DETERMINANTS OF DIVIDEND PAYMENTS BY SACCOs IN NAIROBI

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DECLARATION

This management research project is my original work and has not been presented for a degree award in any other university.

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

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DEDICATION

To my wife Wambeti, daughter Wangari and son Njeru for being around when I needed them most.

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LIST OF ABBREVIATIONS

ABCUL	Association of British Credit Unions
Co-op Act	Co-operative Act
D/NA	Debt/Net Assets
G.O.K	Government of Kenya
I/NA	Investments/Net Assets
K.shs	Kenyan Shillings
KUSCCO	Kenya Union of Savings and Credit Co-operatives
MBA	Master of Business Administration
M.O.C.D	Ministry of Co-operative Development
R/NA	Reserves/Net Assets
SACCO	Savings and Credit Co-operative
SACCOs	Savings and Credit Co-operative Societies
S.DEV	Standard deviation
S/NA	Surplus/Net assets
U.S.A	United States of America
VAR	Variance
WC/NA	Working Capital/Net Assets
WOCCU	World Council of Credit Unions

ABSTRACT

The study had the objective of identifying the determinants of dividend payments by SACCOs in Nairobi.

A review of literature highlighted some of the variables that may determine the amount of dividends paid by firms. These variables include legal requirements, liquidity position, stability of earnings, availability of investment opportunities and the level of debt. For SACCOs, there is a legal requirement that they should not pay a dividend exceeding 10% of the fully paid shares thereby restricting the managers on how much they should pay as dividends. Liquidity, stability of surpluses and availability of investment opportunities were found to be moderately significant in determining dividends paid by SACCOs. Past dividends were found to be significant while debt levels were insignificant in determining dividend payments.

The research methodology adopted dictated the use of secondary data. The annual financial reports were used in the study and analysed using descriptive statistics and the SPSS package played a very important role.

The objective was achieved by analyzing the determinants by use of a growth ratio, liquidity ratio, profitability ratio, and dividend ratio. It was found that past dividends and surpluses were significant as determinants of dividends paid while reserves, investments, liquidity and debt had a moderate to low explanatory power in determining the amount of dividends paid by SACCOs.

The multiple regression models have been used to explain the relationship between dividends paid and the selected variables .i.e. surpluses, investments, liquidity, debt, past dividends and reserves.

For the purposes of comparison, SACCOs were grouped into three classes. i.e. small, medium and large. These classes were based on the average amount of share capital held by each SACCO for the period of the study. SACCOs which had an average share capital below

Kshs.10m were considered small; between Kshs.10m and Kshs.60m were considered medium and over Khs.60 as large. It was found that large SACCOs paid a higher dividend rate than the small and medium SACCOs, possibly because they have more resources than the small and medium SACCOs.

From the research findings it was concluded that past dividends and surpluses were statistically significant, investments, liquidity and reserves were moderately significant while the level of debt was insignificant as determinants of dividends paid by SACCOs in Nairobi.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND

A credit union is a financial co-operative organized by people who have a common bond. All the members pool their assets, providing funds for loans to those in need within the group. The members own and operate the credit union, electing directors and supervisory personnel from among the membership. Credit unions are regulated either by federal or state law, depending upon the source from which the group receives its charter. The principal functions of credit unions are to encourage savings and thrift, and to provide consumers credit at favourable interest rates (Dougherty, 1987).

Most developing countries including Kenya are faced with many socio-economic problems such as unemployment, corruption, illiteracy, and shortage of investment funds due to low savings rate as a result of low income among the people. To alleviate these problems, calls have been made for mobilization of funds as a way to encourage savings. The co-operative sector is one source of mobilizing funds besides other financial institutions. Saving and Credit Co-operative Societies (*SACCOs*) have been used to mobilize the people to save. *SACCOs* were established in order to promote thrift, provide source of credit at a fair rate of interest and pay members a dividend in return for their funds invested. Dividends should be paid in order to attract more savings to enable it accomplish its major goal, to offer loans (Obuon, 1988).

To attract and retain members, SACCOs usually pay dividends from the profits made. Dividends are either paid out or capitalized depending on members' wishes through their elected representatives (delegates) or directly in case of smaller SACCOs. Capitalization of dividends is however, the more preferable option, from a financial management perspective, especially for SACCOs which are faced with liquidity problems (Ongore, 2001).

Individuals or corporations invest because they expect some returns. The returns to the investors are either in form of dividends or capital gains. Dividends are generally referred to as the

distribution of net earnings to shareholders. Capital gains on the other hand are obtained by the investors in the form of appreciation in the market values of a firm's shares (Wairimu, 2002).

A firm's dividend decision is a critical one. Other than financing and investment, dividend decision is one of the financial management decision areas. The importance of a firm's dividend decision is best summarized by Weston and Brigham (1981) as follows.

"Dividend policy determines the extent of internal financing by a firm. The Finance Manager decides whether to release corporate earnings from the control of the enterprise. Because dividend policy may affect such areas as the finance structure, the flow of liquid funds, corporate liquidity, stock prices and investor satisfaction, it is clearly an important aspect of financial management".

Numerous studies have been done on the determinants of dividend payments by firms. Some of the studies which have attempted to identify the determinants of dividend policy adopted by a firm are summarized below.

Lintner (1956) carried out interviews with the top executives of 28 US firms aimed at identifying the factors which influences their dividend policies. His findings were that a firm's level of earnings was the most important factor which influenced its dividend policy.

Thompson and Walsh (1963) conducted a survey of dividend practices of some 230 American manufacturing companies. Their findings were that companies stressed dividend consistency. In addition, they found that among other things the following factors do influence dividend practices: cash presently available and the anticipated need for cash, the companies past and prospective earnings, the interest of the shareholders, the impact of taxes, legal requirements and the dividend practices of other corporations.

Since the first goal of credit unions has always been to encourage thrift, they make it as easy as possible to save. Another fundamental purpose of credit union founders was to give people of ordinary means a low-cost alternative to loan sharks. Credit unions have fulfilled that mission by offering loans to members who might not qualify for credit elsewhere and by keeping loan rates

down. However, credit unions do also give dividends to their members. Given to the complexity of a firm's dividend decision, it is important that the members be well appraised by the management committee on the determinants of dividend payments by their respective SACCOs. It is with this background therefore, that this paper seeks to identify the determinants of dividend payments by SACCOs.

1.1.1 DEFINITION OF TERMS

Co-operative

A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social, cultural needs and aspirations through a jointly owned and democratically controlled enterprise. Like companies, co-operatives are economic organizations whose income generating activities are devoted to the economic social welfare of their members by providing services, which enable individuals to improve their personal skills and economic means for self advancement (G.O.K, 1997).

Savings and credit co-operative society (SACCO)

A SACCO is a co-operative society based on employment as common bond i.e. all members who work under one employer form a savings and credit co-operative society. The members are encouraged to save through a check-off system from their monthly salaries. It is in this way that regular savings are accumulated and it is from this that loans are given (Ouma, 1989).

Dividends

Dividends are the payments of part of a co-operative's surplus if the co-operative decides to make any such payments to the members. This includes interest on members' deposits.

Reserves

A reserve is the money set aside for future needs (such as unexpected expenses) or expenditures which will benefit co-operatives (such as training for the members or maintenance of equipment).

Surplus

A surplus is the money which a co-operative might have at the end of the financial year after all the debts are paid.

Institutional capital

This refers to all legal (statutory) reserves and surpluses created either from the accumulation of net income or capital donations. It also includes the current year's net income that will be transferred to the statutory reserve. These reserves are not expendable and no member may present an individual claim on them.

1.2 STATEMENT OF THE PROBLEM

Occupational credit unions also referred to as the Savings and Credit co-operative Societies *(SACCOs)* can be described as co-operative societies whose objectives are to encourage their members to save, thereby creating or accumulating capital, which can then be lent to the members at a reasonable rate of interest and/or better lending conditions than other financial institutions. Any returns to the organization should be distributed back to the membership in relation to the volume of business that each member had with the society (Gachara, 1990).

The loans granted by these SACCOs to their members are for provident purposes i.e. to provide for social needs such as buying clothes, radio, paying school fees and wedding gifts. Loans are also given for productive purposes, this in effect are loans for economic development. As a source of credit facilities, these co-operatives have generally achieved their objectives (Ouma, 1989).

Payment of dividends by profit making organizations such as public limited companies is made from profits generated by the company since the company law prohibits dividend payments out of capital. Payment of dividends is governed by the provisions of the company's articles, failing which the provisions of Table A apply i.e. regulations for management of a company limited by shares, not being a private company. Article 116 of Table A sates that; no dividend shall be paid otherwise than out of profits. It means that provided the dividend is not paid out of capital, it does not matter from whatever fund it is paid, whether called profits or otherwise. In the case of

co-operative societies in accordance with the co-operative societies Act, dividends may be distributed to the members of a *SACCO*. When a society has made a surplus and it's likely that some of it is going to be paid in form of dividends a provision for this should be made in the books of accounts after transferring 25% of the surplus to "statutory reserve" account and the rest to "Appropriation" account. The final amount to be paid out in form of dividends has to be decided by the general meeting. However, section 43 of the co-operative societies Act cap 490 1969, states that no registered society shall pay a dividend exceeding 10% per year of the fully paid shares.

