

**FACTORS THAT DETERMINE DIVIDEND PAYOUT RATIO AMONG SACCOS
IN KENYA**

BY

CATHERINE MBUKI

**A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF
BUSINESS ADMINISTRATION OF THE UNIVERSITY OF NAIROBI, SCHOOL OF
BUSINESS**

NOVEMBER 2010

DECLARATION

I declare that this project is my original work and has not been submitted for a degree in any other university.

Sign:

Date:

CATHERINE MBUKI D61/P/7242/06

SUPERVISOR'S DECLARATION

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

Sign:

Date:

JOSEPHAT LISHENGA

DEPARTMENT OF FINANCE AND ACCOUNTING

SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI.

DEDICATION

To my family, for the encouragement and support during this course. My mother Lois and father Jeremiah, whose wise guidance and upbringing inspired me a lot.

ACKNOWLEDGEMENT

Much appreciation goes to all who offered me moral and practical support in the production of this work. I am very grateful to my supervisor Mr.Lishenga, Lecturer University of Nairobi, for the guidance and advice he gave me right from proposal writing to the project.

To my Parents, Sisters, and brothers for their support and encouragement.

My colleagues in the MBA classes, their interaction over the entire period of the program has contributed a lot in the approach taken in this research.

I'm also grateful to many others who contributed in one way or another to the fulfillment of this work, I express heart full gratitude.

To you all, may our good Lord continue to bless you.

ABSTRACT

Savings and Credit cooperative Societies that are successful earn income which is either used to acquire securities, retire debts, invest in operating assets or distribute to its members as dividends. The biggest challenge that arises if a SACCO decides to distribute its income to its members is the proportion of the income that should be distributed and also the pattern of the pay out. Many reasons exist why cooperatives should pay or should not pay dividends and investors pay attention to dividend; that is the "Dividend Puzzle".

The objective of the study was to establish the factors that determine dividend pay out ratio among SACCOS in Kenya. The data was collected in September 2010. The sample composed of 25 SACCOS that have a country wide network in Kenya, and they have head offices in Nairobi. The total numbers of the registered SACCOS in Kenya are 5000.

The results were analyzed using Regression method and presented on tables. The study established that SACCOS' Profitability, Growth opportunity, Cash flow and Size variables positively influenced dividend pay out ratio, while risk variable negatively influenced dividend pay out ratio.

THE LIST OF TABLES

1. Table 1.....ANOVA Statistics for 2005 Data
2. Table 2.....Coefficients of 2005 Model.
3. Table 3.....ANOVA Statistics for 2006 Data.
4. Table 4.....Coefficients for 2006 Model.
5. Table 5.....ANOVA Statistics for 2007 Data.
6. Table 6.....Coefficients for 2007 Model.
7. Table 7.....ANOVA Statistics for 2008 Data.
8. Table 8.....Coefficients for 2008 Model.
9. Table 9.....ANOVA Statistics for 2009 Data.
10. Table 10.....Coefficients for 2009 Model.

LIST OF ABBREVIATIONS

ACCOSCAAfrican Confederation of Savings and Credit Co-operatives

DIV Dividend Payout.

M & M Miller and Modigliani Theory

OLS Ordinary Least Square

SACCOS.....Savings and Credit Co-operative Societies

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT.....	v
THE LIST OF TABLES	vi
LIST OF ABBREVIATIONS.....	vii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study.....	1
1.1.1 Cooperative Societies in Kenya.....	3
1.2 Statement of the problem	5
1.3 Objective of the Study.....	6
1.4 Importance of the Study	6
CHAPTER TWO	8
LITERATURE REVIEW	8
2.1 Introduction	8
2.2 Theoretical Framework	8
2.2.1 Full Information Models.....	8
2.2.2 Models of Information Asymmetries	9
2.2.3 Behavioral models	10
2.2.4 Modigliani and Miller.....	11
2.2.5 Bird in the Hand Theory.....	14
2.2.6 Dividends.....	15
2.2.7 Sources of Equity and Dividends	17
2.2.8 Dividend as Member Advantage	18

2.2.9 Determinants of Dividend Payment policy.	19
2.3 Empirical Literature Review	22
2.3.1 SACCOS and Dividend Payment in Kenya	22
2.4 Summary of literature review	24
RESEARCH METHODOLOGY	26
3.1 Introduction	26
3.2 Research design.....	26
3.3 Population.....	26
3.3.1 Sample	26
3.4 Data Collection.....	27
3.5 Data Analysis and Presentation.....	27
CHAPTER FOUR.....	30
4.0 DATA ANALYSIS AND PRESENTATION.	30
4.1 Introduction	30
4.2 Analysis and Presentation	30
4.2.1 Year 2005 Analysis and Interpretations	30
4.2.2 Year 2006 Analysis and Interpretations	32
4.2.3 Year 2007 Analysis and Interpretations	34
4. 2.4 Year 2008 Analysis and Interpretations	36
4.2.5 Year 2009 Analysis and Interpretations	38
CHAPTER FIVE:	41
5.0 SUMMARY, CONCLUSION, LIMITATION AND RECOMMENDATIONS	41
5.1 Introduction	41
5.2 Summary.	41
5.3 Conclusions	42
5.4 Limitation to the study.....	43
5.5 Recommendations	43

5.6 Suggestion for further research.....	43
REFERENCES	45
APPENDICES	52
Appendix I: Respondents' Letter of Introduction.....	52
APPENDIX II. List of SACCOS which participated in the study.	53

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Successful co-operative societies earn income. This income can be invested in operating assets, used to acquire securities, used to retire debt or distributed to its members. The income distributed to the members is the dividend. Issues that arise if a cooperative decides to distribute its income to its members include the proportion to which such income would be distributed to the members; whether the distribution should be as cash dividends or the cash be passed on to the members by buying back some shares and the stability and consistency of the distribution of the dividend.

Much controversy surrounds dividends policy. Black (1976) observed that “the harder we look at the dividends picture, the more it seems like a puzzle, with pieces that just do not fit together”. Since then, the amount of theoretical and empirical research on dividend policy has increased dramatically (Baker, 1999). Though little literature has been done on why co-operatives should pay or not to pay dividends, figuring out why they pay dividends and investors/members of such co-operatives pay attention to dividend that is, the “dividend puzzle”, is still problematic and unexplored. This owes to the fact that there has been emerging consensus that there is no single explanation of dividends payment. Black (1976), notes, that there was no convincing explanation for paying cash dividends to the SACCO members unlike other entities. Although Black’s conclusions were made more than two decades ago, financial economists still are wrestling with the “dividend puzzle”. Bernstein (1996), and Aivazian and Booth, (2003), revisited the dividend puzzle and noted that some important questions remained unanswered hence, setting dividend policy remains controversial and involves judgment by decision makers.

Dividend pay-out decision is among the basic policy choices confronting financial officers. However, the academic finance community has been less helpful in offering meaningful guidance on these issues. The choice of the amount of dividend is left to managerial discretion;

how much to pay is still an open issue. Over the past several decades, finance scholars have engaged themselves in extensive theorizing about factors that might be important in determining SACCO'S dividend policies. In developed countries the decision between paying dividend and retaining earnings has been taken seriously by both investors and management and has been subject of considerable research by economists in the last four decades (Lintner, 1956, Modigliani and Miller, 1961 and Black and Scholes, 1973).

Scholars have also tried to identify the factors influencing the dividend payout ratio and practices of SACCOS such as profit after tax, liquidity and reserve position, changes in equity holding and size of the firm etc (Kumar and Khurana, 1984). Certain financial economists have therefore acknowledged the after tax earnings of any co-operative as an important internal source of funds that can be invested and also a basis for dividend payment to the members (Li, and Lie, 2006).

Dividend payout has been an issue of interest in financial literature. Academicians & researchers have developed many theoretical models describing the factors that managers should consider when making dividend payout decisions. By dividend policy, we mean the payout policy that managers follow in deciding the size and pattern of cash distribution to shareholders over time. Miller and Modigliani (M&M) (1961) argue that given perfect capital markets, the dividend decision does not affect a co-operative's value and is, therefore, irrelevant. Most financial practitioners and many academics greeted this conclusion with surprise because the conventional wisdom at the time suggested that a properly managed dividend policy had an impact on share prices and co-operative members' wealth.

Even to date, dividends remain one of the greatest enigmas of modern finance. The inability of theoretical and empirical studies to resolve this intriguing puzzle stems from several possible sources (Amihud and Li, 2006). A major reason for this ongoing debate is the heavy reliance on economic modeling approaches without an in-depth understanding of how investors and managers behave and perceive dividends. Researchers cannot measure such crucial elements by merely modeling market data but must use other interactive tools such as interviews and surveys. Bruner (2002, pp. 50) notes, "The task must be to look for patterns of confirmation across

approaches and studies much like one sees an image in a mosaic of stones.” To resolve the dividend puzzle, Chiang, Frankfurter, Kosedag and Wood, (2006) conclude that the cardinal thrust of academic research must turn toward learning about motivation and on what perceptions this motivation is based.

The new SACCO regulations (2010) have strict corporate benchmarks which include the authority’s administrative sanctions such as prohibition of paying dividends, acquisition of property or expansion. SACCO managers said the end of low interest rate lending will deny them a competitive edge in the marketplace, making them vulnerable to competition from commercial banks’ recent foray into the low end of the market – a move that is set to accelerate with the advent of agency banking. The development could trigger a wave of innovation in savings and lending products as both Saccos and commercial banks attack the same market, but SACCOS will be seeking to maintain their traditional comparative low interest rate edge. This is about to change as the Saccos adjust their operations to comply with new regulations such as the one requiring them to maintain minimum capital of Sh10 million or eight per cent of their total liquid assets. Compliance with this rules means that SACCOS will be left with less money for lending, and ultimately a negative impact on their income (Business Daily 2010).

