process by financial managers. The management of a firm must decide the amount of profit to be retained in the business and then up with the ratio for allocation of dividends to each shareholder. If the managers decide to retain a greater portion of the profit, the amounts of dividends earned by shareholders reduces (Pandey 2006). The decision on how much profit should be retained and the amount paid in form of dividends is a vital element in dividend policy. Other considerations in the dividend policy are budgets for administration, how stable dividends are, repurchasing of stock and the level of liquidity in the organization (Kirungumi 2003).

According to Baker, Powell, and Veit (2002), formulation of dividend policy remains a challenge to most financial managers and scholars despite the important role it plays in financial management. One of the factors that render dividend policy a challenge is the existence of diverse reasons put forward to explain what determines various policies (Desai,
Foley and Hines, 2001). Bebczuk, (2004) posit that agency problems emanating from conflict between managers and shareholders is a major factor that explain differences in dividend policies. The owners of a company consider dividends as a tool that enables them to take charge of resources from the managers. On the contrary, managers of a company use dividends as an indicator to the capital market signaling that the company is profitable.

The level of performance in a firm can be deduced from its dividend policy (Rigar and Mansouri, 2003). The amounts of dividend payments made by a firm can be a pointer of financial heath within the organization and the investment opportunities available. Most of shareholders do not approve reduction in dividend payments with a view to use much of the profit made in repurchasing stock. However, retention of larger portion of profit can be viewed as an indicator of growth of a company.

Policies that guide dividend payments differ in every organization. According to Alkuwari, (2009), each organization designs its policy on dividend payment according to the state of business environment where it operates. Majority of organizations opt for retention of larger portions of the profit made in a financial year in order to expand their capital base.

A critical area of dividend policy is the decision on how much of the profit should be paid as dividends and how much should remain in the organization. The amount of profit ploughed back into the organization forms a major source of fund for growth purposes. Nonetheless, owners of a company advocate for payments of high rates of dividends. Hence firm's management, in implementing its dividend decisions, should properly weigh its investment needs against those of the shareholders. This then will enable the management to come up with an optimal dividend policy determined solely by the profitability of investment (Kirugumi 2003).
Majority of organizations formulate policies on dividends which are guided by a principle that the fall in levels of dividends shows weakness in the organization and managers should raise the amount of dividends after ascertaining sustainability of such levels or future possibilities for improvement (Horne 2001). Consequently, shareholders whose own consumption pattern closely follows the dividends pattern of the firm will be attracted by the knowledge that they are unlikely to encounter imperfect capital markets in order to make dividends or consumption pattern adjustments.

1.1.2 Determinants of Dividend Policy

Empirical studies have established various determinants of dividend policy including financial leverage, liquidity, profitability, firm size, working capital management, investments, and share price volatility. The amount of dividends reduces with increase in financial leverage and reduction in financial leverage lead to rise in dividends (Zeng 2003; Fenn and Liang 2001). According to James, (2009), Baker and Wurglerm (2004), Baker (2009), Okpara (2010) and Muthusamy (2010) the amount of dividends paid reduces with increase in liquidity of a firm and the fall in liquidity leads to rise in dividends.

Profitability is directly related to dividend payout (Lasher, 2008, Al-Kuwari 2009, Abdi 2010). When a firm makes higher profits in a given trading period, it is expected to issue out higher levels of dividends. Similarly, an increase in the size of a firm corresponds to an increase in the amount of dividends paid (Deshmukh, 2005, Al- Shubiri, 2011). Firms with adequate working capital have sound cash position and thus pay higher dividends than firms with inadequate working capital (Ahmed & Javid, 2009, Pandey, 2010). Availability of investments opportunities for a company is also a major factor determining dividend payments (James, 2009).
Volatility in the prices of stock influences dividend payments. Higher volatility in the prices of stocks lead to higher dividend payments and the fall in volatility of stock prices lead to increase in dividend payments (Chijoke and Aruoriwo, 2011). On the contrary, Zuriawati, Joriah and Abdul (2012) established that increase in volatility in the prices of shares lead to fall in dividend payments but the influence is not significant.

1.1.3 SACCOs in Kenya

Kenya has experienced growth in savings and credit co-operatives. SACCOs have made great contributions in socio-economic development in Kenya by improving access to fund for business and personal (Wambua, Rotich and Anyango, 2016). The body that regulates SACCOs is known as Sacco Societies Regulatory Authority (SASRA). SASRA authenticates and register all SACCOs in Kenya. The legislative framework that guides operations of Kenyan SACCOs: the Sacco Societies Act that was enacted in the year 2008. The act regulates licensing and monitoring Kenyan SACCOs. Appendix III shows that SASRA has registered 164 SACCOs (SASRA 2017).

Kenyan SACCOs plays an important role in fulfilling financial need of people who cannot qualify for credit facilities offered by banks (Kadagi, Ahmed and Wafula, 2015). SACCOs accept small monthly deposits and have low rates of interest on loans. The time taken to process loans is also short because members can act as guarantors unlike banks that require huge collaterals. The services provided by SACCOs are close to the people because some of them are formed at organizational levels and mainly involve people who work in the same organization (Kadagi, Ahmed and Wafula, 2015).

According to Cheruiyot et al (2012), the major objective of Saccos in Kenya is to promote economic interests and general welfare of members. Saccos provide members with the avenue of borrowing to enhance production and welfare purposes this in turn reflects
the various loan products that Saccos have i.e. provident loans which are used to smoothen incomes of families to which the members hail from and also loans for productive purposes e.g. investments and educational loans and also emergency loans which members can access in case of an emergency e.g. sickness, death and any mishap.

1.2 Research Problem

Dividend policy play major role in financial management because it influences how firms invest their income. Dividend policies are associated with other aspects of financial management such as management of assets and mismanagement of capital (Baker and Weigand, 2013). Despite the importance placed on dividend policy in an organization, there is no universally accepted guidelines on its formulation and scholars describe it as a puzzle (Brealey and Myers 2005; Abor and Bokpin, 2010). This is an indication that more research is needed on dividend policies across the world to provide deeper insight into best practices that financial managers should adopt in dealing with payment of dividends.

A few empirical studies on dividends have been carried in Kenya and the main focus has been on firms listed at Nairobi Securities Exchange (Martin 2008; Ngunjiri, 2010; Ngobe et al. 2013; Mwihaki 2013; Elmi and Muturi 2016). The aforementioned studies have majorly examined the association between dividends and volatility of stock prices (Exchange and Martin 2008; Ngunjiri 2010; Ngobe et al. 2013; Mwihaki 2013). The study by Elmi and Muturi (2016) analyzed the nexus between dividends and profitability. Kenya still lack studies on dividend policies of firms that are not listed at NSE. Besides, studies in Kenya have not focused on other determinants of dividend policy such as financial leverage (Zeng 2003), liquidity (Okpara 2010), profitability (Abdi 2010), firm size (AL- Shubiri, 2011), and working capital (Pandey, 2010) and investment (James, 2009).
Mbuki (2010) established that dividends payout ratio among Kenyan SACCOs was determined by availability of investments opportunities and availability of cash to pay the dividend. However, the study too did not focus on factors such as financial leverage, profitability, firm size, and working capital management. This indicates that more research is still needed on dividend policies of Kenyan SACCOs. Consequently, this study seeks to bridge the research gap by examining the determinants of dividend policy of SACCOs in Kenya.

1.3 Research objectives

The general objective of this study is to establish the determinants of dividend policy of SACCOs in Kenya.