Whereas investors in private companies invest so as to receive cash dividends or receipts in form of capital gains in addition, members join co-operative societies with the purpose of receiving efficient, inexpensive savings and loan service. Co-operative societies usually have an option of retaining all the surplus profits made by them or paying it out as dividends while observing the 10% rule. Members of SACCOs however usually expect to receive some dividends as a reflection of their return from the shares owned.

In practice, the dividend policy of a firm can be formulated in a number of ways and it is therefore not a simple act of either paying cash dividends or not paying. Even when a firm decides to pay dividends, the decision does not end there for directors must decide how much dividends to pay, how to pay the dividends and when to pay the dividends.

Whereas some studies on the determinants of dividend payments of firm's have been carried out in the *U.S.* and a number of other countries, no such studies have been conducted on *SACCOs*. The dividend decisions of firms are no doubt shaped by the environment in which the decision is made. Thus, an explicit analysis of the determinants of dividend payments by SACCOs is necessary. Hence, this study seeks to identify the determinants of dividend payments by SACCOs in Nairobi.

In order to analyze this problem the study will test the following hypothesis;

H_o: $b_1 = b_2 = b_3 = b_4 = b_5 = b_6 = 0$

The surpluses, investments, liquidity, debt levels, past dividends and reserves do not determine the dividends paid.

H_A: $b_1 \neq b_2 \neq b_3 \neq b_4 \neq b_5 \neq b_6$

At least one of the variables is a determinant of dividends paid.

The hypothesis shall be tested using a two-tailed t-test at a confidence level of 95%.

1.3 OBJECTIVE OF THE STUDY

The objective of this study is to identify the determinants of dividend payments by SACCOs in Nairobi.

1.4 IMPORTANCE OF THE STUDY

The study is expected to be of benefit to the following parties: _

Members: The study will help the members to understand the dividend policy adapted by their respective SACCOs. They will also understand the factors that influence the dividend payout by their respective SACCOs.This means that those interested in dividends will pressurize their SACCOs to explain the rationale behind their dividend policies.

SACCOs: To encourage financial managers to pursue prudent investments policies that will in turn ensure high surpluses. These high surpluses would lead to high dividend payouts. This will create confidence with members who will in turn be encouraged to save more with their SACCOs. Consequently, the SACCOs will have a lot of money at its disposal to help it fulfill its main objective i.e. to lend, thereby maximizing the members' wealth.

Government: The study will make the government realize the importance of creating a proper, conducive, macro-economic and political environment for the improvement of financial performance of SACCOs.

Scholars: The study will add to the body of knowledge in the finance field and also serve as reference material for scholars in research institutions and university and particularly those interested in enhancing research in SACCOs.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 CREDIT UNIONS: AN INTERNATIONAL PERSPECTIVE

Credit unions are not-for-profit financial co-operatives that originated in Germany over 100 years ago. They were founded as direct reaction to economic poverty of the under-privileged underclass in the 1840s in Prussia (Dougherty, 1987; Johnson, 1993; Abcul, 1993). Two figures in particular influenced the Germany credit union movement namely, Herman Schultze - Dorlitzsch and Friederich Raiffeisen. While Raiffeisen concentrated on the rural areas in Southern Germany, Schultze-Dercitzsh focused on inner-cities and set up urban credit unions. These urban credit unions (the first one was founded in 1850) grew from 183 unions in 1859 with 1800 members, to 1002 unions with 641000 members in 1912 (Johnson, 1993: 428). The principle characteristics of the Schultze-Delitzsch co-operative system were: the system was adapted to the needs of craftsmen and small businessmen; it had to operate on the principle of mutual help and refuse philanthropic assistance; the financial basis for the society was its own capital; the reserve funds were set up to cover losses and were financed by the annual income and entrance fees (i.e. this fund was limited to 10% of the total capital);capital was to earn limited interest; the financial basis of the co-operative societies were guaranteed with the solidarity and unlimited liability of its members (later on, these Schultze-Delitzsch societies also admitted limited liability);members who took on special positions were paid according to the responsibilities of such office; the co-operatives maintained prudent proportions between owned capital and capital obtained as loans; the co-operative was limited to banking type operations and they only granted short-period loans.

The rural credit union movement of Raiffeisen aimed to ease credit problems of poverty stricken and indebted German farmers. He reasoned that the members could save money together and make loans to each other at a low interest rate. The borrower's character would be the primary security for the loan.

Raiffeisen's idea was a success. Before he died in 1883, he had started more than 425 credit unions. Raiffeison's movement grew into Germany's biggest co-operative movement (Watkins 1986:160). The early rural credit unions were characterized by the following (ABCUL 1993);the character of the individual was a most important condition for admittance to the society; they would only accept members from a particular group within a limited area; the first organizations of the Raiffeisens type had a philanthropic character only rich individuals were accepted with the purpose of helping the poor (later on, Raiffeisen modified the structure of the societies and the users i.e. the people actually interested in obtaining services formed them);capital contributions or shares were small; the responsibility of members for the liabilities of the society was first and unlimited; the members were not entitled to the reserve funds even after the dissolution of the society; officers of the co-operatives performed their duties on a voluntary basis; they were non-profit making and loans were granted for periods varying from 2-10 years with the object of adapting the system to the needs of farmers.

Alphonse Desjardins, a legislative reporter in Quebec, brought the credit union idea to North America. Deciding that credit unions would be the answer to the usury that plagued his people, he founded his first credit union at Levis, Quebec in 1900. Six years later, Quebec passed the first credit union law in South America. In 1909, Desjardins started the first U.S credit union in Manchester, New Hampshire (ABCUL, 1993). As well as the German credit union movement, the development of the American unions was triggered by several individual namely, Pierre Jary and Edward A. Filene, who believed that co-operative organizations were able to solve economic and social problems. A further reason for the establishment of U.S credit unions was that in the course of the increased industrialization it became increasingly necessary to reflect on new ways concerning consumer credit, as the American consumers demanded more goods, and regarded previously luxury goods, such as automobiles, as a necessity or in the case of certain electrical appliances, as a commodity. Today US-American credit union movement is by far the largest and the most influential in the world.

When comparing the size and the market penetration of British credit unions with the American credit unions, the British movement can only be described as modest or according to the Registrar of friendly societies as "tiny" (Tett and Gapper, 1993). In 1995, there were 482 credit

unions in Great Britain with 110,000 members and assets of more than £50 million. This is an estimated equivalent of one in three-hundred Britons being a member, as opposed to one in three in Canada, Australia, the USA and Ireland (Gardner, 1994). However, when analyzing the growth rates of British credit unions, one may recognize a positive development trend even on a smaller scale. In 1989, there were 141 credit unions in England, Scotland and Wales (Griffiths and Howells, 1990 449). In 1993, there existed 300 credit unions with 50,000 members and a membership growth rate of 40% (Dibben, 1993; Cook, 1992; Tett and Gapper, 1993).

2.2 HISTORICAL BACKGROUND OF CO-OPERATIVES IN KENYA

The modern co-operative organizations were introduced way back in 1908 by European settlers. But those organized by Africans were not founded until after 1930's. However, owing to lack of support and encouragement by the colonial government progress of co-operatives organized by Africans was very slow. The British considered the Africans so illiterate, and that it would not be possible to find capable people to manage and keep books of accounts for these co-operatives (Ongore, 2001). The first co-operative society's ordinance was passed in 1931 and replaced by another in 1932. However, this was also replaced by the 1945 co-operative society's ordinance. The 1945 ordinance was passed after the colonial government ordered an investigation. Mr. W. K. H. Campble who recommended and affirmed that co-operatives could play an important part in the economic development of this nation conducted it. He recommended that Africans should be supported and encouraged to organize themselves into co-operative groups. The recognition by the government was followed by the creation of co-operative department in 1946. The Registrar now called commissioner of co-operative department and a small supporting staff was recruited. He was charged with the responsibility of promoting and registering, controlling and supervising co-operatives.

This was a turning point for co-operatives as indigenous Kenyans were not only officially allowed to form and to join co-operatives, but were also allowed to grow cash crops like coffee which was earlier restricted to the white settlers. By 1963, when Kenya became independent, there were 1030 co-operatives societies with a turnover of Ksh.100 million (G.O.K, 1997).

Immediately after independence, it was the policy of the government to involve all Kenyans in the economic activities of the new nation. Co-operatives were institutional frame work, through which many indigenous Kenyans could participate. At the time however, co-operatives were faced with a number of problems, which included; lack of integrity on the part of some union/society committee members and employee's misappropriation and misallocation of funds, excessive costs in handling members produce, and general inefficiency in the business operations of the movement. The main causes of these problems were: lack of basic understanding among the co-operatives about the purpose and functions of the movement; lack of technical and managerial skills, and lack of knowledge and experience on the part of the employees (Oyoo, 2002).