Competition from commercial banks and the financial requirements of the new regulations could see closure or merger of some Saccos if they do not innovate and cut operating costs. The rules are very stringent on SACCO management. The era when Saccos provided good dividends may be coming to an end. Implementation of the SACCO regulations means that rebates will no longer be earned on the basis of member savings but on the basis of shares of capital a member has paid for. Dividends will also not be paid in cases where a Sacco has negative capital, as is the case with banks and listed companies (Business Daily 2010).

1.1.1 Cooperative Societies in Kenya

Cooperative society is an association of persons who have voluntarily joined together to achieve a common end through the formation of a democratically controlled organization ,making equitable contributions to the capital required and accepting a fair share of the risks and benefits

of the undertaking in which the members actively participate (Mr Murungi, 2003). Savings and Credit cooperatives are member-owned financial institutions that offer savings and Credit services to their members (Mr. Maina and Mr Kibanga, 2004). The fundamental role of any business firm is to economically benefit/promote the social-economic status of the shareholders. Profitability is the basis of any business goal. For a long period of time, the main goals for Savings and credit cooperative societies have been service efficiency, good leadership, good reputation and organizational growth so as to serve their members as required. In the modern Kenya the basic legal consideration supporting the separation of ownership and management control is, the primary objective of any business firm should be to increase owners' wealth through quality service and increased profits/ surplus (Mr Maina and Mr Kibanga, 2004).

The first cooperative society in Kenya was organized by European settlers, in Rift Valley in the year 1908. The society was supposed to market cereal crops, fruits and Dairy products. That time there was no Co-operative Law to govern it until 1931. In 1955 the Africans were allowed to set up market oriented cooperatives for cereals, coffee, cotton, fruits, pyrethrum and vegetables. In 1966, the Cooperative Societies Act was enacted which introduced control measures to counteract mismanagement and misappropriation of funds. The Savings and Credit cooperative societies were formed in late 1970's. There has been a fast growth. For example between 1985 and 2006 the number of registered savings and Credit cooperatives rose from 1285 to 4876 (Ministry of Co-operative Development and Marketing, 2007).

The Kenyan SACCO system registered under Cooperative Societies Act, chapter 490, is the largest credit union network in the whole of Africa. There are about 5,000 SACCOs currently registered in Kenya (Ministry of Co-operative Development and Marketing 2008). In 2008 SACCOs', which holds 30 per cent of national savings, deposits grew to KSHS 7.9 billion from KSHS 6.9 billion in 2007. The asset base also rose to KSHS 11.7 billion in 2008 from KSHS 3.2 billion in 2000 (Wahome,2009). SACCOS pay dividends on shares to their members once the SACCO is established and profitable (Bailey, 2001). Dividends are, however, paid to the members depending on the number of shares one has. According to Amidu and Abor, (2006), in a study conducted in Ghana, dividend payment by SACCOS are determined by legal restriction,

investment//growth opportunity, attitude of management, traditions, profitability, age and size of the SACCO.

SACCOS in Kenya, till 2009, had been giving dividends up to 6% which is higher than that of commercial banks. With the introduction of SACCO Act 2008, SACCOS are expected to give lower dividends on savings. This will be made possible with the separation of share accounts and deposit accounts, which will result in dividends paid to members decreasing (Wahome, 2009). Currently, dividends are calculated on deposits which are also deemed as share contribution. But with the change imposed by the Act, dividend paid will consider the share account and not the total deposit. The measures are intended to introduce prudent management similar to those of commercial banks.

1.2 Statement of the problem.

Many reasons exist why cooperatives for that matter should pay or not to pay dividends. Yet figuring out why cooperatives pay dividends and investors pay attention to dividend; that is the “dividend puzzle” is problematic. Bernstein (1996) and Aivazian and Booth (2003), revisited the dividend puzzle and noted that some important questions remained unanswered. Thus setting entities’ dividend policy remains controversial and involves judgment by decision makers. There has been emerging consensus that there is no single explanation of dividends. According to Brook, Chalton and Hendershott, (1998), there is no reason to believe that corporate dividend policy is driven by a single goal.

Cooperative business may retain their earnings, or distribute part or all of them as dividends to their members. They distribute the dividends in proportion to members’ savings/deposits, instead of the value of members' share capital. Therefore, co-operative dividends are often treated as pre-tax expenses. It has also been observed that, even though cooperative societies in Kenya pay dividend, there is no consistency and most of them pay less than the expectation of the members. The inconsistency in the payment of dividends has raised concern among the members. In Kenya the economy was fully liberalized in early 1990's which led to the decontrol of the management of Savings and Credit cooperative societies by the government. The effect was increased

competition from the other well established financial institutions such as commercial banks hence lowering the profitability of savings and credit cooperative societies.

In Kenya, only two studies that have been done on the determinants of dividend payout ratio on SACCOS; Njiru, (2003) and Njuguna, (2006). Their findings were that the determinants of dividend payment were profitability, growth opportunities, cash flow and dividend policy of the SACCO. However scanty and incomprehensive conclusion has been made on the determinants of dividend payment to conclusively solve the 'dividend puzzle' highlighted by Black, (1976). These studies outlined factors such as past growth rate, future growth rate, systematic risk, profitability, cash flow, institutional holding, corporate tax, dividend policy as some of the determinants of dividend payment. The purpose of the study, therefore, is to add onto the existing literature that has been done on the determinants of dividend payment by investigating and documenting the determinants of dividend payout ratio of SACCOS in Kenya under the existing regulations. This study is different from the ones done, in that the economic footing has changed. The knowledge has it that, this has been due to high loan interest rates by the Banks in the local market, rising inflation rates in the recent past, severe drought which was experienced in Kenya between year 2007 and 2009 was unfavorable to growth of businesses. The SACCOS have also been forced to adopt the strategy of expansion in order to benefit from economies of scale and survive in the current environment of stiff competition. This study is also different in that the SACCOS have started restructuring their organizations and conforming to the financial requirements of the SACCO Act 2008. That will make it hard for them to pay dividends as they did previously.

1.3 Objective of the Study

To establish the factors that determine dividend payout ratio among Savings and Credit Cooperative Societies in Kenya.

1.4 Importance of the Study

Shareholders of the SACCOS

This study is important to the shareholders of the SACCOS in Kenya, for the study will make plain to them what drive SACCOS into paying dividends. This will enlighten the shareholders view and make them understand why at times they can't receive dividend and when they receive high dividends.

The research will also be valuable to the management of SACCOS, for the study will highlight on why dividends should be paid and the determinants behind it. As so the management will know when to pay and when not to.

Academicians

The study will be of importance to the academicians for the study will form a good base upon which further research will be based and empirical and secondary materials got.

The government Agencies and Policy Makers

Government agencies and policy makers may use the results to formulate positive national policies on a framework that is relevant and sensitive to the forces influencing the SACCOS in Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter shall review the literature available on determinants of divided payout policy. The first section shall present the theoretical framework on determinant of divided payout policy. Empirical studies in these areas shall also be reviewed.

2.2 Theoretical Framework

2.2.1 Full Information Models

The full-information model was introduced by Ben-Or and Linial (1985) to study collective coin-flipping, which is the problem of generating a common bounded-bias bit in a network of n players with t faults. This problem was studied in a series of works that aimed to improve the fault-tolerance and round-complexity, resulting in the protocols of Russell and Zuckerman (2001) and Feige (2001), that construct $\log_2 n + O(1)$ round protocols that tolerate, for any $\epsilon > 0$, $t < n^{2+\epsilon}$ faults. Goldreich et al. (1998) consider the problem of multiparty computation in the full-information model. These coin-flipping protocols assume the existence of a broadcast channel, and therefore, cannot be used as such to construct a broadcast protocol! Nevertheless, we use the ideas from the coin flipping protocol of Feige (1999) in an essential way in our Byzantine Agreement protocol.

The objective is to maximize the probability of choosing the best available applicant. Two models are distinguished according to when the availability can be ascertained; the availability is ascertained just after the arrival of the applicant (Model 1), whereas the availability can be ascertained only when an offer is made (Model 2). For Model 1, we can obtain the explicit expressions for the optimal stopping rule and the optimal probability for a given n . A remarkable feature of this model is that, asymptotically (i.e. $n \rightarrow \infty$), the optimal probability becomes insensitive to q and approaches 0.580164. The planar Poisson process (PPP) model provides more insight into this phenomenon. For Model 2, the optimal stopping rule depends on

the past history in a complicated way and seems to be intractable. We have not solved this model for a finite n but derive, via the PPP approach, a lower bound on the asymptotically optimal probability.

2.2.2 Models of Information Asymmetries

In economics and contract theory, information asymmetry deals with the study of decisions in transactions where one party has more or better information than the other (Aboody and Lev, 2000). This creates an imbalance of power in transactions which can sometimes cause the transactions to go awry. Information asymmetry models assume that at least one party to a transaction has relevant information whereas the other(s) do not (Brown et al 2004). Some asymmetric information models can also be used in situations where at least one party can enforce, or effectively retaliate for breaches of, certain parts of an agreement whereas the other(s) cannot (Izquierdo and Izquierdo, 2007).

In adverse selection models, the ignorant party lacks information while negotiating an agreed understanding of or contract to the transaction, whereas in moral hazard the ignorant party lacks information about performance of the agreed-upon transaction or lacks the ability to retaliate for a breach of the agreement (Spence, Michael, 1973). An example of adverse selection is when people who are high risk are more likely to buy insurance, because the insurance company cannot effectively discriminate against them, usually due to lack of information about the particular individual's risk but also sometimes by force of law or other constraints. An example of moral hazard is when people are more likely to behave recklessly after becoming insured, either because the insurer cannot observe this behavior or cannot effectively retaliate against it, for example by failing to renew the insurance (Mas-Colell et al 1995).