1.3.1 Specific Objectives

Specifically, the study seeks to:

i. Evaluate the influence of financial leverage on dividend policy of SACCOs in Kenya

ii. Assess the influence of liquidity on dividend policy of SACCOs in Kenya

iii. Determine the effect of profitability on dividend policy of SACCOs in Kenya

iv. Establish the effect of firm size on dividend policy of SACCOs in Kenya

v. Establish the effect of working capital management on dividend policy of SACCOs in Kenya

vi. Examine the effect of investment on dividend policy of SACCOs in Kenya.

1.4 Value of the Study

The information generated by study will inform shareholders about the determinants of dividend policy in SACCOs in Kenya. Shareholders in SACCOs will use the results of this study to make prudent decisions on their investments. Knowledge on the determinants of
dividend policy will minimize conflicts between shareholders and the managers therefore mitigating agency problems that might arise over their investments.

Management of SACCOs will use the results and recommendation from this study as a source of information for management of dividend policies in Kenya. Managers will be in a position to formulate proper dividend policies that will benefit the shareholders’ return on investment.

The study will enrich the current documented scholarly knowledge on dividend policies thus aid future researchers on issues relating to dividend policy and can be used for comparison purposes with other research conducted in relation to dividend policy in various industries.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of theoretical literature on dividends and empirical literature pertinent to dividend policy. The chapter commences with review of theories on dividend followed by empirical literature on dividend policy and its determinants. The chapter also reviews empirical studies in Kenya. The chapter concludes with a section on the research gap.

2.2 Theoretical Review

There are many theoretical approaches to dividends. One of the theoretical perspectives is that dividends are not relevant. Another theoretical perspectives advocate for relevance of dividends. This section presents dividend relevance theories and dividend irrelevance theories.

2.2.1. Dividend Relevance Theories

The study discusses there theories that advocate for reliance of dividends. These theories are Bird-in-Hand theory (Gordon 1963), information signaling effect theory (Ross 1977), tax differential theory (Litzenberger and Ramaswamy 1979) and agency theory (Ross, Westerfield and Jordan 2011).

In the Bird-in-Hand theory Gordon (1963), posit that the value of a firm is influenced by the firm’s policy on dividends. The owners of a company tend to avoid risky investments and opt for investments that are certain. They have a preference for dividends which are certain as opposed to capital gains. Capital gains are not certain because they are affected by fluctuations demand and supply. To a shareholder dividend is a “bird in hand” due to guaranteed payments. On the other hand, capital gains are treated as "the bush" because returns are not guaranteed (Gordon 1963). Declaration of high rates of dividends result in higher firm values
The signaling effect theory argued by Ross (1977) contend that policies on dividends can used by managers to convey essential information to a market that is not efficient. Managers are the only ones in possession of the kind of information they intend to convey in such markets. Management that declares high rates of dividend tend to inform market players and the owners of the company those future levels of profits would be high enough to sustain the declared dividends. The resultant effect would be the rise in prices of the shares in the firm and the value of the firm. Positive information about dividends causes rise in the firm value.

Tax differential theory by Litzenberger and Ramaswamy (1979) advocates for the relevance of dividends through an argument that dividends attract high amounts of taxes compared to tax levied on capital gains. Consequently, firm value falls if a firm decides raise the amount of dividend paid to shareholders. The more the dividends, the more the taxes paid and vice versa. A firm that intends to raise its value should declare low amounts of dividend. Tax differential theory holds the view that policies on dividend are relevant because they influence firm values.

According to agency theory (Ross, Westerfield and Jordan 2011) payment of dividends are affected by existence of agency problems in a firm. Managers may end up paying high amounts of dividend as a strategy to solve agency problem in a firm. The amount of profit ploughed back into the business reduces under such circumstances. Such decision also compels managers to look for other sources of fund to manage capital from financial institutions that offer credit. However, the management capabilities of the managers may become questionable due to increased quest for external funds. These events compel managers to be more transparent with firm owners and manage the firm in a manner that improve shareholders equity.

2.1.1. Dividend Irrelevance Theories

Modigliani and Miller theory of dividend irrelevance (Modigliani and Miller 1961) opines that firm value is not affected by payment of dividends. According to this theory, policies that
guide investment determine the amount profit made by a company. Firm value is dependents on the profit earned. Consequently, the policies on investment render policies on dividend irrelevant. Firm owners are able to determine the amount of money earned without dependence on dividend policy.

This study also adopts the theory of Agency Cost and Free Cash Flow (Rozef 1982) which argue that, as means to prevent agency problems arising from payment of dividend, decision on investment should be left to the owners of a firm. All that a company needs to do is pay the profit due to firm owners and they can decide what to do with such profit. This kind of approach will ensure that shareholders are in control of the firm and minimize agency problems. Therefore, dividend policy is not needed because shareholders are in charge of investment in the firm.

Another theory that vie dividend policy as irrelevant in firm is Tax Preference Theory (Litzenberger and Ramaswamy 1979). The theory argues that higher tax that dividends attract act as deterrent to payment of dividends in an effort not to lower the value of the firm. Investor tends to choose firms that do not pay dividends and instead invest profit earned in capital gains. Under such circumstances, dividend policy becomes irrelevant because shareholders prefer the lowly taxed capital gains. Moreover, the value of the firm increases when no payments are made as dividends.

2.3 Dividend Policy

Dividend policy is a strategic framework that guides the decisions pertinent to dividends in an organization (Shisia, Sang, Sirma and Maundu, 2014). The main components of the policy are guidelines on the allocation of profit the owners of a company and the guidelines that steer ploughing back of profit in a firm. The owners of a firm can access data on performance
through policy on dividends. The following paragraphs discuss various forms of dividend policies.

The first type of dividend policy is referred to as the residual payment policy. This policy states that a firm should first deduct the profit to be ploughed back into the firm for working capital management from the total profit earned. Payment of dividends is then equated to the amount that remains (Shisia et al., 2014). The implication this policy is that the yearly dividends declared varied as profits and funds invested varied. These instabilities lead to rise in cost of capital due to skepticism by the investors. The main advantage of residual policy is that firm value rises anytime that money earned exceed the cost of equity.

The second type of dividend policy is known as predictive dividend policy (Shisia et al., 2014). This policy is characterized by setting the payment of dividends at particular amount. The rate at which dividends rise should be constant. Shareholders prefer stability in policies on dividends. A fall in firm earnings can lead to fall in dividend payments but such reductions depend on confirmation that there will be no more falls below the low levels of firm earnings. The benefit of predictive policy is the assurance made to stakeholders on that they always earn whenever profits are made in the firm.

The third type of dividend policy is known as constant payout ratio (Shisia et al., 2014). The underlying principle in this policy is that fluctuations occur in the dividends declared on each share due to changes in profits made by a firm. This policy makes it easy for managers to come up with periodic amounts of dividend to be declared in the firm. The main drawback in this policy is that it causes volatility in the price of shares because investors become skeptical of the possibilities of gaining out of their investment.

The fourth type of dividend policy is referred to as low plus extra or bonus policy (Mathur, 1979). The main characteristic of this policy is the availability extra payments made in addition
to the dividends declared in a firm. Shareholders have assurance that they will earn dividends at the end of each financial period. Payment of bonuses send signals that the firm is committed to making dividend payments on a regular basis.

2.4 Determinants of Dividend Policy

This section presents a discussion of factors that influence policies on dividends. Determinants considered include: financial leverage, liquidity, profitability, firm size, Working capital management and investments. These factors are discussed as follows:

2.4.1 Financial Leverage

Financial leverage refers to the ratio of debt to the assets of a firm (Fenn and Liang 2001). Financial leverage is used as an indicator of the possibilities of firms encountering defaults in the future (Zeng 2003). Payments of dividends increases with the fall in financial leverage and the rise in financial leverage leads to fall in the rates of dividend declared in a firm. The rise in financial leverage indicates that a firm is facing a rise in distress in financial management. When a firm record high rates of financial leverage, payment of dividends may exacerbate the levels of distress in such firms (Fenn and Liang 2001).