Due to the acceptance of the government of the co-operative movement as a tool of development especially in the small scale farming areas, it was categorical that it will continue to give every encouragement to the movement. This view of the government was formalized and expounded in the first three Development Plans, mainly 1970, 1974 and 1978. The aim was to ensure that public and co-operative sectors grew rapidly to embrace a large section of the economy. Co-operative policies were therefore, instituted to enable co-operatives to improve their performance, enjoy marketing monopolies; and consolidate the movement in those areas where it was active. In 1945 cooperative ordinance was revised and gave way to co-operative societies Act Cap 490 of the Laws of Kenya, in 1966. With the new Act, the government was able to be involved and therefore, influence the day-to-day activities of societies. More importantly, the government was able to inject massive assistance to the movement.

The support to the movement was both in the form of finance and technical expertise. In order to Marshal this support to the movement, the government entered into agreements with a number of donors who included the World Bank, United States, Germany and the Nordic countries, who assisted in technical expertise, finance as loans and grants to needy societies. Thus, since independence, the government adopted policies for development of the co-operative movement.

2.3 AIMS AND OBJECTIVES OF CREDIT UNIONS

Co-operatives have desired an economic system based upon common ownership and mutual aid in which no one person could be in a position to exploit the rest of the membership. A system in which equity, individual freedom and a strong sense of fellowship would be the basis of social relationships (Gachara, 1990). According to Calvert (1959), the objectives of a co-operative society must be the promotion of the economic interest of the members. Accordingly, the main duty of the Registrar of Co-operatives would be to study the economic interest of the class from which membership is drawn and to devise measures, on co-operatives lines whereby these interests can best be promoted. This view, that the objective of co-operatives should be the promotion of the economic interests of the members, is given recognition in Kenyan Co-operative Law chapter 490 Laws of Kenya section 5 which states:

"Subject to the provisions of this Act, a society which has for its objectives the promotion of the economic interests of its members in accordance with the co-operative principles, and which in the opinion of the commissioner is capable of promoting these interests, may be registered as a co-operative society under this Act with or without limited liability."

In addition to this view, other authors feel that co-operatives have more than just the economic interest of their members as their objectives. For example, Arnold Bonner (1966) states that:

"... Cooperation has other aims than economic ones. The earnest co-operator seeks to apply co-operative methods to all purposes of social life, and does so because he believes that in working for a common good, man's highest qualities are enlisted and developed and in the employment and development of these qualities, the man becomes a better man and the quality of human race is approved ..."

From the foregoing the main objective of co-operative society should be to promote the economic interest of the members.

However, sessional paper No.4 of 1987 expressed that the aim of SACCOs would be:

a) Mobilizing savings by encouraging members to have proper savings accounts through which they can conduct their financial transactions and thereby minimize the keeping of cash in homes. This will ensure that any would-be idle cash will be employed in some economic activities necessary for the creation of wealth for the people of the nation.
b) Providing security and protection of members' funds deposits.
c) Establishing adequate facilities for credit for members.
d) Encouraging capital mobilized within the SACCOs to be utilized for the benefit of the members.
e) Allowing members through their elected directors to determine how the resources of the SACCOs should be invested for their own benefit.

The major objective of the co-operative enterprise however, remains the promotion of the economic welfare of its membership, be they farmers, artisans, the poor, the disadvantaged etc. Economic interests however, vary widely depending on the type of membership. They could be promoted through[1],

a) Teaching producers to produce more from their present industry e.g. Agriculture, through application of scientific methods, improved implements better crops, seed etc.
b) Teaching producers to produce wealth in the hours during which they are at present idle.
c) Increasing the wealth of producers by eliminating the number who add value to the production process in the country e.g. middle men, distributors, processors and others.
d) Decreasing special sources of waste e.g. through litigation, pest control and improved storage.

However, the objectives of a co-operative society must be expressly stated in its by-laws. A society cannot have any other objective other than that stated in its by-laws. The society cannot undertake anything outside these objectives as to do so would be ultra virus i.e. acting beyond the objectives for which it was formed. Rule (7) of the co-operative societies Rules (1969) makes a requirement that each society should make by-laws in which the objectives must be specifically stated. Rule (7.1) (K), when a co-operative has been started, it often becomes clear

[1] British Cooperation: Cooperative Union Publication pp 22 Ibid 34 1967

that the original purpose for which it was contemplated does not meet all the needs, both economic and social, of the membership. In such cases, the objectives of the organization need to be changed to cater for these emerging needs. In such cases, members are faced with the alternative of either changing their by-laws or forming a new society to meet many needs. In Kenya, the by-law amendment procedure seems too lengthy and members have often resorted to forming new societies to meet new needs.

2.4 CATEGORIES OF CREDIT UNIONS

Gachara (1990) recognizes that the co-operative movement in Kenya started long before the country gained independence. Since independence the government has embarked on improvement and expansion of co-operatives as a means of increasing earnings and improving the social welfare of her peoples. The government realizes the importance of co-operatives in national development. This recognition has taken expression in various governmental policy statements as contained in various sessional papers[2]. For example sessional paper No. 14 of 1975 states, interalia that:

"The co-operative movement will continue to play an active role in the national efforts towards accelerated economic development and will be free to compete, on the basis of its efficiency and service to the members, with other state and private enterprises in those sectors of the economy in which they are able to participate."

The policy will be to give the highest priority to consolidation and efficiency in those spheres of the economy where co-operatives are already active, while also extending their participation in the small shale farming sector by the provision of credit, supply of farm inputs and marketing facilities for their members.

Gachara (1990) further mentions that the growth in co-operative activity was slow during the colonial period mainly because the colonial masters did not encourage the formation of co-operatives among the natives. Since independence, however, a phenomenal expansion has occurred in both the number of co-operatives and also the activities undertaken. At

[2] Sessional paper No. 10 of 1965; Sessional paper No. 4 of 1986; Development Plans 1974/79, 1984/89 and 1989/93.

independence, there were 1,030 registered societies while in 1989 there were 4,944 registered societies and over *10,000 in 2003*. Membership has also increased from *200,000* at independence to 2,270,910 members in 1989[3] and over 3million members in 2003[4].

The unique characteristic of credit union is the common bond of its members, which is an attribute that describes all the members of a particular credit union (Johnson, 1993: 427). The common bond is "the tie that binds the members together" (Griffiths and Howells, 1990: 448). The common bond ensures that credit union membership is characterized by mutual concern, loyalty and trust. With reference to the common bond of credit unions, the literature distinguishes three types of credit unions (Dibben, 1992; Dougherty, 1987) i.e. residential, association and occupational credit unions explained as under:

Residential Credit Unions: This refers to credit unions whose members live in a common geographical area.

Association Credit Unions: This refers to credit unions based on religious, fraternal, professional and labour union groups.

Occupational Credit Unions: This refers to credit union whose common bond is based on working for the same employer. Occupational credit unions are far more instrumental in providing cheap loans (Griffiths and Howells, 1990). Occupational credit unions are a more recent development and confirm that the credit union movement is not restricted to low-income groups, but may also appeal to middle income people. Occupational credit unions are responsible for a shift in the movement with reference to newly registered credit unions. Occupational credit unions may also refer to employees of the public and private sector

Gachara (1990) in his research gave examples of co-operative activities in Kenya and include; processing and marketing of agricultural produce, agricultural credit and input marketing, input supplies and distribution, education and extension, channeling credit to farmers, mobilization of rural savings and mobilization of urban savings.

[3] Annual Report: Ministry of Cooperative Development 1989.
[4] Annual Report: Ministry of Cooperative Development 2002.

However, the M.O.C.D (2003) categorizes the types and operations of co-operative societies as:-

Agricultural and Marketing Co-operatives: These are co-operatives in the agricultural and marketing lines. Their functions are to collect, process, store, and to sell members produce. Payments are made to the members at appropriate intervals. These co-operatives also supply members with farm requirements e.g. seeds, fertilizers, farm machinery and implements. These co-operatives include Coffee Co-ops, Dairy Co-ops, Cotton Co-ops, Sugar-cane Co-ops and Fisheries Co-ops.

Consumer Co-operatives: These co-operatives are generally formed to meet and to supply members demand for food, clothing and house-hold goods. The members fulfill this aim by running consumer shops and also whole-sale facilities, where these co-operatives would stock and obtain commodities they require.

Housing Co-operatives: The housing co-operatives provide houses for their members. They build and rent or sell houses to the members. On the other hand, they grant loans to their members to buy or build houses for themselves e.g. Kidiruban Housing Co-op., Mathare Housing Co-op. Society, Kariobangi and National Co-op. Housing Union.

Savings and Credit Co-operative Societies (SACCOs): A SACCO is a co-operative society based on employment as a common bond i.e. all members who work under one employer form a saving and credit co-operative society. The members are encouraged to save through a check-off system from their monthly salaries. It is in this way that regular savings are accumulated and it is from this that loans are given. The motto for success in SACCOs is "save regularly, borrow and repay promptly" (Ouma 1989). Examples of SACCOs include Mwalimu SACCO, Magereza SACCO, and Harambee SACCO.

Artisans and Handicrafts Co-operatives: These co-operatives include small-scale traders, crafts and industries e.g. Akamba Handicraft Co-op., Wamungu Handicraft Co-op., Art Co-op., Stone-Cutter Co-op. and Craft Co-op. Union among others.