Information asymmetries are important in theory. Izquierdo and Izquierdo, (2007) sparked a large theoretical literature on the role of asymmetric information in credit markets that has influenced economic policy and lending practice worldwide (Aboody and Lev, 2000). Theories show that information frictions and ensuing credit market failures can create inefficiency at both

the micro and the macro level, via underinvestment, overinvestment, or poverty traps. Many policies have been put forth to address information asymmetry problems. A better understanding of which information asymmetries are empirically salient is critical for determining optimal remedies.

But information asymmetries are difficult to identify in practice. Empirical evidence on the existence and importance of specific information frictions is relatively thin in general, and particularly so for credit markets. Distinguishing between hidden information and hidden action is difficult even when precise data on underwriting criteria and clean variation in contract terms are available, as a single interest rate may produce independent, conflated selection and incentive effects. For example, a positive correlation between loan default and a randomly assigned interest rate, conditional on observable risk, could be due to adverse selection ex-ante (those with relatively high probabilities of default will be more likely to accept a high rate) or moral hazard ex-post (because those given high rates have greater incentive to default) (Brown et al 2004).

2.2.3 Behavioral models

Behavior models coordinate a set of what we will call *steps*. These are called *states*, *actions*, or *subactivities* in UML (Polderman and Willems, 1998). In behavioral science, [system theory](#) and [dynamic systems](#) modeling, a behavioral model reproduces the required behavior of the original analyzed [system](#), such as there is a one-to-one correspondence between the behavior of the original system and the simulated system. That namely implies that the model uniquely predicts future system states from past systems states (Paolo and Jan, 2006). The behavioral approach is motivated by the aim of obtaining a framework for system analysis that respects the underlying [physics](#) and sets up the appropriate [mathematical](#) concepts from there.

A key question of the behavioral approach is whether a quantity w_1 can be deduced given an observed quantity w_2 and a [model](#). If w_2 can be deduced given w_1 and the model, w_2 is said to be [observable](#). In terms of mathematical modeling, the to-be-deduced quantity or [variable](#) is often referred to as the [latent variable](#) and the observed variable is the manifest variable. Such a

system is then called an observable (latent variable) system (Paolo and Jan, 2006). An advanced technique to make a behavior model object-oriented is to associate each step with the changes to objects that the step is intended to cause, and associate those changes with the steps that they initiate.

2.2.4 Modigliani and Miller

The payment of regular cash dividends to shareholders is a long-established tradition in developed capital markets (Lintner, 1956) and although Fama and French (2001) report that the number of industrial firms that pay dividends in the period 1978-1998 decreased by over 50 per cent, DeAngelo *et al.* (2004) observe that the amount of dividends paid by industrial firms actually increased significantly both in nominal and real terms over the period 1978-2000. Researchers' attempts to examine why corporations make such payments (and why shareholders demand them) have been at the heart of numerous modern finance studies (Bernstein, 2005). Pervasive, time-invariant answers to the dividend question appear to be lacking, however.

Despite Miller and Modigliani's (1961) demonstration that dividend policies are irrelevant in a perfect market, it seems that many firms believe in the virtue of regular disbursements to investors. Black (1976) argues that when taxes are introduced into the Miller and Modigliani framework, firms should eliminate dividend payments to shareholders altogether; he suggests that firms' and investors' fixation with regular dividends – and the almost universal corporate policy of paying substantial dividends to shareholders – represents one of the main puzzles in modern corporate finance literature. More recently DeAngelo and DeAngelo (2006) observe that, contrary to Miller and Modigliani (1961), payout policy is not irrelevant and that if managers implemented Black's (1976) suggestion to eliminate dividends “they would destroy untold amounts of shareholder wealth” (DeAngelo and DeAngelo, 2006, p. 295).

Despite the prospect of paying additional income tax, financial directors appear to assume that shareholders expect dividends and believe they are entitled to such returns. As back as the 1950s, Lintner (1956) highlighted that managers sought to maintain constant growth in dividends and avoid making cuts in payments. Frankfurter and Wood (2002), using a sample of 420 US firms,

note that Lintner's model remains the best description of the dividend setting process in that managers are reluctant to reduce dividend payments, even in periods of financial distress, and that dividends are increased only if directors are confident that the higher levels can be maintained. More recently, Brav *et al.*'s (2005) survey of 384 financial executives (and in-depth interviews with an additional 23) reports that Lintner's key findings remain valid at the beginning of the twenty-first century. Similar survey evidence from Germany (Frankfurter and Wood, 2002), Hong Kong and Turkey (Frankfurter *et al.*, 2004), the UK (Dhanani, 2005) and Ireland (McCluskey *et al.*, 2003) suggests that managers from other countries hold similar attitudes.

2.2.4.1 Residual Theory

The essence of the residual theory of dividend policy is that the firm will only pay dividends from residual earnings, that is, from earnings left over after all suitable (positive NPV) investment opportunities have been financed. Retained earnings are the most important source for financing for most companies. A residual approach to the dividend policy, as the first claim on retained earnings will be the financing of the investment projects. With the residual dividend policy, the primary focus of the firm's management is indeed on investment, not dividends. Dividend policy becomes irrelevant, it is treated as a passive rather than an active, decision variables.

The view of management in this case is that the value of firm and the wealth of its shareholders will be maximized by investing the earnings in the appropriate investment projects, rather than paying them out as dividends to shareholders. Thus managers will actively seek out, and invest the firm's earnings in, all acceptable (in terms of risk and return) investment projects, which are expected to increase the value of the firm. Dividends will only be paid when retained earnings exceed the funds required to finance the suitable investment projects. Conversely when the total investment funds required exceed retained earnings, no dividend will be paid.

2.2.4.2 Dividend Signaling Theory

In practice, change in a firm's dividend policy can be observed to have an effect on its share price – an increase in dividend producing an increasing in share price and a reduction in dividends producing a decrease in share price. This pattern led many observers to conclude, contrary to M&M's model, that shareholders do indeed prefer dividends to future capital gains. Needless to say M&M disagreed.

The change in dividend payment is to be interpreted as a signal to shareholders and investors about the future earnings prospects of the firm. Generally a rise in dividend payment is viewed as a positive signal, conveying positive information about a firm's future earning prospects resulting in an increase in share price. Conversely a reduction in dividend payment is viewed as negative signal about future earnings prospects, resulting in a decrease in share price.

2.2.4.3 Dividend Irrelevancy Theory

Dividend irrelevancy theory asserts that a firm's dividend policy has no effect on its market value or its cost of capital. The theory of dividend irrelevancy was perhaps most elegantly argued by its chief proponents, Modigliani and Miller (usually referred to as M&M) in their seminar paper in 1961. They argued that dividend policy is a "passive residual" which is determined by a firm's need for investment funds.

According to M&M's irrelevancy theory, does not matter how a firm divides its earnings between dividend payments to shareholders and internal retentions. In the M&M view the dividend decision is one over which managers need no agonies, trying to find the optimal dividend policy, because an optimal dividend policy does not exist. M&M built their dividend irrelevancy theory on a range of key assumptions, similar to those on which they based their theory of capital structure irrelevancy. For example they assumed: Perfect Capital markets, that is there are no taxes, (corporate or personal), no transaction costs on securities, investors are rational, information is symmetrical – all investors have access to the same information and

share the same expectations about the firm's future as its managers. The firm's investment policy is fixed and is independent of its dividend policy.

2.2.5 Bird in the Hand Theory

The majority of theories proposed as explanations of why companies pay dividends have focused on intuitive observations. Prominent among these is the "bird-in-the-hand" theory, according to which investors place value on the tangible nature of a cash disbursement relative to a possible capital gain (Gordon, 1959). The second broad group of theories suggests that the dividend provides a reliable signal to investors about underlying company performance, financial strength and earnings growth (Arnott and Asness, 2003). Finally, a third class of theories focuses on clientele or tax effects and predicts that investors choose between dividend-paying and-non paying companies according to their tax status (Masulis and Trueman, 1988).

Each of these theories provides obvious testable propositions, all of which are investigated in the present study. The first school views dividends as attractive to shareholders because they are less risky than promises of growth. The second school suggests that dividend increases (decreases) represent positive (negative) news because they signal managerial confidence (concern) about the future cash flows to be earned by the firm; they are, therefore, seen as an important influence on share price (McCluskey *et al.*, 2006). The third school argues that the income tax liability on dividends raises investors' required pre-tax returns on higher dividend-paying shares, thereby causing such equities to sell at a discount relative to their lower dividend-paying counterparts; the differential taxation treatment of dividend income and capital gains leads to a negative relationship between share prices and dividends (Shefrin and Statman, 1984).

These three schools of thought contrast with the original theory of Miller and Modigliani (1961) which maintains that a firm's dividend policy is essentially irrelevant to share price valuation as investors can manufacture an income stream from a firm themselves by buying and selling the company's securities (Miller and Modigliani, 1961; Black and Scholes, 1974; Miller and Scholes, 1982). To date, most research into dividend behaviour has focused on large developed markets such as the US, the UK, Canada and Australia. The majority of these investigations have

attempted to quantify how share prices respond to the publication of information about dividends in order to determine if the news from the disbursement is favorable, unfavorable or non-existent. These studies thereby seek to draw inferences about the validity of the various schools of thought by examining how share prices respond to dividend announcements and/or dividend changes.

Many such studies encounter significant problems when the dividend news is not disclosed in isolation but, as in Ireland, is published at the same time as other data such as earnings or capital expenditure plans; disentangling the importance of the dividend component of the joint signal is a non-trivial task (Green and McAree, 2001; McCluskey *et al.*, 2006). In addition, studies focusing on market reactions in small, relatively illiquid stock exchanges as in Ireland may have problems in linking any price changes to dividend changes because equities are thinly traded.

2.2.6 Dividends

In co-operative societies, profits are distributed to stockholders as dividends according to the number of shares of stock owned or used to expand the business. Cooperative businesses may retain their earnings or distribute part or all of them as dividends to their members. They distribute their dividends in proportion to the members' savings/contribution, instead of the value of members' share capital. Many cooperatives, however, don't pay any dividends on capital. Others pay a modest return, in line with state statutes that bar substantial payments. The timing and amount of such dividend distributions are decided by the board of directors (Gorton and Schmid, 1999).