One of the solutions to mitigate distress caused by high rates of financial leverage is the signing of covenants on debts aimed at reduction in the amounts paid as dividends to persons or entities that own bonds (Nash et al 2003). The rise in the ratio of debt equity result in the rise of the rates of dividend declared by a firm and the fall in debt equity result in the fall dividend payment (Kapoor et al 2010).
2.4.2 Liquidity

Liquidity denotes the capability of an organization to fulfil its financial obligations anytime such obligation needs to be paid for (Pandey 1999). When a firm issues out dividends it reduces the amount of liquid cash that can be used to meet the demands of short time creditors and lenders. This causes adverse effects on the ability of a firm to survive constraints in financial positions rendering the firms insolvent. Profitability of a firm can also be affected by the dividend decision. By issuing out dividends to the shareholders, the available cash that could have been used for reinvestment is drawn out of the firm. Liquidity position relates to a firm’s capability to fulfil obligation that arise in short terms. Cash is an important element in the liquidity position of the company. Managers may be compelled not to declare dividends when a firm lacks funds to pay for the short term obligations (James, 2009).

A rise in the levels of liquidity lead to reductions capital cost as the net present value (NPV) of the firm increases thus lowering dividend payments (Baker and Wurgler, 2004). Therefore, the rise in liquidity causes a fall in in the rates of dividends and a fall in the level of liquidity leads to a rise in dividends. The amounts of dividends should rise when the liquidity of a firm is high enough to support investments. However, this means that the firm has limited resources to declare dividends. Larger companies are able to pay dividends compared to smaller ones because they have bigger reserves of cash. The opportunities of growth are limited in firms that declare dividends (Baker, 2009). Studies by John and Muthusamy (2010) and Okpara (2010) also concluded that high levels of liquidity adversely influence the capacity of a firm to declare dividends.

2.4.3 Profitability

The amount of profit that a firm earns influences the ability of the firm to pay dividends to the stakeholders. It follows that if a firm makes more profit it gets in a position to award higher
rates of dividends (Lasher, 2008). Dividend payout ratio determines the amount of profit made that goes into the issuance of dividends. Empirical studies have established the nexus between firm profitability and payment of dividends (Al-Kuwari 2009 and Abdi 2010).

According to Al-Kuwari (2009), rise in profitability lead to rise in in dividends and a fall in profitability result in low levels of dividend. However, there is an inverse association between dividend and the level of liquidity and financial leverage. Resolution of agency conflicts is a major driving force in the payment of dividends as managers seek to minimize problems with the shareholders (Al-Kuwari 2009).

2.4.4 Firm size

The size of a firm is a major determinant of its ability to declare dividends and influences the amounts paid as dividends (Deshmukh, 2005). The larger the firm, the higher its ability to pay dividends and the higher the amounts of dividends. Small firms have limited abilities to pay dividends because much of the profit made is directed towards growth of the firms.

Large firms incur more agency costs compared to small forms (Zeng, 2003). Consequently, bigger firms pay more dividends in efforts to minimize agency costs. In terms of information asymmetries, smaller firms are more exposed to information asymmetries compared to large firms which are able to pay more dividends (Mitton, 2004). AL- Shubiri (2011) established that the larger the size of the firm, the more the dividends paid. Conversely, the smaller the size of the firm the lower the amount of dividend it will pay.

2.4.5 Management of Working Capital

The efficient management of working is important for any firm to make profits and maximize the value of shareholders. When capital is efficiently management, a firm ends up with adequate levels of cash in hand that can be used to pay for dividends (Pandey, 2010). A firm
should ensure that it efficiently manage cash flows in order to enhance liquidity and avail fund for payment of dividends. Moreover, adequate cash is needed for growth of the firm and expansion of working capital. In the event of dwindling level of firm liquidity, managers can opt for conservative policy of dividend (Pandey, 2010).

Dividends and working capital are intertwined and any decisions on payment of dividends must take into account the status of working capital in the firm (Ahmed and Javid, 2009). The best practice is to allocate for capital expenditure than use the use the remaining amounts to declare dividends. Firms with adequate working capital have sound cash position and thus pay higher dividends than firms with inadequate working capital. Liquidity is an important consideration for a firm making a dividend decision since most dividends are often paid in cash (Pandey, 2010). Therefore the determination of dividend payout depends on the working capital of a firm.

Pandey (2006) analyzed the patterns of dividends paid by Malaysian firms. The results indicated that working capital, firm’s size and investment opportunities affect dividend payments. This indicated that well managed companies with optimum working capital pay higher dividends.

2.4.6 Investment

Availability of investments opportunities for a company is also a major factor determining dividend payments (James, 2009). When a company has investment opportunities it can fund them through retained profits or borrowed funds. Retained profits usually offer a cheap available source of financing compared to borrowed funds. If the management makes a decision to use the retained funds, this reduces the amount available for distribution to shareholders hence little or no dividends for that particular period and vice versa (James, 2009).
The more the funds are directed towards investment, the less the funds available to pay dividends (Deshmukh, 2005). Therefore smaller firms that are still expanding tend to direct more funds into growth and declare low amounts of dividends. One the contrary, larger firms that are not investing heavily on expansion have more cash to make dividend payments (Amidu and Abort, 2006).

Investments do not always lead to low dividends as discussed in theory of signaling effect discussed in section 2.2.1 of this study (Ross, 1977). In this perspective, manager of firms that invest heavily in capital markets may end up declaring more dividends as a mean to inform the market players that the firm is in a good financial position. The proponents of agency theory (Zeng, 2003) argue that a firm may pay more dividends as way to ensure that shareholders are in control of the firm and prevent any selfish interests of managers. The above studies have shown that investment influence dividend polices.

2.6 Empirical Studies in Kenya

Odawo and Ntoiti (2015) analyzed factors that influence policies on dividends adopted by banks in Kenya. The factors analyzed included financial leverage, the size of the firms, the profitability of the firms and the level of liquidity in the financial market. Data was collected for a five-year-period ranging from 2003 to 2013. The study concluded that payment of dividends was inversely associated with liquidity in the financial market and directly proportional to profitability and finance leverage. Odawo and Ntoiti (2015) recommended that firms should strive to ensure that the above factors form part of dividend policy in Kenya’s financial sector.

Olang and Akenga (2017) examined the influence of working capital on payment of dividends by firms listed at NSE. Olang and Akenga (2017) targeted all the 61 firms listed at the NSE by the year 2016 and data collected ranged from the year 2011 to 2015. The study concluded that
payment of dividends is positively influenced by the management of working capital. The more efficient the working capital was managed, the higher the amounts of dividends declared by a firm. The study revealed that cash management, inventory management and account receivables were positively correlated to dividend policy. Olang and Akenga (2017) recommended that firms should ensure that cash is well managed, implement policies that ensure debtors pay on time, and inventory is well managed in order to improve payment of dividends.

A study by Kioko (2006) focused on the nexus between profitability and dividend policies held by Kenyan firms listed at the NSE. The study concluded that a positive association exists between changes in dividend policies and the level of profitability of the firms at the initial stages of changes made to dividend policies. The relationship between the two variables was not statistically significant in the subsequent years after change in dividend policies. A similar study exists by Kisaka, Kitur and Mbithi (2015) on the influence association between dividends paid by commercial banks in Kenya and the profits made by the banks. Kisaka et al., (2015) concluded that rise in the amount of profit earned led to rise in the amount of dividends paid by the banks.