Service Co-operatives: These are co-operatives which provide services to Wananchi as their main function. The services include transport, insurance, health and medical.

2.5 PRINCIPLES AND PRACTICES OF CREDIT UNIONS

Like every other co-operative; credit union must base their operations on certain principles. Many authors have dealt in this area among who are Dublin (1971) in his book "credit unions theory and practice" and Gachara (1990) in his MBA research project. However, these principles appear to be similar and include:

The Principle of Democracy: This principle refers to the fact that the credit union is co-owned by its members and organized according to the, "one member - one vote" rule, with no regard of the actual amount of the individual members' deposits. Furthermore, all important policy decisions as regards borrowing limits, budgets, investments, approval of final accounts and appointment of auditors must be passed in the annual general meeting.

The Principle of Voluntariness: This principle refers to the fact that no one is forced to become a member and that deposits are personal property and may be withdrawn at any time. Credit unions encourage their members to maintain their savings on a long-term basis, which implies that they must operate efficiently, and effectively to keep their members and attract new ones.

The Principle of Saving: The credit union has two purposes: to provide a place where members can save their money, and to provide depository of money where members may borrow in time of need. If one of these is more important than the other, it is the first. In some places, occupational credit unions in particular, payroll deduction or check-off plans have been instituted. Under these plans, the employer agrees to withhold a certain amount of money from the employee's paycheck each payment period and deposit it in the credit union.

The Principle of Loans/Equity: Credit union loans must be tailored to fit the needs and capacity of the borrower, not so as to earn for the credit union in interest charges as much of his money as possible. Keeping this principle in mind, the credit union should plan every loan carefully with the borrower. Because the primary purpose of a credit union loan is to help the borrower, this planning session is a most important part of the lending process.

The Principle of Limited Interest: To pay its expenses, provide reserves, and pay dividends, the credit union must collect interest on its loans. In most cases, credit unions find that they must charge the maximum interest allowed by credit union laws, 1% per month on the unpaid balance of every loan. This amounts to 12% a year simple interest. The aim is to reduce the cost of

interest to the borrower, because 12% is a low charge when compared to the interest charged by other lenders - banks, 18%-24%; loan companies, 36%-42%; loan sharks, 10-40% or more (Dublin, 1971).

The Principle of Dividends: At the end of each fiscal year, most credit unions pay their members a dividend or bonus on their savings. Generally, dividends are added on to the members' share account although he may always elect to receive cash payment.

The Principle of Universality: This refers to the idea of the overall applicability of the co-operative philosophy in the international context. This may be depicted by the international growth of the credit unions and the co-operation of the various national bodies in supranational associations, such as the International Association of Credit Unions. The eventual aim of the credit unions, with member organizations in all nations is pooling not only their economic resources but their experiences, their education, their inspiration, and their enthusiasm.

2.6 RESERVE FUNDS IN SACCOs

Gachara (1990) reviewed the reserves in SACCOs and pointed out that a reserve is an appropriation of the surplus of an organization that is not distributed to the members but remains in the organization to increase the capital base of the organization i.e. out of the total profit or surplus, a portion of it is retained in the organization.

The law requires that a SACCO should transfer 25% of each year's surplus to a statutory reserve fund, which amount is not available for distribution. This amount is set aside for future needs (such as unexpected expenses) or expenditures which will benefit co-operatives (such as training for the members or maintenance of equipment). Any co-operative which has a surplus from its transactions must have a reserve fund (Co-op. Act; section 47, Rule 42).

Gachara (1990) in his study of the investment practices of reserve funds in SACCOs in Nairobi found out that reserves formed a relatively small percentage (4.9%) of the total liabilities in such societies. However, he discovered that despite this relatively small percentage, in absolute terms these amount was large. The 54 societies combined held reserves to the tune of Ksh. 61,558,000, within an established mean growth rate of 31.44% during the study period. Another objective of

his study was to find out how these reserve funds are invested. The study could not identify how such funds were invested as most societies left such amounts in the society to increase working capital. It was however, established that the main uses of funds in these organizations were increasing loans to members and increasing current assets. Another aim of the study was to find out how benefits from such investments are distributed to the membership. It was found out that most societies consolidated any income obtained from investments to that obtained from granting loans to members and distribute this combined surplus to the members on the basis of the share capital held.

As observed by Gachara (1990), Ogola (1986) pointed out that this mandatory reserve fund percentage is arbitrary and too high. He argues that instead of tying up so much money in reserves, the societies should be free to lend it to members for productive purposes. Ogola (1986) is concerned with the investment practices of the SACCOs by arguing that the legal requirements for reserves were constraining the growth of SACCOs as these reserves would create idle funds in these organizations.

2.7 INVESTMENTS BY CO-OPERATIVE ORGANIZATIONS

In 1983, the M.O.C.D carried out a study to establish the nature, trends and implications of past investment projects by various categories of co-operative societies (Gachara, 1990). It also studied the future potential of such investments, the modes of financing and investment process guiding such investments.

The findings were:

a) There was no coherent document containing policy guidelines and regulations on investments.
b) The law guiding investments was inadequate.
c) The by-laws to guide investments could no longer handle recent developments as societies were just expanding their scope and area of operation.
d) About 75% of all unions in the country were too dependent on borrowed funds.
e) SACCOs were unable to provide loans to members because large amounts of funds were invested on low-return projects which had not clear benefit to members.

f) Investment decisions were made solely by committee members without the approval of members in meeting.

As a result of these findings, the M.O.C.D issued policy and guidelines on Co-operative investments through commissioners circular dated 25th November 1985.

SACCOs were expected to:

a) Invest funds in activities that promote members thrift and satisfaction of their financial needs by providing savings and loan services at the most favourable terms.
b) Undertake other investments when the primary objective has been fulfilled.

Investments by SACCOs in expensive office blocks must be discouraged because such investments are not in line with the primary objective of the societies. Such investments have not been very profitable for co-operatives, and such investments tend to endanger the liquidity position of societies so that they will often not be able to give loans as required by the members. If a society has excess funds it should seek to improve conditions of the loans to any savings by the members or invest in fixed bank deposits (Gachara, 1990).

Co-operatives are free to invest in various types of projects including real estate or financial investments. While doing so, however, they will be encouraged to give priority to the pursuit of their original goals and objectives through their core activities. Investment in secondary activities will be expected to supplement the achievement of original objectives of co-operative societies. The exception will however be in cases where certain members through the society wish to invest in certain ventures. In such cases, the society will provide an institutional framework for doing so without mixing the activity with the normal functions of the society. Investments are risk-taking ventures and require detailed evaluation to determine their economic viability for this reason all investment proposals must be appraised by the members (Sessional Paper No. 6, 1997).

2.8 DIVIDEND PAYMENT FOR URBAN SACCOs

According to a Guide to the Co-operatives Societies Act No. 12 of 1997, a dividend is a special payment to shareholders. The payment of dividends is a common practice in companies where people buy shares in order to make profits. But the members of a co-operative do not invest their money in the co-operative for personal profit, but to help the co-operative meet the members' need for a certain service or for employment.

The guide further argues that since the primary aim of a co-operative is to serve the needs of its members, a co-operative should use surplus money to improve the benefits to its members, not to pay large dividends on each share.

Also, since a co-operative emphasises benefits to its members and engages in transactions primarily with its members, it is more interested in giving surplus money back to its members in proportion to the contribution each member made to the surplus-instead of the basis of how many shares are held by each member.

The following regulations apply to the payment of dividends or bonuses by a co-operative to its members:

a) Every co-operative must declare the bonuses due to its members each year. But it may issue bonus certificates instead of making cash payments. The bonus certificates can be traded in for cash at a later date, from a special fund kept by the co-operative for this purpose.
b) Before a co-operative can pay its members any dividend or bonus or other similar payment, it must have audited financial statements showing the surplus funds which will be used for this purpose.
c) The rate of payment for dividends must be recommended by the Management Committee and approved by the membership at the annual general meeting.
d) No registered society shall pay a dividend exceeding the maximum rate prescribed under this Act which shall not in any case exceed 10% per annum (Co-operative Societies Act Cap 490. Section 44).

The Kenya government realized the need for promotion of co-operative savings and credit societies to mobilize savings among the salaried workers as early as 1965. The Kenya National Promotion Committee was formed to formulate policies on SACCOs at that time. In 1969, the check-off system was introduced where the employers undertook to deduct member's savings at source.

The government's promotional exercise gained impetus in 1975 when the sessional paper No. 14 was launched. The SACCOs have since grown significantly both in savings and membership. There was therefore, great need to formulate workable accounting and management guidelines to regulate the operations of the SACCOs. These guidelines are aimed to instituting controls and leading the movement to greater development. The ministry of co-operative development's major role in the co-operative movement is geared towards planning, supervision, direction and control of all co-operative activities.

The surveys and annual reports (M.O.C.D, 1984) of the SACCOs indicate that inspite of considerable improvement in many societies the following have continued to be the problems: -

a) Posting of personal and general ledgers and extraction of trial balances.
b) Management, accounting and internal control systems are not adequate.
c) Mismanagement and embezzlement of member's funds is still common.
d) Cash budgeting and control over liquidity is inadequate.