Savings and Credit cooperatives have three channels for allocating benefits to its members: (high) deposit interest rates, (low) loan interest rates and dividends. The allocation of dividends according to members' savings/contribution to the SACCO is often considered to be a pre-tax expense. Members who want to borrow from a credit cooperative prefer low loan rates while those who want to lend to the cooperative prefer high deposit rates. According to Flannery, (1974), the 'output-maximizing' incentive pits one group of members against another because the Savings and credit cooperatives cannot raise deposit rates and lower loan rates

simultaneously with a given amount of operating profit to distribute to members. Resolution of this conflict follows the preferences of the median member (Smith, Cargill, and Meyer, 1981 and Hart and Moore, 1998).

A second important incentive conflict in Savings and credit cooperatives concerns its dividend policy. All members prefer higher operating profits and dividends, holding all else equal, but this 'profit-maximizing' incentive necessarily requires less favorable prices to one or more groups of cooperative members. Distribution of benefits in the form of dividends also may reduce efficiency losses from overproduction but the controlling member group cannot capture all such benefits because minority members receive identical payments (Sue, 2007).

Dividends are usually settled on a cash basis, as a payment from the cooperative to the shareholder. They can take other forms, such as store credits (common among retail consumers' cooperatives) and shares in the cooperative (either newly-created shares or existing shares bought in the market) Further, many public organizations offer dividend reinvestment plans, which automatically use the cash dividend to purchase additional shares for the shareholder (Gorton and Schmid , 1999).

Consumers' cooperatives allocate dividends according to their members' trade with the cooperative. For example, a credit union will pay a dividend to represent interest on a saver's deposit. A retail co-operative store chain may return a percentage of a member's purchases from the co-operative, in the form of cash, store credit or equity. This type of dividend is sometimes known as a patronage dividend or patronage refund, as well as being informally named *divi* or *divvy* (Edgar Online 2001 and Balnave and Patmore, 2005). Producer cooperatives, such as worker cooperatives, allocate dividends according to their members' contribution, such as the hours they worked or their salary.

Besley, Coate, and Loury (1993) examine the sustainability and allocation rules in rotating saving and credit associations, a common form of rudimentary credit cooperative found all around the world. Hart and Moore (1996 and 1998) study decision-making in consumer

cooperatives generally, but their analysis is relevant also for credit cooperatives. They highlight the possibility of cooperative decision-making resulting to either in ‘inefficient inclusion’ related to “output-maximization” incentives or ‘inefficient exclusion’ related ‘profit-maximization’ incentives. Hart and Moore (1998) also provide an analysis of dividend-paying cooperatives. Finally, Canning, Jefferson, and Spencer (1999) examine optimal pricing policies in not-for-profit financial institutions, a related but somewhat constrained version of the credit cooperatives.

2.2.7 Sources of Equity and Dividends

Co-operatives societies like sole proprietorships, partnerships and closely held corporations face problems acquiring equity. The equity capital usually is provided by the owners or acquired via retained earnings. Cooperatives pass earnings to users on a patronage basis and therefore cannot attract equity from outside sources to the same extent as investor-owned businesses (National Cooperative Bank, 1996).

The key primary ways which members provide equity to their cooperative are direct investment, retained margins and per-unit capital retains. Cooperatives may also acquire equity by retaining earnings from nonmembers who make use of the services provided by the SACCOs as customers since they have not paid membership fee.

Direct investment refers to cash purchases of membership certificates, common and preferred stock or other forms of equity. Most cooperatives require a member to make a direct payment when joining the cooperative. In return, the member receives a membership certificate in a non-stock cooperative or a share of common stock in a stock cooperative. The certificate or share of stock usually conveys to the owner the right to vote on matters submitted for decision to the cooperative membership and the owner is generally referred to as a member of the cooperative (Van Opstal and Gijssels, 2009).

Some cooperatives also acquire equity by selling nonvoting stock or equity certificates to members and nonmembers. This nonvoting equity usually pays a limited dividend as an

inducement for persons to invest in the cooperative. Cooperative earnings used to pay dividends on equity are usually subject to taxation at both the cooperative and the recipient levels.

While cooperatives are sometimes described as businesses that operate "at cost," few if any can do so on a day-to-day basis. Rather, cooperatives seek to generate income that exceeds expenses on an ongoing basis. Then, usually after the close of the fiscal year, they return earnings from business conducted on a cooperative basis to the persons responsible for the business generating those earnings, who are called patrons (Smith, Cargill and Meyer, 1981).

These returns, based on the amount of business each patron does with the cooperative during the year, are called 'patronage dividends'. The patronage dividends are different from traditional dividends, which are based on stock ownership rather than the amount of business conducted with the firm.

The board of the directors of a SACCO has the responsibility to determine how the earnings will be distributed. The directors may decide to pay all the earnings as cash patronage refunds, part of it, or retain all the earnings as equity investment in the cooperative.

Cooperatives that market products produced by their members have a third means of acquiring equity capital, per-unit capital retains. These are capital investments based on either the number of physical units handled by the cooperative or on a percentage of sales revenue. Per-unit retains are deducted from sales proceeds due the members from the cooperative.

2.2.8 Dividend as Member Advantage

Not surprisingly top-three advantages in the survey conducted among savings and credited co-operatives in Belgium were fair price/quality relation (least indicated by the financial co-operatives), realization of economies of scale (mostly indicated by co-operatives in the primary sector), co-operative dividend (mostly indicated by the financial co-operatives). The patronage dividend was mentioned by 25% of the co-operatives in the survey (Van Opstal, Gijssels and Wyns, 2008). Focus groups with non-accredited co-operatives, showed that most of the enterprises give patronage dividends to their members, though it seems not to be evident in

workers cooperatives in which more equal payment is considered to be a ruling principle, as well as in multi-stakeholder co-operatives in which multiple types of members have a different relationship with the co-operative (Van Opstal and Gijssels, 2009). The study further showed that apart from dividend co-operatives gives other member advantages such as information sharing, sharing logistics, democratic participation, societal profit, price reductions, risk spreading, and legal help.

2.2.9 Determinants of Dividend Payment policy.

The first empirical study of dividend policy was performed by Lintner (1956). He discovered that managers tend to value stable dividend policies, dividends are increased gradually and rarely cut and that most co-operatives have reasonably definitive target payout ratios. He further advanced that over the years, the co-operatives will adjust the dividends at a particularly speed of adjustment, so that the actual payout ratio moves closer to the target payout ratio.

Profitability

Characteristics that affect co-operatives' dividends policy include its profitability, liquidity, size, ownership structure and capital structure, among others. Several surveys provide useful insights that financial managers consider the mentioned characteristics very important in determining their dividend policy.

Profits have long been regarded as the primary indicator of a co-operatives' capacity to pay dividends. Pruitt and Gitman (1991), in their study report that, current and past years' profits are important factors in influencing dividend payment hence policy. Baker, Farrelly and Edelman, (1985) also find that a major determinant of dividend payment was the anticipated level of future earnings. Baker, Farrelly, and Edelman (1985) and Farrelly, Baker, and Edelman (1986), by analysis of 318 responses from utility, manufacturing and wholesale/retail co-operatives, they found that the major determinants of dividend payments were the anticipated level of future earnings and the pattern of past dividends.

Pruitt and Gitman (1991) suggested that important influences on the amount of dividends paid were current and past years' profits, the year-to-year variability of earnings and the growth in earnings. Baker and Powell (2000) found support for their hypothesis that the most important factors influencing a c-operatives dividend policy are the level of current and expected future earnings and the pattern or continuity of past dividends.

DeAngelo et al. (2004) posited that the high/increasing dividend concentration may be the result of high/increasing earnings concentration. Their findings supported this contention and they found that just as dividend concentration had increased; so did the concentration of earnings. Earnings in both 1978 and 2000 of the sample co-operatives are concentrated among a relatively few firms at the top end of the distribution, and that such concentration is notably greater in 2000 than it was in 1978. There was also strong link between losses and the failure to pay dividends. Their findings suggest that earnings do have some impact on dividend payment.

Baker and Smith (2006) found out that co-operatives exhibited behavior consistent with a residual dividend policy and their matched counterparts to learn how they set their dividend policies. Their results showed that for the sample and matched firms, the pattern of past dividends, the level and stability of earnings, and desire to maintain a long-term dividend payout ratio elicit the highest level of agreement from respondents. Ferris et al. (2006) found mixed results for the relation between a firm's earnings and its ability to pay dividends..

Size

Fama and French (2001) found that payers and non-payers differ in terms of profitability, investment opportunities and size. Their evidence suggests that three fundamentals, profitability, investment opportunities and size, are factors in the decision to pay dividends. Dividend payers tend to be large, profitable firms with earnings on the order of investment outlays. The salient characteristics of dividend payers are low earnings and few investments. Mitton (2004) wrote that size and growth in addition to profitability has been proven to be positively correlated with dividend payouts. Li and Lie (2006) reported that co-operatives are more likely to raise their dividends if they are large and profitable and the past dividend yield, debt ratio, cash ratio and

market-to-book ratio are low. Co-operatives are more likely to cut their dividends if they have poor operating income, low cash balances and a low market-to-book ratio.

Cash Flow

Liu and Hu (2005) in his study found that cash dividend payment was higher than the accounting profit. However, he found that 50 percent of the sample co-operatives had dividend cash payment higher than the free cash flow. One theory that can be used to explain why co-operatives at times borrow money to pay for dividends is the agency theory. Agency theory has also been a popular view in the discussion of dividends relevancy, as been advanced by Jensen and Meckling (1976), and later extended by Rozeff (1982) and Easterbrook (1984). Agency theory posits that there is a conflict of interests between the managers (agents) and the outside shareholders (members). Managers may consume excessive perquisites out of undistributed earnings or they may invest the earnings in less than optimal investments. This conflict of interests is referred to as agency costs. Dividend has been identified as a mechanism that can reduce agency costs. By paying out a large dividend, it reduces the amount of funds available for managers to spend excessively on perquisites. Furthermore, the larger dividend payment forces the firm to seek external financing, which will subject it to the scrutiny of the capital market for new funds and reduces the possibility for suboptimal investments.