A study by Elmi and Muturi (2016) investigated the association between payment of dividends and profitability of firms listed at the NSE. Unlike Kisaka et al., (2015) who focused on banks at the NSE, Elmi and Muturi (2016) targeted commercial and service firm at the NSE. Elmi and Muturi (2016) concluded that dividend payment by commercial and service firms was not significantly influenced by their profitability. The study findings by Elmi and Muturi (2016) differed from Kisaka et al., (2015) who concluded that rise in the amount of profit earned led to rise in the amount of dividends paid by the banks. This mixed result on the effects of profitability on dividend policies in Kenya indicate that more research is needed on the factors that influence dividend payment in Kenya.
2.7 Research Gap

Dividends policy is still a puzzle that has not been solved by scholars in the field of corporate financial management (Lease et al, 2000). Empirical research on dividends indicate variation in dividend policies in respect to time (Sarig, 2004) and disparities in the the level of development among nations (Aivazian and Booth, 2003).

Limited research has been carried out on dividend policies adopted in countries that are still developing as compared to the countries that are already developed. The regulatory and business conditions between developing nations and the developed ones are different (Mitton, 2004; Lin, 2002). According to Glen and Singh (2004), developing countries contend with deeper economic constraints resulting in variation in dividend policies compared to developed economies. Additional differences in economic environment between developed and developing nations include access and management of information and volatility in prices (Bekaert and Harvey, 2003). Kenya is a transitional economy and development of knowledge on dividend policy is necessary in the development of policies that guide investments and shareholders’ wealth maximization.

The differences on the outcome of studies on dividend policy between developing and developed countries indicate the importance of continued research on determinant of dividend policy. The empirical studies reviewed on dividend policy in Kenya have focused on firms listed at Nairobi securities exchange (Odowo and Ntoiti, 2015; Kisaka, Kitur and Mbithi, 2015) and banking industry (Olang and Akenga, 2017; Kioko 2006; Kioko 2011; Elmi and Muturi 2016). Little attention has been paid to other sectors and firms that are not listed at NSE. This study seeks to bridge the research gap by assessing the determinants of dividend payout policy of SACCOs in Kenya.
2.8 Conceptual Framework

Figure 2.1 illustrates the conceptual framework for the study. The conceptual framework illustrates the association relationship between the dependent and independent variables. The dependent variable in the study is dividend policy. The independent variables comprise of the determinants of determinants of dividend payout (financial leverage, liquidity, profitability, firm size, working capital and investment).

![Conceptual Framework Diagram]

**Figure 2.1: Conceptual Framework**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial leverage</td>
<td>Dividend Policy</td>
</tr>
<tr>
<td>Liquidity</td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td></td>
</tr>
<tr>
<td>Working capital</td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The main focus of this chapter is to discuss the methods of research that were operationalize this study. The specific areas discussed in this chapter are the research design adopted by the study, the population targeted and the sampling methods used to arrive at the number of participants. The chapter also lay out the methods for data collection and how data was analyzed.

3.2 Research Design

The study adopted a causal research design. A causal research design explains how changes made on an independent variable cases changes on a dependent variable (Copper and Schindler 2006). The purpose for the adoption of the causal research design was to enable determination of the causal effect of financial leverage, liquidity, profitability of Kenyan SACCOs, the size of Kenyan SACCOs, working capital management and investment made by Kenyan SACCOs on dividend policy of the SACCOs.

The study fulfilled conditions required for analysis of causal effects. The first requirement is empirical association which was fulfilled by an assessment of the relationship between dividend policy as the dependent variable and financial leverage; liquidity; profitability; firm size; working capital and; investment as the independent variables. The second requirement was specification appropriate time order which in this study was an 8-year-period from 2010 to 2017. The third requirement for causation was non-spuriousness which was observed by ensuring that association between the study variables was not attributed to changes in other variables.
3.3 Study Population

The population targeted by the study was SACCOs in Kenya. SASRA (2017) has a list of 164 SACCOs registered in Kenya as shown in Appendix III. All the 164 SACCOs registered in Kenya constituted the population targeted by this study.

3.4 Sampling Method

The study used Slovin’s formula to calculate sample size from the target population of 164 registered SACCOs in Kenya. A sample of 39 registered SACCOs in Kenya was derived as shown below.

Slovin Formula:  \( n = \frac{N}{1 + N(e^2)} \)

Where:
- \( n \) = number of samples
- \( N \) = total population
- \( e \) = margin of error * desired

Applying the Slovin’s Formula we have

\[
\begin{align*}
  n &= \frac{164}{1 + 164 \times (0.14)^2} \\
    &= \frac{164}{1 + 164 \times 0.0196} \\
    &= \frac{164}{1 + 3.2} \\
    &= \frac{164}{4.2} \\
    &= 38.9142 \\
    \approx &\ 39
\end{align*}
\]

The study further applied purposive sampling technique to select the 39 SACCOs derived at by the Slovin’s formula above from the target of 164 registered SACCOs in Kenya. Purposive sampling is used in selection of respondents or participants that poses particular knowledge that a study is looking (Tongco, 2007). Statistical methods of data analysis like logistic regression models, frequencies, chi-square, and analysis of variance and cross tabulation among others can be used with purposive sampling. (Neupane et al., 2002).
The main consideration in the criteria for selection of 39 SACCOs that participated in the study is the length of period the SACCOs have been operational in Kenya. In this respect, the study selected 39 SACCOs that have been operational for the longest time. This enabled collection of time series data for last 5 years. The choice of 8 years was to enable study come up with reliable findings because the study intends to use inferential statistics to examine time series data. The more the number of years, the more confidence in the conclusion drawn from inferential statistics. Appendix II shows the sampled SACCOs. Appendix ii shows the sampled SACCOs.

3.5 Data Collection Method

The study collected secondary data on dividends policy, financial leverage, liquidity, profitability, firm size, working capital and investment) of SACCOs in Kenya. The study extracted secondary data from audited statements of financial position from the 39 selected SACCOs in Kenya. The study data was quantitative in nature and was in time series covering an 8-year-period from 2010 to 2017 (Appendix I). The long period will enable the study to confidently determine causality between the variables.

3.6 Data Analysis

Data was analyzed using descriptive statistic including mean and standard deviations and inferential statistics (correlation and regression analyses). Correlation and regression analyses examined the association between dividends as the dependent variable and financial leverage, liquidity, profitability, firm size, working capital and investment as the independent variables.

3.6.1 Multiple Regression Analysis

The study formulated the following multiple linear regression model:

\[ D = \beta_0 + \beta_1 FL + \beta_2 L + \beta_3 P + \beta_4 FS + \beta_5 WC + \beta_6 I + \epsilon \]
Where: D-Dividends Payout

$\beta_0$ - constant

$\beta_i$ to $\beta_6$ - coefficients of the regression

FL- Financial Leverage

L-Liquidity

P-profitability

FS-Firm Size

WC-Working Capital

I-Investment

$\varepsilon$ - standard error

### 3.6.2 Measurement of Variables

Dividends was measured using the dividend payout ratio as shown below:

$$\text{Dividend Payout Ratio} = \frac{\text{Dividends}}{\text{Net Income}}$$

Financial Leverage was measured using financial leverage ratio as follows:

$$\text{Financial Leverage} = \frac{\text{Total Assets}}{\text{Total Equity}}$$

Liquidity was measures using liquidity ratio as follows:

$$\text{Liquidity Ratio} = \frac{\text{Liquid Assets}}{\text{Short term Liabilities}}$$

Profitability was measured using return on equity financial leverage ratio as follows:

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

Firm Size was measured using total assets turnover
Total assets Turnover Ratio = \frac{Sales}{Total assets}

Working capital was measured using working capital ratio as follows:

Working Capital Ratio = \frac{Current Assets}{Current Liabilities}

Investments was measured using return on investment as follows:

Return On Investment = \frac{Gain from Investment − Cost of Investment}{Cost of Investment}

3.6.3 Tests for Assumptions of Regression

The study examined the following assumptions of regression: multicollinearity, heteroskedasticity and autocorrelation.