It is in this context that the "Management and Accountancy Manual for Urban SACCOs" was launched in 1982.

This manual provides a guideline on the procedure for the calculation of dividends. It points out that in accordance with the Co-operative Societies Act, dividends may be distributed to the members of a SACCO. There are two fundamental principles which must be considered in making the calculations:

- Shares must be paid into the member's account by the first of the month to earn for that month.
- Shares must remain in the member's account until the end of the year to earn dividend.

The manual also recommends one method of dividend calculation i.e. Dividend Percentage Rate

$$= \frac{\text{Amount payable as dividends} \times 12 \times 100}{\text{Accumulated monthly share balances.}}$$

The manual also outlines the procedure for calculation of members share capital eligible for dividends. The total share capitals at the end of each month are added. However, the balance of the last month of the fiscal year is not included as these are not eligible for a dividend. The last month's balance becomes the opening balance for the next year's calculations. The total of all monthly balances is multiplied by the dividend factor where;

$$\text{Dividend factor} = \frac{\text{dividend percentage}}{12}$$

This manual also outlays the procedure for paying dividends. When a society has made a surplus and it's likely that some of it is going to be paid in form of dividends a provision for this should be made in the books of accounts. Before the provision is posted, 25% of the surplus has to be transferred to "Statutory Reserve Account" and the rest to "Appropriation Account". The provision for dividends is then posted by crediting "Dividends Payable Account" and debiting "Appropriation Account". When the final amount to be paid out in form of dividends has been decided by the general meeting and the authority from the commissioner for co-operative development is granted the society has to open a "Dividend Account" at the bank to which the society transfers the net amount of dividends payable. When the member receives the payout, he/she must acknowledge receipt by signing the "Member Dividend Schedule".

Management Accounting is a term used to describe the accounting methods, systems and techniques which coupled with special knowledge and ability, assist management in its task of maximizing profit or minimizing losses. It should be noted that since co-operatives are not profit making, they should aim at minimizing losses and maximizing reasonable surpluses, which generally arise from the balances of income over expenditures (Ouma, 1984).

2.9 REASONS FOR PAYING DIVIDENDS

A firm's shareholders are the rightful owners of all the profits it generates. The shareholders objective in investing in a firm's shares is the maximization of their wealth. The "real" returns to the shareholders could be in the form of dividends or capital gains (where the market value of a firm's share appreciates in value as a result of the retentions). Given that the shareholders own all the earnings generated by the firm, then, it can be argued that they should be indifferent as to whether they receive the returns in the form of either dividends or capital gains (Karanja, 1987).

According to Karanja (1987) and Wairimu (2002), there are many reasons why firms should pay dividends. These reasons include:

Lack of investment opportunities. Bierman (1977), states that a firm may declare dividends if it lacks investment opportunities which are 'good enough'. This line of argument has come to be referred to in finance as the "residual theory of dividends". The residual theory holds that dividends are declared only after the firm has exhausted its needs for investment funds. Wairimu (2002) observes that this line of reasoning has been advocated by the traditional theorists on dividend policies such as Walter (1956) and Gordon (1959). The traditional view of dividends does recognise the fact that dividend payments do reduce the amount of funds available to the firm for investment purposes when external opportunities for investment funds are ignored. According to the traditional view, dividends should be declared only when there are "unattractive" investment opportunities, but should not be declared when attractive investments exist. The argument that dividends are the residual of a firm's investment decisions has been criticized for its failure to recognise that alternative sources of investment funds do exist in the form of debt and the issuing of new equity. Thus investments do not necessarily have to be financed from retained earnings and the criteria of which funds to utilize should be determined by the cost of these funds. Modigliani and Miller (1961) argued that the availability or non-availability of good enough projects should not be used as a basis for determining dividend payments.

Subsequent to M-M (1961), Baumol et al (1970) carried out studies which showed that the rate of return on new equity is much greater than the rate of internally generated funds. They

attributed this phenomenon to the higher costs associated with external financing due to the floatation costs involved. They summarized their findings as follows:

"...The firm will tend to utilize more expensive money only if it has available an investment project sufficiently promising to justify the higher costs and if it has pretty well exhausted funds derivable from cheaper sources."

Thus, Baumol et al (1970) find in support of the residual theory of dividends. Firms must hence exhaust all the internal sources of funds for investment purposes before resorting to external financing.

Reduction of uncertainty. Gordon and Lintner (1963) argued that a bird in hand is worth two in the bush and so investors' value cash dividend more than capital gains. This is so as unless realized, capital gains are uncertain. They concluded that dividend decisions are relevant and that the higher the dividends the higher the value of the firm. Other traditional theorists who have relied on the uncertainty resolution of dividends to argue that dividends are "good" are Graham, Dodd & Cottle (1962) and Walter (1956 &1963).

Information content of dividends. This argument was advanced by Ross (1977) and also known as dividend signaling hypothesis. Those who identify themselves with this line of reasoning argue that dividends do convey useful information to the investors. An increase in dividends is taken by the shareholders to mean that the board of directors expects the firm to do well in the future. Lintner (1956) in his study found out that directors used dividend policy to convey to shareholders their expectations about the firm's future performance. However, in 1961 Modigliani and Miller in the revolutionary paper argued that dividends did not convey any useful information to the investors and hence was a rejection of the "information content of dividends hypothesis". Other studies which purport to test the "information content" of dividend hypothesis are by Fama, Fisher, Jensen and Roll (1969), Pettit (1972), Gonedes (1978) and Kwan (1981). The results achieved to date are inconclusive with some researchers finding in favour of the "information content" hypothesis while others finding against.

Provide investors with consumption income. Another reason why firm's pay out dividends is to satisfy investors need for consumption income (Bierman, 1977). Some investors generally invest in firm's shares because they expect to receive dividends in the future to meet their consumption needs. Hence it is argued that failure to pay out dividends will cause suffering and frustration to the investors and thus may push them to liquidate their holdings in a particular firm.

Such an outcome may become detrimental to a firm's well being as it may find difficult to raise finances by issuing new equity. However, some scholars find this argument in favour of dividends to be to be weak as it ignores the fact that shareholders are free to liquidate part of their holdings and consequently realize capital gains if they needed the income for consumption purposes.

Clientele effect theory. It was advanced by Petit (1977) who argued that different groups of shareholders have different preference for dividends. The low income earners would prefer high dividends to meet their consumption needs while the high income earners would prefer a low dividend to avoid payment of taxes. Therefore, when a firm sets its dividend policy there would be movement of investors to and from the firm until an equilibrium position is reached. At equilibrium the dividend policy set by the firm is consistent to the clientele of the shareholders that it has.

From the foregoing, it is clear that most of the studies were done based on profit-making firms. Bearing their inconclusive nature, it becomes even more difficult to attribute the reasons to pay dividends to non-profit making organizations such as SACCOs. The matter is further complicated where SACCOs members are mainly interested in maximizing their wealth by getting cheap loans from their societies and dividend payment as well.

2.10 DETERMINANTS OF DIVIDEND PAYMENTS BY FIRMS

As observed by Wairimu (2002) a few studies have attempted to discover the factors that influence a firm's dividend decision. Lintner (1956), in his survey of eight USA firms found that a firm's level of earnings was the most important factor which influenced its dividend policy. Glen et al, (1996) in their study of dividend practices in both developing and developed countries concluded that dividend decisions were influenced by various factors such as shareholder preferences, legal considerations, level of earnings and a firm's growth prospects among others. Karanja (1987) had evidence to the effect that a firm's cash position was the most important consideration when paying dividend.

Dividend policy does not only involve the decision on whether to pay dividends or not, but also how much to pay, the mode of payment, and when to pay the dividend. This makes dividend decisions more complicated. Among those identified as affecting dividend decisions are;

Legal requirements. Dividend policies are affected by legal requirements in different countries. Directors, therefore, lack complete authority to determine how much to pay due to legal restrictions. In Kenya, the Companies Act recognizes the shareholders right to receive dividends. Similarly, the Co-operative Societies Act recognizes the right of members of a co-operative society to receive dividends as discussed earlier. However, both Acts are silent as to when the owners can invoke this right and overrule the directors' decision to withhold dividends. This is so because the Acts do also give the directors the discretion of declaring dividends.

Liquidity position. A firm wishing to pay cash dividends must have enough funds for such dividends. If a firm is facing liquidity problem it may decide to issue bonus or other form of dividends.

Stability of earnings. The level of earnings and stability in earnings affect the amount a firm can pay as dividends. If a firm has very high profit which are stable then it can adopt a high dividend payout ratio.

On the other hand, firms whose earnings fluctuate significantly from year to year find it difficult to predict future earnings. These firms will have the tendency to retain most funds to finance

internal investments. Hence, they will adopt conservative dividend pay out ratio (Weston & Brigham, 1986).