Risk

Pruitt and Gitman (1991) find that risk (year-to-year variability of earnings) also determines co-operatives' dividend policy. A co-operative that has relatively stable earnings is often able to predict approximately what its future earnings will be. The co-operative is therefore more likely to pay out a higher percentage of its earnings than a co-operative with fluctuating earnings. In other studies, Rozeff (1982), Lloyd, Jahera and Page (1985) and Collins, Saxena and Wansley, (1996) used beta value of a firm as an indicator of its market risk. They found statistically significant and negative relationship between beta and the dividend payout. Their findings suggest that co-operatives having a higher level of market risk will pay out dividends at lower

rate. D'Souza (1999) also finds statistically significant and negative relationship between beta and dividend payout.

Growth Opportunity

Green, Pogue and Watson, (1993) investigated the relationship between the dividends, investment and financing decisions. Their study showed that dividend payout levels are not totally decided after a co-operative's investment and financing decisions have been made. Dividend decision is taken along investment and financing decisions. Their results however, do not support the views of Miller and Modigliani (1961). Partington (1983) revealed that co-operatives' use of target payout ratios, motives for paying dividends and extent to which dividends are determined are independent of investment policy. Higgins (1981) indicates a direct link between growth and financing needs: rapidly growing co-operatives have external financing needs because working capital needs normally exceed the incremental cash flows from new sales. Higgins, (1972), shows that payout ratio is negatively related to a co-operative's need for funds to finance growth opportunities.

2.3 Empirical Literature Review

2.3.1 SACCOS and Dividend Payment in Kenya

Savings and Credit Co-operatives first appeared in Germany in the 1870's. The idea moved to North America in 1900 with European immigration. Canada, the United States, Australia and Ireland have the most established movements. In many regions of these countries SACCOS are much larger than the commercial banks. By 2006, there were 28 countries in Africa that had established credit unions. Kenya is a member of the African Confederation of Savings and Credit Co-operatives (ACCOSCA) (SACCOL, 2006).

Co-operative principle of 'limited return on capital' creates problems for member capital formation. Co-operatives are supposed to be people-centered organizations, not capital-centered enterprises; therefore, while earning return on capital invested by members is permissible, it shouldn't be excessive. While Kenyan agricultural co-operatives are encouraged to allocate part

of their surplus to pay dividends on member shares, in practice they seldom do so. In the five Kenyan co-operatives studied by Rouse, (1998), none had paid a dividend on member shares for the last 8-10 years; most of the surplus had been returned to the members in the form of direct delivery payments. While a 'pro-payment, no-dividend' policy may appeal to member users, it is likely not to appeal much to member investors; co-operative tend to be one-in-the same person.

Unfortunately, current taxation laws in Kenya discourage the accumulation of co-operative institutional capital. Co-operatives have been subject to income tax since 1985 and taxes are charged on total income, but deductions are allowed on up to 80 percent of that for dividends and bonuses paid to members (Ikaheimo, Jamsen and Malinen, 1999). To avoid paying higher taxes, many co-operatives therefore choose to redistribute as much of their net earnings as they can to members leaving little for direct reinvestment. Thus some modification in these taxation laws, for example, by reducing or eliminating the tax on retained co-operative earnings, might encourage more accumulation of institutional capital.

One way in which co-operatives cope with the liquidity problem is by getting members to agree to purchase additional shares by deducting the cost of the share purchase from products/services they sell to the cooperatives. This method of member capital formation was extensively used in the Kenyan co-operatives studied by Rouse, (1998), and seems to be a much simpler, less painful way of mobilizing additional member share capital; however, the method as applied in Kenya suffered from two major weaknesses: often deducted share purchases were made in a less-than-transparent way, without fully informing the member involved and since the new member shares purchased through this method did not produce dividends and had a low future redemption value.

Karanja (1987) studied dividend practices of publicly quoted companies and found out that there are many reasons why firms pay dividends. One reason is lack of investment opportunities, which promises adequate returns. Firm's cash position was also an important consideration of timing of dividends. Onyango (1999) noted that shareholders tend to receive higher cash dividends after bonus issue. Njoroge (2001) examined relationship between dividend payout and some financial ratios such as return on assets. The results obtained were that the most significant

variable in making dividend decisions is return on assets while return on equity and growth in assets are not considered in making dividend decisions. Maina (2000) carried out a study to establish whether there exists a relationship between dividend and investment decisions since both compete for internally sourced funds and given that funds obtained by debt are very expensive and not available to all firms

2.4 Summary of literature review

In co-operative societies, profits are distributed to stockholders as dividends according to the number of shares of stock owned or used to expand the business. Cooperative businesses may retain their earnings or distribute part or all of them as dividends to their members.

Savings and Credit cooperatives have three channels for allocating benefits to its members: (high) deposit interest rates, (low) loan interest rates and dividends. The allocation of dividends according to members' savings/contribution to the SACCO is often considered to be a pre-tax expense. Co-operatives societies like sole proprietorships, partnerships and closely held corporations face problems acquiring equity. Their equity capital usually is provided by the owners or acquired via retained earnings. Some cooperatives also acquire equity by selling nonvoting stock or equity certificates to members and nonmembers. The board usually determines how the earnings will be distributed

The top-three advantages of SACCOS in the survey conducted among savings and credited co-operatives in Belgium were fair price/quality relation (least indicated by the financial co-operatives), realization of economies of scale (mostly indicated by co-operatives in the primary sector), co-operative dividend (mostly indicated by the financial co-operatives).

Determinants of Dividend Payout Policy have been identified in the literature as Profitability, Size, Cash Flow, Risk and Growth Opportunity. In Kenya, while agricultural co-operatives are encouraged to allocate part of their surplus to pay dividends on member shares, they seldom do so. The current taxation laws in Kenya discourage the accumulation of co-operative institutional capital. Co-operatives have been subject to income tax since 1985 and taxes are charged on total

income, but deductions are allowed on up to 80 percent of that for dividends and bonuses paid to members. One way in which co-operatives cope with the liquidity problem is by getting members to agree to purchase additional shares by deducting the cost of the share purchase from products/services they sell to the cooperatives.

From the literature review it can be concluded that the factors that determine dividend payout policy are Profitability, Size, Cash Flow, Risk and Growth Opportunity. However most of the literature relates to different economic times from the hard economic times experienced currently. The economic footing has changed. The knowledge has it that, this has been due to high loan interest rates by the Banks in the local market, rising inflation rates in the recent past, severe drought which was experienced in Kenya between year 2007 and 2009 was unfavorable to growth of businesses. The SACCOS have also been forced to adopt the strategy of expansion in order to benefit from economies of scale and survive in the current environment of stiff competition. The purpose of the study therefore is to add onto the existing literature that has been done on the determinants of dividend payment by investigating and documenting the determinants of dividend payout ratio of SACCOS in Kenya in the current situation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology that was used in gathering the data, analyzing the data and reporting the results. Here the researcher aimed at explaining the methods and tools used to collect and analyze data to get proper and maximum information related to the subject under study.

3.2 Research design

The design was causal research study which aimed at establishing the determinants of dividend payout ratio among savings and credit cooperative societies in Kenya. Causal Research explores the effect of one variable on another variable and more specifically, the effect of independent variable on the dependent. Thus, this approach was appropriate for this study, since the researcher intended to collect detailed information on the factors that determine dividend payout ratio among SACCOS in Kenya.

3.3 Population

The population of interest of this study was the savings and credit cooperative societies in Kenya. In Kenya there are about 5000 registered SACCOS (Ministry of Co-operative Development and Marketing 2008).

3.3.1 Sample

The study focused on the SACCOS that have a countrywide network in Kenya, and have their head offices in Nairobi. There are 25 active SACCOS with such network (Ministry of Cooperative development and Marketing 2008). The sample comprised the 24 SACCOS. The convenience sampling method was used. The method involved collecting information from SACCOS that conveniently met the criteria and were available to provide data that represents the

population. The SACCOS selected were easy to access and obtain data. The method is necessary when one intends to get information quickly and efficiently (Ken Black 2004).

3.4 Data Collection

In order to identify the determinants of dividend payout ratio among savings and credit cooperative societies, secondary data sources was used as internal secondary research i.e. information acquired within an organization where research was being carried out. Secondary data is information gathered for purposes other than the completion of a research project. Secondary data research is the research which is based on gathering the information from the findings of other researchers (Steppingstones, 2004). Collecting data from secondary data sources has the advantage of being less expensive and time consuming.

Data was derived from the annual reports of the SACCOS to be sampled from Nairobi province and their books of account. Past five years information of the SACCOS was collected on its profitability, Revenue received, book value of total assets, ratio of retained earnings to the book value of equity and total capital.

3.5 Data Analysis and Presentation

Various options of panel data regression was done, fixed effects, random effects and OLS panel. And the results presented in a table. The dividend payout ratio was regressed against the five explanatory variables: profitability, risk, cash flow, growth and size (Revenue generated).