3.6.2.1 Multicollinearity Test

A linear association between the independent variables leads to multicollinearity. Linear regression makes an assumption that none of the independent variables has significant relationships among themselves. The existence of multicollinearity cause biasness in testing and interpreting the research questions using t-test. The study assessed multicollinearity using variance inflation factor (VIF).

3.6.2.2 Autocorrelation

Autocorrelation happens when there is covariance between error terms (Montgomery, Peck and Vining, 2001). Regression analysis assume that error terms should not have any form of covariance (covariance should be zero). The study used Durbin Watson Test to examine autocorrelation.

3.6.4 Test for the Significance of the Regression Coefficients

The study used $t$-test to assess the statistical significance of regression coefficients for each of the independent variables (financial leverage, liquidity, profitability, firm size, working capital
management and investment). Significance level for regression analysis in the study will be set at 95%. Therefore, probability (p) will be set at 0.05 (5%). Any variable with a probability (p) value that was less than 0.05 was deemed to have significant relationship with the dependent variable (dividend policy) while any variable with a p-value more than 0.05 was considered to have an insignificant relationship with dividend policy. The study also estimated the magnitude of relationship between the variables using unstandardized coefficients.
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the outcome of data analysis and the interpretation of the results. The chapters also discuss the findings of the study and relate the findings to the outcome from similar previous studies.

4.2 Descriptive Statistics

Table 4.1 shows descriptive statistics for the data obtained on the study variables. The descriptive statistics include mean, standard deviation, variance skewness and kurtosis.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean Statistic</th>
<th>Std. Deviation Statistic</th>
<th>Variance Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividends payout ratio</td>
<td>8</td>
<td>3.9541</td>
<td>2.80455</td>
<td>7.866</td>
</tr>
<tr>
<td>Liquidity ratio</td>
<td>8</td>
<td>.479125</td>
<td>.0953481</td>
<td>.009</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>8</td>
<td>1.548768</td>
<td>.5102821</td>
<td>.260</td>
</tr>
<tr>
<td>Return on equity</td>
<td>8</td>
<td>.225638</td>
<td>.3645676</td>
<td>.133</td>
</tr>
<tr>
<td>Total assets turnover ratio</td>
<td>8</td>
<td>1.401625</td>
<td>1.3394912</td>
<td>1.794</td>
</tr>
<tr>
<td>Working capital ratio</td>
<td>8</td>
<td>.610450</td>
<td>.2340335</td>
<td>.055</td>
</tr>
<tr>
<td>Return on investment</td>
<td>8</td>
<td>.143088</td>
<td>.1755345</td>
<td>.031</td>
</tr>
</tbody>
</table>

The study findings in Table indicate that the average dividend payout ratio was 3.9541 and the corresponding standard deviation was 2.80455. The mean and standard deviation for the dependent variables were liquidity ratio (\(M=0.479125, SD=0.0953481\)), financial leverage (\(M=1.548768, SD=0.5102821\)), return on equity (\(M=0.225638, SD=0.3645676\)), total assets turnover ratio (\(M=1.401625, SD=1.3394912\)), working capital ratio (\(M=0.610450, SD=0.2340335\)) and return on investment (\(M=0.143088, SD=0.1755345\)).
4.3 Multicollinearity Test

The study used variance inflation factor to examine multicollinearity among the independent variables as one of the assumptions of regression analysis. Table 4.2 shows the findings of the study.

**Table 4.2: Collinearity Statistics**

<table>
<thead>
<tr>
<th></th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial leverage</td>
<td>.214</td>
<td>4.675</td>
</tr>
<tr>
<td>Liquidity</td>
<td>.116</td>
<td>8.655</td>
</tr>
<tr>
<td>Profitability</td>
<td>.137</td>
<td>7.309</td>
</tr>
<tr>
<td>Firm size</td>
<td>.052</td>
<td>19.370</td>
</tr>
<tr>
<td>Working capital</td>
<td>.573</td>
<td>1.744</td>
</tr>
<tr>
<td>Investment</td>
<td>.114</td>
<td>8.792</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Dividends

The results in Table 4.2 shows that variance inflation factor for financial leverage was 4.675, less than 10, indicating that multicollinearity was not a reason for concerns. Similarly, variance inflation factor for liquidity (VIF=8.655), profitability (VIF=7.309), working capital (VIF=1.744) and investment (VIF=8.792) were less than 10 indicating that multicollinearity was not a problem. However, variance inflation factor for firm size (VIF=19.370) that was greater than 10 raised concern. Therefore, the study further analyzed multicollinearity using collinearity diagnostics in Table 4.3 below.
Table 4.3: Collinearity Diagnostics

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimension</th>
<th>Eigenvalue</th>
<th>Condition Index</th>
<th>Financial leverage</th>
<th>Liquidity</th>
<th>Profitability</th>
<th>Firm size</th>
<th>Working capital</th>
<th>Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>5.722</td>
<td>1.000</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>.615</td>
<td>3.049</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.11</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>.482</td>
<td>3.445</td>
<td>.00</td>
<td>.00</td>
<td>.01</td>
<td>.02</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>.120</td>
<td>6.908</td>
<td>.00</td>
<td>.00</td>
<td>.01</td>
<td>.00</td>
<td>.95</td>
<td>.01</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>.044</td>
<td>11.439</td>
<td>.01</td>
<td>.02</td>
<td>.01</td>
<td>.09</td>
<td>.15</td>
<td>.00</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>.013</td>
<td>21.069</td>
<td>.01</td>
<td>.66</td>
<td>.22</td>
<td>.57</td>
<td>.04</td>
<td>.01</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>.004</td>
<td>40.232</td>
<td>.97</td>
<td>.31</td>
<td>.77</td>
<td>.21</td>
<td>.78</td>
<td>.04</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Dividends

Condition indices greater than 15 indicate that multicollinearity is a concern while indices greater than 30 indicate that multicollinearity is a very serious concern. From the study findings in Table 4.3 the conditional indices were less than 30 with exception of dimension 7 indicating that multicollinearity was a concern but it was not of a very serious nature.

4.4 Autocorrelation

The study examined autocorrelation of the data as one of the assumptions of regression analysis. Table 4.4 shows the findings of the study.

Table 4.4: Durbin-Watson Test

<table>
<thead>
<tr>
<th>Durbin-Watson test statistic ($d$)</th>
<th>Sample Size</th>
<th>Regressors</th>
<th>Critical Value (α =0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower ($d_L$)</td>
</tr>
<tr>
<td>0.481</td>
<td>8</td>
<td>6</td>
<td>0.56</td>
</tr>
</tbody>
</table>

The results in Table 4.2 indicate that the test statistic for Durbin-Watson test was $d=0.481$ which was less than the lower critical value ($d_L=0.56$) read from Durbin-Watson table for critical values for a sample of 8 and 6 regressors ($d=1.755<d_L=0.56$). This indicated that there was no autocorrelation among study variables.
4.5 Significance of the Regression Coefficients

The study carried out multiple linear regression analysis to determine the significance of the relationship between the variables. Table 4.5, 4.6 and 4.7 show the findings of the study.