Availability of investment opportunities. Dividend policy is also affected by the availability of profitable investment opportunities. Investment projects can be financed either through the use of debt or equity. However, raising new debt and or equity is more expensive as cited earlier than using internally generated funds. Firms with many profitable investments opportunities will generally retain funds to finance these investments and hence pay little or zero dividends. Conversely, those firms with limited investment opportunities may have to maintain high dividend payout ratios. Therefore, investment opportunities available to a firm do influence its dividend decision (Mathur, 1979).

According to the Co-operative Societies Act, Co-operative investments can be financed by;

a) Directly using the share capital contribution from the members.
b) Using retained earnings surpluses to acquire such investments.
c) Using any excess liquid funds to invest.
d) Asking members to contribute directly for any investment to be undertaken.
e) Borrowing loans and investing.

While it is possible to identify the beneficiaries of the project financed through (d) above, and to distribute any future benefits to them, the beneficiaries of the projects financed through (a), (b), (c) and (e) cannot be identified. The benefits accruing from such investments can only be considered with surplus from the main activity and distributed to all members as dividends.

Restriction in debt contracts. According to Weston & Brigham (1986), restrictions in debt contracts assigned to protect the lenders usually state that:

- Future dividends can only be paid from future earnings but not from past retained earnings.
- Dividends cannot be paid when net working capital is below a specified amount.

Hence, restrictions in debt contracts serve to limit a firm's ability to dividends.

Shareholders desire for dividends. If a firm shareholders are mainly high income earners they will prefer low dividends for capital gains in future. But if a firm shareholders are low income earners they will prefer high dividends for consumption purposes.

Access to capital markets. A large well established firm with a record of profitability and some stability of earnings will have easy access to capital markets and other forms of external financing. It therefore, has greater ability to raise equity from the capital markets as compared to smaller firms. Smaller firms result to using internal sources of financing, meaning high earnings retention and low dividend payout ratios.

Other factors include; tax on improperly accumulated earnings, business outlook, a firm's credit standing, working capital needs, attitude of the Board of Directors, the capital structure mix, inflation, dividend practices of other firms and control (Karanja, 1987).

2.11 GENERAL LITERATURE ON SACCOs

Karanja (1986) conducted a study on operations of the Kenya Union of Savings and Credit Co-operatives and found that the members although they felt that the services offered by KUSCCO were important they were not very satisfied with these services. He suggested changes within the organization that were meant to strengthen the organization and improve the services rendered. However, he did not identify the determinants of dividend payments in SACCOs.

Oyoo (2002) conducted a research on financial performance of SACCOs in Nairobi before and after deregulation. He said that SACCOs seemed to perform better after deregulation. In general the research established that the performance of SACCOs in the two eras were not significantly different. He also observed that in terms of profitability ratios the SACCOs performed relatively better before regulation as compared with after deregulation. However, he did not identify the determinants of dividend payments by these SACCOs.

Karanja (1987) carried out a research on the dividend practices of publicly quoted companies in Kenya. The objectives of the study were to investigate the dividend practices and to identify those factors which influence the dividend policies of publicly quoted companies in Kenya. The

research found out that most companies distributed between 20% and 60% of their earnings, the heaviest concentration was in the 40% and 60% range. The researcher found out that the level of dividends varies directly with the level of earnings. It implies that most companies follow a stable dividend payout rate (i.e. dividends as a percentage of earnings attributable to the shareholders). The research also found out that companies were found to emphasize dividend regularity. This means that dividends were paid even when a company's earnings were very poor or even losses made.

Karanja (1987) further points out that through logical reasoning that liquidity position of a firm could be a factor influencing dividend policy i.e. that a firm that shows a large amount of profits in its accounts indicates its ability to pay dividends. However the researchers study found out the contrary concluding that a firm must not only consider its present cash requirements but also the future. However, this study did not include SACCOs which also pay dividends to their members.

Obuon (1988) carried a study on the determinants of savings in SACCOs in Kenya. He argues that if members of SACCOs are not given dividends, there will be no or less motivation to save. And if no sufficient corporate savings is mobilized, it will be difficult to undertake long term investment projects unless through long-term loans. However, reliance on loans increases indebt ness, dependence, and cost of investment undertakings and funds unreliability, hence it should be avoided as much as possible. He concludes by noting that to expand their share-capital/ deposits or to raise the demand for their shares, SACCOs should not only raise their loans to members, membership, number of branches but also the average monthly contribution per member while at the same time pay out more dividend to create an incentive on the part of members. This study did not identify the determinants of dividend payments by SACCOS.

Campbell (1975) discussed on Co-operatives as they exist in Asia and Africa. He gave a brief idea about SACCOs on analysis in terms of performance, activities, structure and administration. The payment of dividend should be based on performance of the society after taking into account the future needs of the society. However, the management has the final say in determining how much to pay. A society may perform very well and ends up paying lesser or no dividends.

Mwarania and Mutugu (1986) focused on the role of SACCOs in Kenya's economic development. They argued that "the one percent interest charged on loans gives a misleading signal on the relative scarcities of funds". They saw SACCOs as a part of Kenya's financial attention. According to them, funding of SACCOs is no more the responsibility of only deposits or share capital of the members but also of corporate savings. Hence there is the need for dividend and retained earnings policies to be streamlined. Thus they have raised the issue of need to increase corporate savings even though they did not specify how that can be done.

Kumar and Khurana (1984) studied the determinants of corporate dividend in India since it influences the growth of a company. The study intended to find out the influence of factors such as net profits, liquidity, share prices, reserves, investor's expectations and investment level on dividend. They used cross-sectional data and administered questionnaires to 65 firms to collect the data. These factors were ranked depending on the frequency of "YES" or positive responses. The study revealed that net profits after tax, liquidity position and reserves were the most important factors. However, this statistical methodology of ranking is too simple to give binding results. No test of significance was done or could be done using this methodology since standard errors are not known. The study does not reveal any relationship between the independent variables which we believe does exist. It did not also incorporate SACCOs which pay dividends as well.

2.12 TOOLS OF FINANCIAL ANALYSIS FOR FIRMS

Several authors of accounting books have come up with several accounting ratios that help in the ascertainment of the financial performance of business entities. Weston (1986) classifies ratios into; liquidity ratios, leverage ratios, activity ratios, profitability ratios, growth ratios and valuation ratios. Weston (1986) argues that ratio analysis gives a reasonably good picture of operation, but it is incomplete in one respect - that is it ignores the time dimension.

Njoroge (2001) examined the relationship between dividend payouts and some financial ratios such as return on assets, return on equity and growth in assets. The results obtained were that the most significant variable in making dividend decisions is return on assets while returns on equity and growth in assets are not considered in making dividend decisions.

Gureshi (1983) looked at the determinants of corporate savings in Pakistan. Its objective was to establish firm's behaviour with respect to retention and distribution of profits. He wanted to know the role of these factors and whether it was significant or not. He used multi-regression analysis and time series data to estimate the dividend and retained earnings functions. His results summarised firms favoured stable dividend policy. Profit was the main determinant of dividends.

Rao and Sharma (1984) carried out a research in India to determine the primacy of corporate dividend over retained earnings. They wanted to know whether most firms exhibit a constant target payout ratio or it depended on the nature of product and financial markets in which the corporate sector functioned. They also wanted to know from whose view (vantage) point is dividend paramount i.e. whether it is from the management or the shareholders. They used a simultaneous equation model and cross-sectional data collected from a sample of firms randomly selected. Four equations were simultaneously estimated;

a) SPT= £ (DT_{-1}, LEV, SC/F, PT_{-1}, PRT, PRT/ST)
b) *DT= £ (PT_{-1}, PRT, LEV, EF, SC/F, CIS, RET, IT, RT, DT_{-1})*
c) NWT= £ (IT_{-1}, AT_{-1}, CAT, RT, WT_{-1})
d) IT= £ (RET, EF, CIS, CAT)

Where:

SPT- Share price at time T

DT_{-1}- Dividend per share at time T_{-1} (lagged)

LEV- Debt-Equity ratio

SC/F- Share capital to total assets ratio

PT_{-1}- Share capital at time T_{-1}(lagged)

PRT- Profit after tax

PRT/ST- Profit after tax to sales ratio

DT- Dividend per share at time T

EF- External finances

CIS- Changes in sales

RET- Retained earnings

IT- Investment in fixed assets

RT_{-1}- Profits at time T_{-1}(lagged)

NWT- Net worth

IT_{-1}- Investment in fixed assets at time T_{-1}(lagged)

AT_{-1}- Fixed assets at time T_{-1}(lagged)

CAT-Current assets

RT- Reserves and surplus

WT_{-1}- Net worth at time T_{-1}(lagged)

Results were as follows:

- Most shareholders value dividend
- Management also values dividend in order to reduce shareholder antagonism while at the same time pursued the policy of increasing net worth of the firms through increased retained earnings. This study revealed the importance of dividends and retained earnings but it never specified the type of firms it dealt with. Furthermore, it never gave the solution to likely multicollinearity problem in some of those functions. Otherwise it is a useful study to industrialists.