The panel character of the data allows for the use of panel data regression equation/model. Panel data involves the pooling of observations on a cross-section of units over several time periods and provides results that are simply not detectable in pure cross-sections or pure time-series studies. A general model for panel data that allows the researcher to estimate panel data with great flexibility and formulate the differences in the behavior of the cross-section elements was adopted. The panel regression equation differs from a regular time-series or cross section regression by the double subscript attached to each variable. The general form of the panel data model can be specified more compactly as:

$$Y_{i,t} = \alpha_i + \beta X_{i,t} + \mu_{i,t}$$

With the subscript i denote the cross-sectional dimension and t representing the time-series dimension. In this equation, $Y_{i,t}$ represents the dependent variable in the model, which is the Saccos' dividend payout ratio measured by the dividend payment; $X_{i,t}$ contains the set of explanatory variables in the estimation model; profitability, size of the SACCO and cash flow of the SACCOS. This was the quest of correlating dividend payment with factors such as profitability, growth opportunities, cash flow, the SACCOS' size (market-to-book value) and the risks that the SACCOS face. α_i was taken to be constant over time t and specific to the individual cross-sectional unit i . If α_i was taken to be the same across units, then Ordinary Least Square (OLS), technique for estimating the unknown parameters in a linear regression model, provides a consistent and efficient estimate of α and β .

The model for this study follows the one used by D'Souza (1999) to explain the relationships between dividend payout ratios and the determinants. The dividend payout ratio (DIV) was used as dependent variable and other variables (profitability, risk, growth opportunity, size and cash flow) are independent variables. The panel regression equation below was used:

$$\text{DIV} = \alpha_i + \beta_1 \text{PROF}_{i,t} + \beta_2 \text{CASH}_{i,t} + \beta_3 \text{SIZE}_{i,t} + \beta_4 \text{RISK}_{i,t} + \beta_5 \text{GROW}_{i,t} + \mu_{i,t}$$

Where:

$\alpha_i, \beta_1, \beta_2, \beta_3, \beta_4$ and β_5 are constants

DIV = Dividend payout ratio for SACCO i in period t

PROF = Profitability; earnings before interest and taxes/total assets for SACCO i in period t .

CASH = Cash flow; measured as log of net cash flow for SACCO i in period t

SIZE = Co-operative's size measured as revenue generated for SACCO i in period t

RISK = Variability in profit for SACCO i in period t .

GROW = Growth opportunity variable measured as growth in sales for SACCO *i* in period *t*..

μ = the error term for SACCO *i* in period *t*.

In the light of the above discussions, the following hypothesized relationships are predicted for each variable with respect to the dividend payout ratio.

. PROF and CASH are expected to be positively related to dividend payout ratio.

RISK, GROW and SIZE should be negatively related to dividend payout ratio.

CHAPTER FOUR

4.0 DATA ANALYSIS AND PRESENTATION.

4.1 Introduction

This chapter presents the information processed from the data collected during the study on determinants of dividend ratio from the registered SACCOS in Kenya. The sample composed of 25 SACCOS with country wide network for the period ranging from 2005 to 2009. One of the SACCOS was not active for the period between 2008-2009 years. Therefore it was excluded from the analysis.

4.2 Analysis and Presentation

4.2.1 Year 2005 Analysis and Interpretations

Table 1: ANOVA Statistics for 2005 Data

Model					
R		.699			
R Square		0.489			
Adjusted R Square		0.394			
Std. Error of the Estimate		47.23173			
	Sum of Squares	df	Mean Square	F	Sig.

Regression	57627.23	5	11525.45	5.166	.002
Residual	60232.59	27	2230.836		
Total	117859.8	32			

Table 2: Coefficients of 2005 Model

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-183.465	114.984		-1.596	0.122
Profitability	-1.166	2.97	-0.059	-0.393	0.698
Firm size	8.925	5.349	0.278	1.669	0.107
Growth opportunity	1.944	2.774	0.136	0.701	0.489
Risk	-2.17	5.092	-0.083	-0.426	0.673
Cash	19.967	3.981	0.716	5.016	0

The data findings from 2005 market statistics were analyzed and the SPSS output presented in table 1 and 2 above. From the ANOVA statistics in table 1, the processed data, which are the

population parameters, had a significance level of 2% which shows that the data is not ideal for making a conclusion on the population's parameter. The coefficient table in table 2 above was used in coming up with the model below:

$$\text{DIV} = -183.465 - 1.166 \text{ PROF} + 8.925 \text{ SIZE} + 1.944 \text{ GROWTH} - 2.17 \text{ RISK} + 19.967 \text{ CASH}$$

According to the model, firm size, growth opportunity and cash flow were positively correlated with dividend payout ratio while profitability and risk were negatively correlated with dividend payout ratio. From the model, when cash of the SACCOS is increased by one unit while holding profitability, SACCOS' size, growth and risk constant, the value of dividend payout ratio will increase by 19.967. The SACCOS' size would increase the dividend payout ratio by 8.925 should other factors remain constant, while an increase in risk by one unit would decrease the dividend payout ratio by 2.17.

4.2.2 Year 2006 Analysis and Interpretations

Table 3: ANOVA Statistics for 2006 market Data

Model		5			
R		0.549			
R Square		0.302			
Adjusted R Square		0.172			
Std. Error of the Estimate		28.04091			
	Sum of Squares	df	Mean Square	F	Sig.

Regression	9167.534	5	1833.507	2.332	0.070
Residual	21229.91	27	786.293		
Total	30397.44	32			

Table 4: Coefficients for 2006 Regression Model

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1.844	35.676		-0.052	0.959
Profitability	9.454	3.777	0.421	2.503	0.019
Firm size	0.783	2.266	0.058	0.346	0.732
Growth opportunity	-0.025	0.015	-0.288	-1.678	0.105
Risk	1.725	3.897	0.074	0.443	0.661
Cash	6.451	4.163	0.261	1.55	0.133

The data findings for 2006 statistics were processed using SPSS and the output presented in table 3 and 4 above. According to the ANOVA table 3 above, the parameters predicted in the table above had a significance level of 7% which is inadequate to be used as a population parameter. The regression model drawn from table 4 above is presented below:

$$\text{DIV} = -1.844 + 9.454 \text{ PROF} + 0.783 \text{ SIZE} - 0.025 \text{ GROWTH} + 1.725 \text{ RISK} + 6.451 \text{ CASH}$$

According to the table, the dividend payout ratio had an autonomous value of -1.844 that is when the value of other independent variables is zero. A unit increase in profitability increases the dividend payout ratio by 9.454 when SACCOS' size, growth opportunity, risk and cash flow variables are held constant. A unit increase in cash flow, holding other variables constant, increased the dividend payout ratio by 6.451, while a decrease of 0.025 in dividend payout ratio occurred when there was a unitary increase in growth opportunity holding other independent variables constant. This shows that profitability, SACCOS' size, risk and cash flow had a positive relationship with the dividend payout ratio while growth opportunity negatively influenced the dividend payout ratio.

4.2.3 Year 2007 Analysis and Interpretations

Table 5: ANOVA for 2007 Statistics

2007 Model Statistics					
R		0.270			
R Square		0.073			
Adjusted R Square		-0.105			
Std. Error of the Estimate		94.30671			
	Sum of Squares	df	Mean Square	F	Sig.

Regression	18214.49	5	3642.898	0.41	0.838
Residual	231237.6	26	8893.755		
Total	249452.1	31			

Table 6: 2007 Model Coefficients

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-254.205	227.722		-1.116	0.275
Profitability	-2.106	61.512	-0.01	-0.034	0.973
Firm size	13.793	10.511	0.269	1.312	0.201
Growth opportunity	0.177	3.38	0.011	0.052	0.959
Risk	3.071	17.395	0.052	0.177	0.861
Cash	5.569	7.789	0.143	0.715	0.481

From the finding of the study on the 2007 market statistics as analyzed and presented in the above table, the following regression equation was established by the study for the year 2007:

$$\text{DIV} = -254.205 + -2.106 \text{ PROF} + 13.793 \text{ SIZE} + 0.177 \text{ GROWTH} + 3.071 \text{ RISK} + 5.569 \text{ CASH}$$

From the findings of the data it can be concluded that when the value of profitability, SACCOS' size, growth opportunity, risk and cash flow were zero, dividend payout ratio was -254.205. The table also shows that holding SACCOS' size, growth opportunity, cash flow and risk constant, an increase by one unit of profitability decreases dividend payout ratio by 2.106, when other factors are held constant an increase in SACCOS' size by one unit increases dividend payout ratio by 13.793. If one unit of cash flow was increased while holding other factors constant, the dividend payout ratio would increase by 5.569. This shows that SACCOS' size, growth opportunity, cash flow and risk have a positive relationship with dividend payout ratio while profitability inversely affects dividend payout ratio, although the SACCOS' size influences dividend payout ratio positively most. However, the model was arrived at a significance level of 83.8% which means that the model is adequate in drawing a conclusion on the population parameters.

4. 2.4 Year 2008 Analysis and Interpretations

Table 7: ANOVA statistics for 2008 Model

Model					
R		0.490			
R Square		0.24			
Adjusted R Square		0.1			
Std. Error of the Estimate		44.70623			
	Sum of Squares	df	Mean Square	F	Sig.

Regression	17072.36	5	3414.473	1.708	0.167
Residual	53963.48	27	1998.647		
Total	71035.84	32			

Table 8: Coefficients of model 2008

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-180.207	108.691		-1.658	0.109
Profitability	14.385	15.939	0.715	0.903	0.375
Firm size	10.48	4.887	0.406	2.145	0.041
Growth opportunity	0.369	1.115	0.059	0.331	0.743
Risk	-3.138	4.41	-0.567	-0.712	0.483
Cash	-2.139	4.272	-0.09	-0.501	0.621

The market data for 2008 was regressed on SPSS and the output presented in table 7 and 8 above. From the data analyzed and presented in the table above, the model for the year 2008 is presented below:

$$\text{DIV} = -180.207 + 14.385 \text{ PROF} + 10.48 \text{ SIZE} + 0.369 \text{ GROWTH} - 3.138 \text{ RISK} - 2.139 \text{ CASH}$$

According to the model above, holding profitability, SACCOS' size, growth opportunity, risk and cash flow constant at zero, dividend payout ratio will be -180.207. When the SACCOS' size, growth opportunity, risk and cash flow are held constant, a unit increase in profitability will increase a firm's dividend payout ratio by 14.385. When other factors are held constant, a unit increase in SACCOS' size will increase the dividend payout ratio by 10.48. The model also shows that risk and cash flow have an inverse relationship with dividend payout ratio such that a unit increases in either risk or cash flow holding other factors constant will lead to a decrease in dividend payout ratio of -3.138 and -2.139 respectively. From the above model it can be concluded that profitability, SACCOS' size and growth opportunity positively influenced dividend payout ratio. Profitability variable gave the highest influence while risk and cash flow had a negative influence on the same. From the ANOVA statistics table 7 above, it shows that the parameters in the model have a 16.7% level of significance.