Table 4.5: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.976\textsuperscript{a}</td>
<td>.952</td>
<td>.663</td>
<td>1.34869</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Dependent Variable: Dividends
\textsuperscript{b} Predictors: (Constant), Investment, Liquidity, Profitability, Financial leverage, Firm size, Working capital

From the study findings in Table 4.5 the coefficient of determination (R square) was 0.952 indicating that 95.2\% of the variation in dividend was attributed to investment, liquidity, profitability, financial leverage, firm size and working capital. The results in the model summary indicate that the regression equation adopted by the study was fit for making predictions.

Table 4.6: Analysis of Variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>55.057</td>
<td>6</td>
<td>9.176</td>
<td>7364.372</td>
<td>.009\textsuperscript{b}</td>
</tr>
<tr>
<td>Residual</td>
<td>.001</td>
<td>1</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>55.059</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a} Dependent Variable: Dividends
\textsuperscript{b} Predictors: (Constant), Investment, Liquidity, Profitability, Financial leverage, Firm size, Working capital

The value of F statistic $F (6) = 7364.372$ was significant as indicated by a probability value $p=0.009$ less than $\alpha=0.05$ (95 percent level of confidence). This showed that the regression model adopted by the study was fit for prediction of the relationships among variables.
Table 4.7: Coefficients of Regression

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig. (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>17.627</td>
<td>.850</td>
<td>20.738</td>
<td>.031</td>
</tr>
<tr>
<td>Liquidity</td>
<td>-12.441</td>
<td>.912</td>
<td>-.423</td>
<td>-13.643</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>-5.800</td>
<td>.153</td>
<td>-1.055</td>
<td>-37.877</td>
</tr>
<tr>
<td>Profitability</td>
<td>2.187</td>
<td>.074</td>
<td>.284</td>
<td>29.728</td>
</tr>
<tr>
<td>Firm size</td>
<td>1.922</td>
<td>.073</td>
<td>.918</td>
<td>26.265</td>
</tr>
<tr>
<td>Working capital</td>
<td>10.963</td>
<td>.540</td>
<td>.915</td>
<td>20.296</td>
</tr>
<tr>
<td>Investment</td>
<td>-15.770</td>
<td>.558</td>
<td>-.987</td>
<td>-28.249</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Dividends

From the study findings in Table 4.7, the probability (p) values indicate that significant predictors of dividend policy were liquidity (p=0.047), financial leverage (p=0.017), profitability (p=0.021), firm size (p=0.024), working capital (p=0.031) and investment (p=0.023).

The coefficients in the regression Table 4.7 indicate the magnitude of the variation in the dependent variable caused by a unit change in the independent variable. Therefore, the greatest magnitude of change in the dependent variable was caused by investment (coefficient 15.770) followed by liquidity (coefficient 12.441), working capital (coefficient 10.963), financial leverage (coefficient 5.8), profitability (coefficient 2.187) and firm size (coefficient 1.922) respectively.

The negative signs on the regression coefficients for liquidity (coefficient -12.441), financial leverage (coefficient -5.8) and investment (coefficient 15.770) indicate that there was an inverse proportionality between the two variables and dividend policy for SACCOs in Kenya (the dependent variable). Therefore, dividends paid out in Kenyan SACCOs decreased with the increase in liquidity, financial leverage and investment.
The positive nature of regression coefficients on working capital (coefficient 10.963), profitability (coefficient 2.187) and firm size (coefficient 1.922) indicated a direct relationship between the variables and dividend policy for SACCOs in Kenya. Therefore, dividends paid out to shareholders in Kenyan SACCOs increase with the increase in working capital, profitability and firm size.

4.6 Discussions

The study established that dividend policy of SACCOs in Kenya is determined by liquidity, financial leverage, profitability, firm size, working capital and investment. The study established that rise in financial leverage led to reduction in dividends paid out by SACCOs in Kenya and fall in financial leverage led to increase in dividends paid out by SACCOs in Kenya. The increase in financial leverage indicates that SACCOs are in bad debt positions as debts to asset ratio increases. Therefore, SACCOs with high financial leverage ratios are prone to distress and they avoid paying out or declaring higher amounts of dividends to avoid depending or falling into financial distress. The study findings agreed with Kapoor et al 2010 who argued that increase in financial leverage lead to decrease in dividends.

The study established that increase in liquidity caused decrease in dividends paid out by SACCOs in Kenya. Conversely, decrease in liquidity caused increase in dividends paid out by Kenyan SACCOs. This can be attributed to the reduction in the amount of liquid cash when dividends are paid to the shareholders. The study findings agreed with a similar study conducted by Muthusamy (2010) and Okpara (2010) who reached a similar conclusion that the rise in liquidity led to the reduction in dividends.

The study also established that dividend policy of SACCOs in Kenya depend on investments. Investments by SACCOs mean that more revenues are ploughed back into the business as the SACCOs expand their portfolio. Therefore, SACCOs that intend to promote growth retain
more profit during the period of growth and declare less dividend. However, increased investment may reduce dividends in the short term but increase dividends in the long term as the SACCOs make more income. The study findings agree with similar findings by Amidu and Abort (2006) who established that smaller firms that are still expanding tend to direct more funds into growth and declare low amounts of dividends.

The study findings revealed that profitability was positively correlated to dividend payout by SACCOs in Kenya. The rise in the income at the SACCOs translates into higher return on investment for shareholders as the dividends increase. The study findings are in tandem with similar studies conducted by Al-Kuwari (2009) and Abdi (2010) who reached a conclusion that rise in profitability lead to rise in in dividends and a fall in profitability result in low levels of dividend.

The study findings reveled that firm size influenced dividend policy of SACCOs in Kenya. As the size of SACCOs increase they are able to make more investments and profit. Consequently, large SACCOs are able to pay more dividends compared to smaller SACCOs with smaller base of assets. In another study with findings similar to this study, AL- Shubiri (2011) established that the larger the size of the firm, the more the dividends paid.

Moreover, the study established that working capital influenced dividend policy of SACCOs in Kenya. Prudent management of working capital in SACCOs increase their income and profitability. Increased income enables SACCOs to declare higher amounts of dividend. Efficient management of working capital translates to sufficient cash and optimal levels of liquidity and better payment terms in the dividend policy. Similarly, Pandey (2010) established that the determination of dividend payout depends on the working capital of a firm.
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the key findings of the study on the determinants of dividend policy of SACCOs in Kenya. Conclusions drawn from the study findings are also presented in the chapter as well as recommendations for policy development and for further research.

5.2 Summary

The study collected secondary data on liquidity ratio, financial leverage, return on equity, total assets turnover ratio, working capital ratio and return on investment for eight-year period from 2010 to 2017. The study established that multicollinearity was not a reason for concerns as variance inflation factor were less than 10 and conditional indices were less than 30. Durbin-Watson test ($d=1.755 < d_L=0.56$) revealed that there was autocorrelation among independent variables.

The study established that dividend policy for SACCOs in Kenya was influenced by liquidity ($p=0.047$), financial leverage ($p=0.017$), profitability ($p=0.021$), firm size ($p=0.024$), working capital ($p=0.031$) and investment ($p=0.023$). Dividends paid out in Kenyan SACCOs decreased with the increase in liquidity, financial leverage and investment. Dividends paid out to shareholders in Kenyan SACCOs increase with the increase in working capital, profitability and firm size.

The study established that rise in financial leverage led to reduction in dividends paid out by SACCOs in Kenya and fall in financial leverage led to increase in dividends paid out by SACCOs in Kenya. The increase in financial leverage indicates that SACCOs are in bad debt positions as debts to asset ratio increases. The study established that increase in liquidity caused decrease in dividends paid out by SACCOs in Kenya. This can be attributed to the reduction in the amount of liquid cash when dividends are paid to the shareholders. Dividend policy of
SACCOs in Kenya depend on investments. Investments by SACCOs mean that more revenues are ploughed back into the business as the SACCOs expand their portfolio.