Lintner (1956), found out that variables such as liquidity position, growth prospects of a particular industry, debts to be discharged, average cyclical movement of investment opportunities, working capital requirements and speed of adjustments of competitive companies were important when determining the amount of change of dividend payout. He stated that the most important factor was earnings. Lintner developed a model, which included only two of the observed factors, that is, past dividends and current earnings. The model outlined below:

$$D_t = a + b_1P_t + b_2D_{t-1} + U_t$$

Where;

D_t- Net dividends in year t

P_t- Net profits

U_t- Unexplained random error

a, b1, b2……constants

The simplest rationale for the above model is that dividends depend directly on current net income but also constrained by past dividends. Therefore, managers are reluctant to cut dividends or raise them to higher levels, which may not be maintained. Although Lintner's findings have been supported by subsequent empirical work by Fama and Babiak (1968), Petit (1972) and Watts (1973) he has also received a lot of criticism.

World Council of Credit Unions advocates for quality credit unions for everyone. Oyoo (2002) points out that *WOCCU* uses a model known as *PEARLS* as an integral analysis of financial condition of SACCOs. A PEARL is an acronym in which;

P – Protection; E - Effective financial structure; A - Asset quality; R - Rate of return and costs
L – Liquidity; S - Signs of growth.

WOCCU advocates for the use of PEARLS because all 45 indicators are quantitative and each indicator has a prudential goal. All the indicators are inter-related and therefore, act as management to design specifically for the financial administration of SACCOs.

Oyoo (2002) puts it that PEARLS is an X-ray of SACCOs Balance sheet and Income and expense statement.

The researcher points out that the P, E, A, L and S of PEARLS measure balance sheet and off-balance sheet accounts. The R of *PEARLS* measures income statement accounts.

Oyoo (2002) points out that P-protection of SACCOs is necessary i.e. allowance for loan losses is the primary source of protection, and that capital reserves are used as a last resort. The entire delinquent loans greater than 12 months are charged-off quarterly.

The E-effective financial structure: Oyoo (2002) reckons that the financial structure is the most important variable, which affects growth potential, earnings capacity, and overall financial strength. That the financial structure is constantly changing and must be managed closely particularly under rapid growth scenarios and therefore, prudent norms must be strictly followed. The indicators of an effective financial structure for SACCOs are (Oyoo, 2002); Net Loans/Total

Assets, Savings Deposits/Total Assets, Members Shares/Total Assets and Institutional Capital/Total Assets.

A-Asset Quality is the main variable that affects institutional profitability (Oyoo, 2002). Delinquency must be correctly measured and zealously pursued, non-earning assets should be minimized, and savings, external credit, or shares should never be used to purchase non-earning assets.

R-Rates of return and costs affect the growth of the institution. Share dividends are considered as interest expense and are a reduction of net income. Allowance for loan losses are considered as a separate operating expense.

L-Liquidity; Adequate liquidity is needed to meet the withdrawal demands of members. Since liquidity is costly it should be minimized as it leads to very low returns.

A SACCO can use the following ratio to assess its liquidity i.e. liquid assets-short term payables/total savings deposits.

Oyoo (2002) reckons that growth affects the financial structure of the institution and must be closely monitored. Total assets growth is the most important growth indicator because it affects 16 other PEARLS ratios. The signs of growth to a SACCO include the following, loans, liquid investments, financial investments, non-financial investments, savings deposits, external deposits, member shares, institutional capital, net institutional capital, membership and total assets.

2.13 CONCLUSION OF THE LITERATURE REVIEW

From the foregoing, it is worthy to not that although some studies have been done on SACCOs in various countries and Kenya in particular, none seem to touch on determinants of dividend payments by SACCOs. This study, therefore, intends to identify the determinants of dividend payments by SACCOs and because of limitation of study time and other resources, only SACCOs in Nairobi will be considered.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

The study is aimed at identifying the determinants of dividend payments by SACCOs in Nairobi.

3.1 POPULATION

The population of interest in this study consisted of all SACCOs registered that were on the registration list in the provincial co-operative office, Nairobi province, as at 31st December 2002 (presently there are 583 SACCOs).

Nairobi province is the centre of SACCO activity as about 40% (M.O.C.D, 2003) of all registered SACCOs in the country are to be found here. Due to the similarity of SACCOs which essentially carry out the business of accepting savings and lending it back to members, Nairobi was selected as the focus of the study. A sample study carried out in Nairobi should therefore, be a representative of all SACCOs in the country.
The study covers a period of 5 years from 1998-2002 the two years inclusive.

3.2 SAMPLE

Out of the initial population of 583 active SACCOs in Nairobi all the SACCOs in Audit arrears and those which did not exist in the period of 1998 to 2002 were not included in the study.

The number of SACCOs selected was 60 out of which 23 were rejected and a total number of 37 SACCOs were taken as the sample. Those SACCOs which were rejected was attributed to the non-existence or non-availability of data since they failed to file their returns and annual financial reports with the Commissioner of Co-operative Development.

3.3 DATA COLLECTION

The study was facilitated by the use of secondary data which was obtained in form of raw public accounts. The financial ratio data were computed from the published financial statements of each SACCO. A data collection form was used to collect and summarize the data for computer input appendix 1. The following data was collected for use in the study:

- Surplus/ (deficit) before interest and tax
- Dividends + interest on members' deposits
- Investments
- Total members share capital + members deposits
- Fixed assets
- Current assets
- Current liabilities
- Debt
- Reserve funds i.e. (General reserve fund, Capital reserve fund, Retained surplus and Statutory reserve fund)

Data for this study was collected for the period covering 5 years (1998-2002), from the database of the Provincial Co-operative Office, Nairobi province.

3.4 DATA ANALYSIS

Financial ratios were used to analyze the dependent and independent variables. The major financial ratios used in this study include D_t, S/NA, I/NA, WC/NA, D/NA, D_{t-1} and R/NA (details below and Appendix 3). These ratios were generated on the basis of prior researches such as by Lintner (1956) which identified current dividends as the dependent variable while the current earnings and past dividends as the independent variables.

Ratios were used because they are a convenient way to summarize large quantities of financial data (Oyoo, 2002).

The data was analyzed using multiple regression analysis and correlation analysis. The multiple regression model was in the form: $D_t = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + \varepsilon$

Where:

The dependent variable is:

- D_t=Dividend per Share at Time t. (NB: 1 share=Kshs.20)

The independent variables are:

- X_1 = Surplus to Net Assets i.e. S /NA
- X_2= Investments to Net Assets i.e. I / NA
- X_3= Working Capital(Liquidity) to Net Assets i.e. WC/ NA
- X_4= Debt (Long-term) to Net Assets i.e. D/NA
- X_5= Past Dividends per Share i.e. D_{t-1}
- X_6= Reserves funds to Net Assets i.e. R/NA
- ε = Unexplained random error

The correlation coefficient (r) and coefficient of determination (r^2) was also estimated. Tests of significance were undertaken using the t-statistic at 95% confidence level.

It is worthy to note that most SACCOs did not distinguish between share capital and members deposits, therefore, for the purposes of this study these were lumped together as capital. Equally, dividends and interest on members' deposits were lumped together as dividends.

CHAPTER FOUR

4.0 DATA ANALYSIS AND INTERPRETATIONS

4.1 GENERAL FINDINGS

Secondary data was used in this study. The data was obtained from Income and Expenditure accounts and Balance Sheets of the SACCOs for the period 1998 to 2002. The ratios computed for the purposes of this study were obtained from the Income and Expenditure accounts and Balance Sheets of the respective SACCOs which are in line with WOCCU standards.

The ratios computed enabled the researcher to apply descriptive statistics on all variables for the SACCOs. The SACCOs were divided into three categories according to size. The size was based on the average amount of share capital of each SACCO for the period of the study. SACCOs with less than Kshs.10 million average share capitals were regarded as Small, between Kshs.10 and Kshs.60 as Medium and over Kshs.60 as Large. The size of the each class was based purely on personal judgement of the researcher. The numbers of SACCOs in each class were Small (14), Medium (11), and Large (12) out of 37 of the sample collected. However, the descriptive statistics include figures of all the SACCOs combined (Overall) to portray their general trend on average. The financial ratios on the seven variables are defined in tables in appendix 3.The findings are as explained below.

4.1.1 COMPARISON OF THE VARIABLES FINANCIAL RATIOS

Table 1a: Dividend per Share at Time t (D_t) Compared

SIZE	Small	Medium	Large	Overall
CODE	D_t	D_t	D_t	D_t
MEAN	0.983	1.053	1.27	1.097
S. DEV	0.393	0.372	0.718	0.517
VAR	0.155	0.139	0.516	0.268

Source: Analysed Research Data

The dividends paid per share as can be seen in Table **1a** shows that small SACCOs paid an average of Shs.0.983 per share with a standard deviation of 0.393. The medium SACCOs paid an average of Shs.1.053 per share with a standard deviation of 0.372. The large SACCOs paid an

average of Kshs. 1.27 with a standard deviation of 0.718. Although large SACCOs paid higher dividends than the other two classes they are more risky as evidenced by the high standard deviation. The mean for all the SACCOs combined was Shs.1.097 per share with a standard deviation of 0.517. In the overall, on average, all SACCOs paid dividends at the rate of 5.485% to the share. The lowest dividend paid was Shs.0 per share representing a rate of 0% to the share. The highest dividend paid was Shs.3.17 per share representing a rate of 15.85% to the share. The lowest dividend was paid by Asili SACCO which is a large SACCO while the highest was paid by Nation SACCO which is also a large SACCO. Poor management may have contributed to the low dividends paid by Asili SACCO as opposed to Nation SACCO. However, according to the Co-operative Societies Act, no registered society shall pay dividends exceeding the maximum rate of 10%. This has an implication in that since SACCOs are limited to a certain percentage rate that can be paid as dividends, then the managers may not pay higher rates of dividends even if there was good financial performance. This may be discouraging to the society members who are interested in dividends and may eventually withdraw together with their funds which are so much needed for lending.