4.2.5 Year 2009 Analysis and Interpretations

Table 9: ANOVA Statistics for 2009

Model	
R	0.207
R Square	0.043

Adjusted R Square				-0.134	
Std. Error of the Estimate				402.3962	
	Sum of Squares	df	Mean Square	F	Sig.
Regression	195383.1	5	39076.63	0.241	0.941
Residual	4371913	27	161922.7		
Total	4567296	32			

Table 10: Coefficients of 2009 Model

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-649.563	961.472		-0.676	0.505
Profitability	0.72	129.441	0.002	0.006	0.996
Firm size	26.723	45.996	0.132	0.581	0.566
Growth opportunity	-22.857	53.136	-0.098	-0.43	0.67
Risk	-3.673	56.487	-0.018	-0.065	0.949

Cash	2.802	8.644	0.062	0.324	0.748
------	-------	-------	-------	-------	-------

The data findings for 2009 were computed, analyzed and presented in table 9 and 10 above. According to the ANOVA statistics in table 9 above, the model had a significance level of 94.1% which means that the model is most appropriate to be used as a population parameter. From table 10, the regression model is presented below:

$$\text{DIV} = -649.563 + 0.72 \text{ PROF} + 26.723 \text{ SIZE} - 22.857 \text{ GROWTH} - 3.673 \text{ RISK} + 2.802 \text{ CASH}$$

According to the regression model, when the values of profitability, SACCOS' size, growth opportunity, risk and cash flow are zero, dividend payout ratio will -649.563. When profitability is increased by one unit, the dividend payout ratio will increase by 0.72. The dividend payout ratio will also increase by 26.723 and 2.802 when the SACCOS' size and cash flow are increased by one unit respectively holding other factors constant. The study however shows that an increase by one unit in growth opportunity and risk would decrease the value of dividend payout ratio by 22.857 and 3.673 respectively should other factors be held constant. This shows that profitability, SACCOS size and cash flow have a positive correlation with dividend payout ratio while growth opportunity, risk have an inverse relationship with dividend payout ratio.

CHAPTER FIVE:

5.0 SUMMARY, CONCLUSION, LIMITATION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussions drawn from the data findings analyzed and presented in the previous chapter. The chapter is structured into discussions, conclusions, recommendations and areas for further research.

5.2 Summary.

The study found that the regression equations for the period 2005 to 2009 related dividend payout ratio of the SACCOS to its profitability, size, growth opportunity, earned risk and cash flow. The equations was:

$$\text{DIV} = -253.857 + 4.2574 \text{ PROF} + 12.1408 \text{ SIZE} - 4.0784 \text{ GROWTH} - 0.837 \text{ RISKS} + 6.53 \text{ CASH}$$

From the above regression models for the five years, the study found out that, there were several factors influencing the dividend ratio of SACCOS, which are profitability, SACCOS' size, risk, cash flow and growth opportunity. They either influenced it positively or negatively. The study found out that the intercept varied. The highest value was -1.844 and the lowest was -649.563 with an average of -253.857 for all years. The study also found out that the coefficient of SACCOS' profitability varied from positive to negative. The highest regression value was positive. This means that profitability positively influenced the SACCOS dividend payout ratio. This means that the SACCOS paid dividends based on their profits.

The study found out that the SACCOS' size varied in value although it was positive in all cases. This means that the SACCOS size positively influenced their dividend payout ratio. The study further found out that the coefficients of the SACCOS' growth opportunity to be positive in three out of the five regression models. This depicts that, according to findings, growth opportunity

positively influences the SACCOS dividend payout ratio which is contrary to stipulated facts that growth opportunity tend to limit the SACCOS' propensity to pay dividends. This contradicts the known fact that growth opportunity negatively influences the firm's dividend payout ratio since most of its profits are channeled to investment (Tiriongo 2004). The study also found out that, the coefficient of the risk negatively related to the SACCOS dividend payout ratio hence dividend policy. This is because when the SACCOS focus on retaining most of their earnings, they optimize on the payment of dividends. The study lastly found out that the cash flow of the SACCOS positively correlated to dividend payout ratio in four of the five regressions. That means the more the SACCOS have high level of cash, the less obligations they have on paying debts. The debts are covered by the assets. The low risk of getting into monetary problems motivates SACCOS into diverting most of the profits to payment of dividends.

5.3 Conclusions

The study concludes that SACCOS' profitability, cash flow and size positively and growth opportunity influences their dividend payout ratio. A certain percentage of SACCOS' earning is paid out to shareholders in the form of dividends. Since the dividend policy of a SACCO is quantified by its dividend payout ratio, and profitability by SACCOS' dividend payout ratio, then the same was found by Karanja (1987) who concluded that profitability and company's level of distributable resources influences its dividend policy; Abdul (1993), Njuguna Muchiri (2006) and Tiriongo (2004) also found out the same.

Since the more liquid a firm is, the less it uses its earnings/revenue to pay for debts then most of its revenues will translate to profits hence more fund will be available for dividend payment, since SACCOS pay dividends from their profits. Abdul (1993) in his empirical study to identify parameters which are important in the determination of dividends by publicly quoted companies also found out that liquidity positively influences a company's dividend payment. The study further concludes that SACCOS' size also determines its dividend payout ratio since investors perceive big SACCOS making profits more likely to pay more dividends. They invest in the

same SACCOS since they expect higher dividend yields in the future. This determines the SACCOS' dividend payout ratio hence influence its dividend policy.

The study also concludes that risk negatively determines its dividend payout ratio since the higher the value of risk, the higher the propensity of the SACCO to turn most of its EBDIT profits into retained earnings which constrain its dividend payment because more of profits are retained.

5.4 Limitations of the study.

There was a challenge which was encountered during the study. Some Officers from SACCOS that participated in the study were initially reluctant to release information related to Audited accounts and Annual reports making arguments that it was confidential. That reluctance delayed the completion of data collection.

5.5 Recommendations

The study recommends that SACCOS should minimize the short term debts they incur if they want to have a dividend policy that favors shareholders. 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 so as to increase profitability for the SACCO in order to have a good dividend policy in the future.

5.6 Suggestion for further research.

The study showed that the dividend payout ratio in SACCOS was influenced by the SACCOS' Profitability, cash flow, Size, Risk and Growth opportunity. Precisely the dividend payment ratio is determined by economic performance of the SACCOS. The establishment of SACCO Societies Regulatory Authority (SASRA) in the year 2009 is expected to introduce changes which will control SACCOS on areas of investments. Therefore I suggest further research on the

impact of SACCO Societies Regulatory Authority on the economic performance of SACCOS in Kenya.

REFERENCES

- Aboddy, David; Lev, Baruch (2000). "Information Asymmetry, R&D, and Insider Gains". *Journal of Finance* 55 (6): 2747–2766. doi:10.1111/0022-1082.00305.
- Abdul S. (1993) Determinants of Dividend payout, The case of listed companies in Kenya, Unpublished MBA of the University of Nairobi.
- Aivazian V. and Booth L., (2003), Do emerging market firms follow different dividend policies from US firms?, *Journal of Financial Research*, Vol. 26 No.3
- Alexander Russell and David Zuckerman (2001) Perfect information leader election in log_n + O(1) rounds. *J. Comput. Syst. Sci.*, 63(4):612–626.15
- Amihud Y. and Li K., (2006), The declining information content of dividend announcements and the effect of institutional holdings, *Journal of Financial and Quantitative Analysis*.
- Arnott, R., Asness, C. (2003), "Surprise! Higher dividends – higher earnings growth", *Financial Analysts Journal*, Vol. 59 No.1, pp.70-87
- Baker H., Farrelly G and Edelman R., (1985), A survey of management views on dividend policy, *Financial Management*, Vol. 14 No.3
- Baker H. and Powell, G, (2000), Determinants of corporate dividend policy: A survey of NYSE firms. *Financial Practice and Education*, 10
- Baker H. and Smith D., (2006), In search of a residual dividend policy, *Review of Financial Economics*, 15(1)
- Baker H.K. (1999), Dividend policy issues in regulated and unregulated firms: a managerial perspective, *Managerial Finance*, Vol. 25 No.6, pp.1-19

Balnave N and Patmore G, (2005), Rochdale consumer co-operatives and Australian labour history, Australian Society for the Study of Labour History

Bernstein P., (1996), Dividends: the puzzle, Journal of Applied Corporate Finance, Vol. 9 No.1,

Bernstein, P.L. (2005), "Dividends and the frozen orange juice syndrome", *Financial Analysts Journal*, Vol. 61 No.2, pp.25-30

Besley T, Coate S and Loury G, (1993), The Economics of Rotating Savings and Credit Associations, American Economic Review 83,

Black, F. (1976), "The dividend puzzle", *Journal of Portfolio Management*, Vol. 2 No.1, pp.1-22

Black F., (1976), The dividend puzzle, Journal of Portfolio Management, No.Winter, pp.5-8

Brav, A., Graham, J.R., Harvey, C.R., Michaely, R. (2005), "Payout policy in the 21st century", *Journal of Financial Economics*, Vol. 77 No.3, pp.483-527

Brook, Y., Chalton, W. and Hendershott, R. (1998), Do firms use dividends to signal large future cash flow increase? Financial Management, Autumn

Brown, Stephen; Hillegeist, Stephen; Lo, Kin (2004). "Conference calls and information asymmetry". *Journal of Accounting and Economics* 37 (3): 343–366.