The study findings revealed that profitability was positively correlated to dividend payout by SACCOs in Kenya. The rise in the income at the SACCOs translates into higher return on investment for shareholders as the dividends increase. The study established that firm size influenced dividend policy of SACCOs in Kenya. As the size of SACCOs increase they are able to make more investments and profit. Consequently, large SACCOs are able to pay more dividends compared to smaller SACCOs with smaller base of assets. Besides, the study established that working capital influenced dividend policy of SACCOs in Kenya. Prudent management of working capital in SACCOs increase their income and profitability. Increased income enables SACCOs to declare higher amounts of dividend. Efficient management of working capital translates to sufficient cash and optimal levels of liquidity and better payment terms in the dividend policy.

5.3 Conclusion

The study concluded that the determinants of dividend policy of SACCOs in Kenya are liquidity, financial leverage, profitability, firm size, working capital and investment. The dividend paid by SACCOs in Kenya increases with increase in working capital, profitability and firm size. The increase in financial leverage indicates that SACCOs are in bad debt positions as debts to asset ratio increases. Payment of dividends lead to reduction in the amount of liquid cash. Increased investment mean that less dividend is paid to the shareholders in the SACCOs.

The study conclude that dividend paid by SACCOs in Kenya is adversely affected by increase in liquidity, financial leverage and investment. Increase in income increases profitability and translate to higher amounts of dividends. The rise in the income at the SACCOs translates into
higher return on investment for shareholders as the dividends increase. The increase in the size of the SACCOs and larger asset base enable them to generate more income and consequently declare more dividends. Efficient management of working capital translates to sufficient cash and optimal levels of liquidity and more dividend payments.

5.4 Recommendations

5.2.1 Recommendations for Policy Development

The study recommends that SACCOs should mitigate distress caused by high rates of financial leverage by signing of covenants on debts aimed at reduction in the amounts paid as dividends to persons or entities that own bonds.

The study recommends that SACCOs should not indulge in declaring exorbitant amounts if dividends in the effort to attract more investment at the expense of liquidity position. Declaring of extremely high rates of dividend may lower liquidity to levels that cause distress and discourage investment. Dividends should only increase when the liquidity of a firm is high enough to comfortably support dividends and support investments.

The study recommends that smaller SACCOs should come up with strategies to avoid information asymmetries which may affect the dividend payment. Smaller SACCOs should avoid declaring dividends equal to those declared by larger firms unless enough information is availed to all stakeholders and authorization given.

5.2.2 Recommendations for Further Studies

The study recommends further research on the influence of government regulations and organizational polices on dividend payment by SACCOs in Kenya. The further research will complement the findings of this study by examining non-financial determinants of dividend policy in Kenya.
REFERENCES


<table>
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<th>Year</th>
<th>Dividends</th>
<th>Financial leverage</th>
<th>Liquidity</th>
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<th>Firm size</th>
<th>Working capital</th>
<th>Investment</th>
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<td>2010</td>
<td>0.75</td>
<td>0.405</td>
<td>1.0124</td>
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<td>1.0182</td>
<td>0.0739</td>
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<td>2013</td>
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<td>0.0778</td>
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<td>0.765</td>
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<td>2014</td>
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<td>0.2545</td>
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<td>2016</td>
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**APPENDIX II: SAMPLED SACCOs**

1. AFYA SACCO SOCIETY LTD
2. AGRO-CHEM SACCO SOCIETY LTD
3. ARDHI SACCO SOCIETY LTD
4. BANDARI SACCO SOCIETY LTD
5. CHAI SACCO SOCIETY LTD
6. CHUNA SACCO SOCIETY LTD
7. ELGON TEACHERS SACCO SOCIETY LTD
8. ELIMU SACCO SOCIETY LTD
9. GUSII MWALIMU SACCO SOCIETY LTD
10. HARAMBEE SACCO SOCIETY LTD
11. HAZINA SACCO SOCIETY LTD
12. KENPIPE SACCO SOCIETY LTD
13. KENVERSITY SACCO SOCIETY LTD
14. KENYA BANKERS SACCO SOCIETY LTD
15. KENYA CANNERS SACCO SOCIETY LTD
16. KENYA POLICE SACCO SOCIETY LTD
17. KITUI TEACHERS SACCO SOCIETY LTD
18. KMFRI SACCO SOCIETY LTD
19. KWALE TEACHERS SACCO SOCIETY LTD
20. LAMU TEACHERS SACCO SOCIETY LTD
21. MAGADI SACCO SOCIETY LTD
22. MAGEREZA SACCO SOCIETY LTD
23. MARSABIT TEACHERS SACCO SOCIETY LTD
24. MOMBASA PORT SACCO SOCIETY LTD
25. MURATA SACCO SOCIETY LTD
26. MWALIMU NATIONAL SACCO SOCIETY LTD
27. MWINGI MWALIMU SACCO SOCIETY LTD
28. NAFAKA SACCO SOCIETY LTD
29. NAROK TEACHERS SACCO SOCIETY LTD
30. SAFARICOM SACCO SOCIETY LTD
31. SHERIA SACCO SOCIETY LTD
32. STIMA SACCO SOCIETY LTD
33. SUKARI SACCO SOCIETY LTD
34. SUBA TEACHERS SACCO SOCIETY LTD
35. TRANS NATION SACCO SOCIETY LTD
36. UFANISI SACCO SOCIETY LTD
37. UKULIMA SACCO SOCIETY LTD
38. UNAITAS SACCO SOCIETY LTD
39. WAUMINI SACCO SOCIETY LTD
APPENDIX III: LIST OF LICENSED SACCOs IN KENYA

1. 2NK SACCO SOCIETY LTD
2. AFYA SACCO SOCIETY LTD
3. AGRO-CHEM SACCO SOCIETY LTD
4. ALL CHURCHES SACCO SOCIETY LTD
5. ARDHI SACCO SOCIETY LTD
6. ASIU SACCO SOCIETY LTD
7. BANDARI SACCO SOCIETY LTD
8. BARAKA SACCO SOCIETY LTD
9. BARATON UNIVERSITY SACCO SOCIETY LTD
10. BIASHARA SACCO SOCIETY LTD
11. BINGWA SACCO SOCIETY LTD
12. BORESHA SACCO SOCIETY LTD
13. CAPITAL SACCO SOCIETY LTD
14. CENTENARY SACCO SOCIETY LTD
15. CHAI SACCO SOCIETY LTD
16. CHUNA SACCO SOCIETY LTD
17. COSMOPOLITAN SACCO SOCIETY LTD
18. COUNTY SACCO SOCIETY LTD
19. DAIMA SACCO SOCIETY LTD
20. DHABITI SACCO SOCIETY LTD
21. DIMKES SACCO SOCIETY LTD
22. DUMISHA SACCO SOCIETY LTD
23. EGERTON SACCO SOCIETY LTD
24. ELGON TEACHERS SACCO SOCIETY LTD
25. ELIMU SACCO SOCIETY LTD
26. ENEA SACCO SOCIETY LTD
27. FARIDI SACCO SOCIETY LTD
28. FARUI SACCO SOCIETY LTD
29. FORTUNE SACCO SOCIETY LTD
30. FUNDIUMA SACCO SOCIETY LTD
31. GASTAMECO SACCO SOCIETY LTD
32. GITHUNGURI DAIRY & COMMUNITY SACCO SOCIETY LTD
33. GOODWAY SACCO SOCIETY LTD
34. GUSII MWALIMU SACCO SOCIETY LTD
35. HARAMBEE SACCO SOCIETY LTD
36. HAZINA SACCO SOCIETY LTD
37. IG SACCO SOCIETY LTD
38. ILKISONKO SACCO SOCIETY LTD
39. IMARIKA SACCO SOCIETY LTD
40. IMARIsha SACCO SOCIETY LTD
41. IMENTI SACCO SOCIETY LTD
42. JACARANDA SACCO SOCIETY LTD
43. JAMII SACCO SOCIETY LTD
44. JITEGEMEE SACCO SOCIETY LTD
45. JUMUIKA SACCO SOCIETY LTD
46. KAIMOSI SACCO SOCIETY LTD
47. KATHERA RURAL SACCO SOCIETY LTD
48. KENPIPE SACCO SOCIETY LTD
49. KENVERSITY SACCO SOCIETY LTD
50. KENYA ACHIEVAS SACCO SOCIETY LTD
51. KENYA BANKERS SACCO SOCIETY LTD
52. KENYA CANNERS SACCO SOCIETY LTD
53. KENYA HIGHLANDS SACCO SOCIETY LTD
54. KENYA MIDLAND SACCO SOCIETY LTD
55. KENYA POLICE SACCO SOCIETY LTD
56. JOINAS SACCO SOCIETY LTD
57. KIMBILIO DAIMA SACCO SOCIETY LTD
58. KINGDOM SACCO SOCIETY LTD
59. KIPSIGIS EDIS SACCO SOCIETY LTD
60. KITE SACCO SOCIETY LTD
61. KITUI TEACHERS SACCO SOCIETY LTD
62. KMFRI SACCO SOCIETY LTD
63. KOLENGE TEA SACCO SOCIETY LTD
64. KONDOIN SACCO SOCIETY LTD
65. KORU SACCO SOCIETY LTD
66. KWALE TEACHERS SACCO SOCIETY LTD
67. KWETU SACCO SOCIETY LTD
68. K-UNITY SACCO SOCIETY LTD
69. LAMU TEACHERS SACCO SOCIETY LTD
70. LAHISHA SACCO SOCIETY LTD
71. LENGO SACCO SOCIETY LTD
72. MAFANIYO SACCO SOCIETY LTD
73. MAGADI SACCO SOCIETY LTD
74. MAGEREZA SACCO SOCIETY LTD
75. MAISHA BORA SACCO SOCIETY LTD
76. MARSABIT TEACHERS SACCO SOCIETY LTD
77. MENTOR SACCO SOCIETY LTD
78. METROPOLITAN NATIONAL SACCO SOCIETY LTD
79. MILUKI SACCO SOCIETY LTD
80. MMH SACCO SOCIETY LTD
81. MOMBASA PORT SACCO SOCIETY LTD
82. MUDETE TEA GROWERS SACCO SOCIETY LTD
83. OLLIN SACCO SOCIETY LTD
84. MURATA SACCO SOCIETY LTD
85. MWALIMU NATIONAL SACCO SOCIETY LTD
86. MWITHERI SACCO SOCIETY LTD
87. MWINGI MWALIMU SACCO SOCIETY LTD
88. MUKI SACCO SOCIETY LTD
89. MWITO SACCO SOCIETY LTD
90. NACICO SACCO SOCIETY LTD
91. NAFAKA SACCO SOCIETY LTD
92. NANDI FARMERS SACCO SOCIETY LTD
93. NANYUKI EQUATOR SACCO SOCIETY LTD
94. NAROK TEACHERS SACCO SOCIETY LTD
95. NASSEFU SACCO SOCIETY LTD
96. NATION SACCO SOCIETY LTD
97. NAWEIRI SACCO SOCIETY LTD
98. NDEGE CHAI SACCO SOCIETY LTD
99. NDOSHA SACCO SOCIETY LTD
100. NG’ARISHA SACCO SOCIETY LTD
101. NOBLE SACCO SOCIETY LTD
102. NRS SACCO SOCIETY LTD
103. NUFAIKA SACCO SOCIETY LTD
104. NYAHURURU UMOMA SACCO SOCIETY LTD
105. NYALA VISION SACCO SOCIETY LTD
106. NYAMBENE ARIMI SACCO SOCIETY LTD
107. NYATI SACCO SOCIETY LTD
108. NEW FORTIES SACCO SOCIETY LTD
109. ORIENT SACCO SOCIETY LTD
110. PATNAS SACCO SOCIETY LTD
111. PRIME TIME SACCO
112. PUAN SACCO SOCIETY LTD
113. QWETU SACCO SOCIETY LTD
114. RACHUONYO TEACHERS SACCO SOCIETY LTD
115. SAFARICOM SACCO SOCIETY LTD
116. SHERIA SACCO SOCIETY LTD
117. SHIRIKA SACCO SOCIETY LTD
118. SIMBA CHAI SACCO SOCIETY LTD
119. SIRAJI SACCO SOCIETY LTD
120. SKYLINE SACCO SOCIETY LTD
121. SMART CHAMPIONS SACCO SOCIETY LTD
122. SMART LIFE SACCO SOCIETY LTD
123. SOLUTION SACCO SOCIETY LTD
124. SOTICO SACCO SOCIETY LTD
125. SOUTHERN STAR SACCO SOCIETY LTD
126. SHOPPERS SACCO SOCIETY LTD
127. STAKE KENYA SACCO SOCIETY LTD
128. STIMA SACCO SOCIETY LTD
129. SUKARI SACCO SOCIETY LTD
130. SUBA TEACHERS SACCO SOCIETY LTD
131. SUPA SACCO SOCIETY LTD
132. TAI SACCO SOCIETY LTD
133. TAIFA SACCO SOCIETY LTD
134. TARAJI SACCO SOCIETY LTD
135. TEMBO SACCO SOCIETY LTD
136. TENHOS SACCO SOCIETY LTD
137. THAMANI SACCO SOCIETY LTD
138. TRANSCOUNTIES SACCO SOCIETY LTD
139. TRANS NATION SACCO SOCIETY LTD
140. TIMES U SACCO SOCIETY LTD
141. TOWER SACCO SOCIETY LTD
142. TRANS- ELITE COUNTY SACCO SOCIETY LTD
143. UFANISI SACCO SOCIETY LTD
144. UCHONGAJI SACCO SOCIETY LTD
145. UKRISTO NA UFANISI WA ANGALICANA SACCO SOCIETY LTD
146. UKULIMA SACCO SOCIETY LTD
147. UNAITAS SACCO SOCIETY LTD
148. UNI-COUNTY SACCO SOCIETY LTD
149. UNITED NATIONS SACCO SOCIETY LTD
150. UNISON SACCO SOCIETY LTD
151. UNIVERSAL TRADERS SACCO SOCIETY LTD
152. VIHIGA COUNTY FARMERS SACCO SOCIETY LTD
153. VISION POINT SACCO SOCIETY LTD
154. VISION AFRICA SACCO SOCIETY LTD
155. WAKENYA PAMOJA SACCO SOCIETY LTD
156. WAKULIMA COMMERCIAL SACCO SOCIETY LTD
157. WANAAANGA SACCO SOCIETY LTD
158. WANANCHI SACCO SOCIETY LTD
159. WANANDEGE SACCO SOCIETY LTD
160. WASHA SACCO SOCIETY LTD
161. WAUMINI SACCO SOCIETY LTD
162. WEVARISITY SACCO SOCIETY LTD
163. WINAS SACCO SOCIETY LTD
164. YETU SACCO SOCIETY LTD

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