Bruner, R.F. (2002), Does M&A pay? A survey of evidence from the decision-maker, Journal of Applied Finance, Vol. 12 No.1

Business Daily (June 9, 2010) Cheap Sacco loans face regulator's axe

Canning D, Jefferson C and Spencer J, (1999), Optimal Credit Rationing in Not-For-Profit Financial Institutions, Working paper, Queen's University of Belfast

Chiang K., Frankfurter G.M., Kosedag A. and Wood, B., (2006), the perception of dividends by professional investors, Managerial Finance, Vol. 32 No.1

Collins M., Saxena A. and Wansley J., (1996), the role of insiders and dividend policy: a comparison of regulated and unregulated firms, *Journal of Financial and Strategic Decisions*, Vol. 9 No.2

DeAngelo H., DeAngelo L and Skinner D., (2004), are dividends disappearing? Dividend concentration and the consolidation of earnings, *Journal of Financial Economics*, 72 pp.425-56

DeAngelo, H., DeAngelo, L. (2006), "The irrelevance of the MM dividend irrelevance theorem", *Journal of Financial Economics*, Vol. 79 No.2, pp.293-315

Dhanani, A. (2005), "Corporate dividend policy: the views of British financial managers", *Journal of Business Finance and Accounting*, Vol. 32 No.7/8, pp.1625-72

D'Souza J, (1999), Agency cost, market risk, investment opportunities and dividend policy – an international perspective, *Managerial Finance*, Vol. 25 No.6

Easterbrook F., (1984), two agency-cost explanations of dividends, *American Economic Review*. September

Edgar Online (03/22/2001), Annual Report, Section 1, Business, Retrieved from www.sec.edgar-online.com/ace-hardware-corp on 20/08/09

Fama, E. and French K., (2001), Disappearing dividends: Changing firm characteristics or lower propensity to pay? *Journal of Financial Economics*, 60(1)

Farrelly G., Baker K. and Edelman B., (1986), corporate dividends: Views of the policymakers. *Akron Business and Economic Review*, 17(4)

Flannery M, (1974), an Economic Evaluation of Credit Unions in the United States, Federal Reserve Bank of Boston Research Report No. 54

Frankfurter, G., Wood, B. (2002), "Dividend policy theories and their empirical tests", *International Review of Financial Analysis*, Vol. 11 No.2, pp.111-38

Gorton G and Schmid F, (1999), Corporate Governance, Ownership Dispersion, and Efficiency: Empirical Evidence from Austrian Cooperative Banking, Journal of Corporate Finance 5

Green P., Pogue M. and Watson I, (1993), Dividend policy and its relationship to investment and financing policies: empirical evidence using Irish data, IBAR, Vol. 14 No.2

Hart O and Moore J, (1996), the Governance of Exchanges: Members' Cooperatives versus Outside Ownership, Oxford Review of Economic Policy 12

Hart O and Moore J, (1998), Cooperatives vs. Outside Ownership, Working paper, Harvard University, London School of Economics and University of St. Andrews, January 1998

Higgins R., (1972), the corporate dividend-saving decision, Journal of Financial and Quantitative Analysis, Vol. 7 No.2

Higgins R., (1981), Sustainable growth under inflation, Financial Management, Vol. 10

Izquierdo, Segismundo S.; Izquierdo, Luis R. (2007). "The impact of quality uncertainty without asymmetric information on market efficiency". *Journal of Business Research* 60 (8): 858–867. doi:10.1016/j.jbusres.2007.02.010. ISSN 0148-2963.

Jensen, M. and Meckling, W. (1976), Theory of the firm: managerial behavior, agency costs and ownership structure, Journal of Financial Economics, 3(4)

Karanja M. (1987) Determinants of Dividend payment, The case of listed companies in Kenya, Unpublished MBA of the University of Nairobi.

Ken Black (2004). Business Statistics for Contemporary Decision Making (Fourth (Wiley Student Edition for India) ed.). Wiley-India. ISBN 9788126508099.

Kumar P. and Lee B.S, (2001), Discrete Dividend Policy with Permanent Earnings, Financial Management, Tampa

Li, W. and Lie, E. (2006), Dividend changes and catering incentives, Journal of Financial Economics, 80

Liu, S. and Hu, Y. (2005), Empirical analysis of cash dividend payment in Chinese listed companies, Nature and Science, 3(1)

Lloyd W., Jahera S. and Page D., (1985), Agency cost and dividend payout ratios, Quarterly Journal of Business and Economics, Vol. 24 No.3

Maina, T and Kibanga, M (2004), "Cooperative Management in Developing countries," Manfield management services Ltd, Kenya

Mas-Colell, Andreu; Whinston, Michael D.; Green, Jerry R. (1995). Microeconomic Theory. New York: Oxford University Press. ISBN 0195073401. (Chaps. 13 and 14 discuss applications of adverse selection and moral hazard models to contract theory.) .

McCluskey, T., Burton, B.M., Power, D.M. (2003), "Evidence on Irish company managers' views about dividend policy", *Irish Accounting Review*, Vol. 10 No.2, pp.29-52

McCluskey, T., Burton, B.M., Power, D.M., Sinclair, C.D. (2006), "Evidence on the Irish stock market's reaction to dividend announcements", *Applied Financial Economics*, Vol. 16 No.8, pp.617-28

Michael BenOr and Nathan Linial (1985). Collective coin flipping, robust voting schemes and minima of banzhaf values. In FOCS, pages 408–416,.

Miller M. and Modigliani F., (1961), Dividend policy, growth and the valuation of shares, Journal of Business, No.October,

Ministry of Cooperative Development and Marketing (2007), Investment Policy and Guidelines for Cooperative Sector.

Mitton T. (2004), corporate governance and dividend policy in emerging markets, Emerging Markets Review, 5(4)

National Cooperative Bank, (1996), A Day in the Life of Cooperative America, Washington, DC

Njiru L.A., (2003), Determinants of Dividend Payments by SACCOs in Nairobi, unpublished MBA of the University of Nairobi

Njuguna M, (2006), Determinants of Dividend Payout by SACCOS in Kenya, unpublished MBA of the University of Nairobi

Paolo Rapisarda and Jan C.Willems, 2006. Recent Developments in Behavioral System Theory, July 24-28, 2006, MTNS 2006, Kyoto, Japan

Partington G., (1983), why firms use payout target: a comparative study of dividend policies, paper presented at AAANZ Conference, Brisbane

Polderman J.W. And J.C. Willems, 1998. Introduction to Mathematical Systems Theory: A Behavioral Approach, 424 pages, Springer, New York.

Pruitt S. and Gitman L, (1991), the interactions between the investment, financing, and dividend decisions of major US firms, Financial Review, Vol. 26 No.33

Rozeff S., (1982), Growth, beta and agency cost as determinants of dividend payout ratios, *Journal of Financial Research*, Vol. 5

Shefrin, H.M., Statman, M. (1984), "Explaining investor preference for cash dividends", *Journal of Financial Economics*, Vol. 13 No.2, pp.253-82

Smith D, Cargill T and Meyer R, (1981), An Economic Theory of A Credit Union, *Journal of Finance* 36

Spence, Michael (1973). "Job Market Signaling". *Quarterly Journal of Economics* (The MIT Press) 87 (3): 355–374.

Sue N, (30/03/2007), Cooperatives Pay Big Dividends, can also be retrieved from www.guardian.co.uk/business/2007/mar/30/smes.technology

Tiriongo W. (2004) Determinants of Dividend payout ratio, a case of listed companies in Kenya, Unpublished MBA of the University of Nairobi.

Uriel Feige (1999), Noncryptographic selection protocols. In FOCS, pages 142–153.

Van Opstal, W., Gijssels, C. & Wyns, I. (2008), Les coopératives agréées en Belgique Microperspective, In: Van Opstal, W., Gijssels, C. & Develtere, P. (éds), *Entrepreneuriat coopérative en Belgique: théories et pratiques*. Leuven: ACCO

Van Opstal W. and Gijssels C., (2009), the Co-operative Provision of Public Services in an Evolving Welfare State, EMES Conferences Selected Papers Series ECSP-B08-16.

Wahome, (2009) Dividend policy, growth, and valuation of shares, *journal of business*, No.1 April.

APPENDICES

Appendix I: Respondents' Letter of Introduction

September 2010.

TO WHOM IT MAY CONCERN,

Dear Sir/Madam,

REF: PERMISSION TO CARRY-OUT A RESEARCH ON THE FACTORS THAT DETERMINE DIVIDEND PAYOUT RATIO OF SACCOS IN KENYA.

I am a Postgraduate student at the University of Nairobi, School of business. As part of the fulfillment of the requirements to the award of the MBA degree, I am undertaking a management research project on factors that determine Dividend Payout ratio among Savings and Credit Cooperatives Society in Kenya.

Your organization has been selected to participate in this study and I would kindly request for your assistance to provide the information I need.

The information provided is strictly for academic purpose and will be handled with strict confidence. Your assistance and co-operation will be highly appreciated.

A copy of the final research report will be availed to you on request.

Yours Faithfully,

Catherine Mbuki.

MBA, Student.

APPENDIX II. List of SACCOS which participated in the study.

1. Afya SACCO
2. Harambee SACCO
3. Ukulima SACCO
4. Shirika SACCO.
5. Kenya police SACCO
6. Ulinzi SACCO.
7. Hazina SACCO.
8. Mwalimu SACCO
9. Magereza SACCO
10. Ardhi SACCO
11. Ufundi SACCO
12. Elimu SACCO
13. Asili SACCO
14. Sauti SACCO
15. Sheria SACCO
16. Jamii sacco
17. Kenya Bankers SACCO
18. Maktaba SCCO
19. Ushuru SACCO
20. Nassefu SACCO
21. NHIF SACCO
22. Stima SACCO

23. Posta SACCO

24. Nyati SACCO.