Table1b: Surplus to Net Assets (S/NA) Compared

SIZE CODE	Small S/NA	Medium S/NA	Large S/NA	Overall S/NA
MEAN	0.151	0.056	0.069	0.096
S. DEV	0.245	0.017	0.0423	0.156
VAR	0.059	0.00029	0.0018	0.024

Source: Analysed Research Data

The mean for surplus to net assets in Table **1b** shows that for small SACCOs it was 0.151 (15.1%) with a standard deviation of 0.245. For medium SACCOs the mean was 0.056 (5.6%) with a standard deviation of 0.017 and for large SACCOs 0.069 (6.9%) with a 0.0423 standard deviation. Small SACCOs have a higher return on net assets but more risky. This is probably due to low operating expenses. They are followed by large and then medium SACCOs. However, the overall mean of return on net assets was computed as 0.096 (9.6%) and a standard deviation of 0.156. Since taxes are not controllable by management and since firm's opportunities for availing tax incentives differ, it is prudent to use before-tax measure on return on net assets, which was used in this case.

Table1c: Investments to Net Assets (I/NA) Compared

SIZE CODE	Small I/NA	Medium I/NA	Large I/NA	Overall I/NA
MEAN	0.057	0.0288	0.0276	0.039
S. DEV	0.138	0.029	0.028	0.087
VAR	0.019	0.00089	0.0008	0.0076

Source: Analysed Research Data

Investments to net assets as shown in Table **1c** depicts that for small SACCOs the mean was 0.057(5.7%) with a standard deviation of 0.138. For medium SACCOs, the mean was 0.0288(2.88%) and a standard deviation of 0.029 and for large SACCOs a mean of 0.0276(2.76%) with a standard deviation of 0.028. Investments to net assets of small SACCOs is higher than that of medium and large SACCOs but more risky. However, on overall the mean was 0.039(3.9%) with a standard deviation of 0.087. It means that investments form a small proportion of the SACCOs net assets. This can be attributed to the fact that investments are risk-taking ventures which require detailed evaluation to determine their economic viability and therefore calls for all investment proposals to be appraised by the members (Sessional Paper No.6, 1997). Investments by SACCOs in expensive assets must be discouraged because such investments are not in line with the primary objective of the societies.

Table 1d: Working Capital to Net Assets (WC/NA) Compared

SIZE CODE	Small WC/NA	Medium WC/NA	Large WC/NA	Overall WC/NA
MEAN	0.94	0.97	0.92	0.94
S. DEV	0.14	0.033	0.095	0.101
VAR	0.019	0.00106	0.00907	0.0102

Source: Analysed Research Data

The working capital to net assets as shown in Table **1d** shows that for small SACCOs the mean was 0.94 (94%) and a standard deviation of 0.14. For medium SACCOs the mean was 0.97(97%) with a standard deviation of 0.033 while for large SACCOs it was 0.92(92%) and a standard deviation of 0.095. Medium SACCOs had the highest liquidity and the lowest risk. On overall, the mean was 94% with a standard deviation of 0.101. This generally means that a large part of

SACCOs net assets are composed of the working capital. This is probably due to SACCOs regarding loans granted to members as part of accounts receivables. The working capital to net assets can be used to measure the liquidity of a firm. According to WOCCU, although adequate liquidity is needed to meet the withdrawal demands of members, it is costly and should be minimized since it leads to very low returns.

Table 1e: Debts to Net Assets (D/NA) Compared

SIZE CODE	Small D/NA	Medium D/NA	Large D/NA	Overall D/NA
MEAN	0	0.0096	0.00007	0.0037
S. DEV	0	0.017	0.00024	0.0098
VAR	0	0.00028	0.00000	0.0000

Source: Analysed Research Data

The mean of debt to net assets is shown in Table **1e**. Small SACCOs have a mean of 0(0%) and a standard deviation of *0*; medium *SACCOs* have a mean of *0.0096(0.96%)* with a standard deviation of 0.017 and large SACCOs have a mean of 0.00007(0.007%) and a standard deviation of 0.00024. The small SACCOs had the least mean probably because they did not have enough tangible assets that can act as security for borrowing loans. They were followed by large and then medium SACCOs. The mean for all SACCOs was 0.0037(0.37%) with a standard deviation of 0.0098. It means that on average the lenders had financed only 0.37% of the SACCOs net assets (capital employed). The implication is that 99.63% of the SACCOs net assets were financed by members' funds and reserves. According to the WOCCU standards the debt to net assets ratio should be *0%* which has been achieved by the *small SACCOs. It is* therefore expected that the 0% target will enable SACCOs to pay high dividends since they will not be restricted by debt contracts.

Table 1f: Past Dividends (D_{t-1}) per Share Compared

SIZE CODE	Small D_{t-1}	Medium D_{t-1}	Large D_{t-1}	Overall D_{t-1}
MEAN	0.96	0.98	1.21	1.0479
S. DEV	0.397	0.36	0.67	0.49
VAR	0.157	0.129	0.44	0.242

Source: Analysed Research Data

Table **1f** shows the past dividends per share for small SACCOs as Shs. 0.96 and a standard deviation of *0.397; medium SACCOs* had a mean of *Shs.0.98* and a standard deviation of *0.36*. Large SACCOs had a mean of Shs. 1.21 and a standard deviation of 0.67. Large SACCOs had paid a higher rate of dividends in previous years followed by medium and then small SACCOs. The mean for all SACCOs was Shs.1.048 per share .It means that on average all the SACCOs paid a rate of 5.245% to the share which is in the range of the 10% rule. Past dividends help the management of SACCOs to predict future dividends. It also helps in the retention of members.

Table 1g: Reserves to Net Assets (R/NA) Compared

SIZE CODE	**Small R/NA**	**Medium R/NA**	**Large R/NA**	**Overall R/NA**
MEAN	0.05	0.055	0.079	0.061
S. DEV	0.036	0.031	0.105	0.065
VAR	0.0013	0.00098	0.011	0.0043

Source: Analysed Research Data

Reserves to net assets shown in Table **1g** shows that small SACCOs had a mean of 0.05(5%) with a standard deviation of *0.036. Medium SACCOs* had a mean of *0.055(5.5%)* and a standard deviation of 0.031 and large SACCOs had a mean of 0.079(7.9%) with a standard deviation of 0.105. By the reason that they are large it is expected that large SACCOs had the highest reserves which led to the payment of dividends uncertain as evidenced by a high standard deviation. However, on overall, SACCOs had a mean of 0.061(6.1%) and a standard deviation of 0.065. This means that reserves formed only 6.1% of the SACCOs net assets while 93.9% was formed by the members and lenders funds with the members' funds taking a big proportion as discussed earlier in Table **1e**.

According to the WOCCU standards the goal should be a minimum of 10% which is computed by considering the statutory reserves to total assets. For the purposes of this study the researcher aggregated all forms of reserves and divided by the net assets and therefore did not consider restriction by the WOCCU standards for individual SACCOs.

4.2 REGRESSION RESULTS

The tables below show the results obtained from running Ordinary Least Squares multiple regressions. The model that was used is described below.

$$D_t = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + \varepsilon$$

Where:

D_t is the dividend per share at year t as outlined earlier.

X_1, X_2, X_3, X_4, X_5 and X_6 are the determinants (predictors) of dividends i.e. surplus, investments, liquidity, debt, past dividends and total reserves respectively.

The parameter b_o represents the component of a firms dividend per share that is autonomous, that is, that part that is not affected by the independent variables used in the study. In this study b_0 could represent the impact of factors not included in this model.

Table 2: Regression Output

		SIZE		
SUMMARY OUTPUT	**Small**	**Medium**	**Large**	**Overall**
Multiple R	0.935	0.987	0.998	0.972
R square	*0.874*	*0.974*	*0.997*	*0.946*
Adjusted R Square	0.796	0.934	0.993	0.934
Standard Error	0.178	0.096	0.0611	0.132
Intercept	-8.213	3.984	-0.244	-0.85

Source: Research Data Analysis

Table 2 shows the regression output for all sizes of SACCOs and for the overall. Dividend paid per share was the dependent variable while surpluses, investments, liquidity, debt, past dividends per share, and reserve ratios as the independent variables. Multiple R is the multiple correlation coefficients between all of predictor variables and the dependent variable. The result of the regression analysis indicates that there was a great deal of variance shared by the independent variables and the dependent variable as shown by values ranging from 0.935 to 0.998 on all SACCO sizes. Generally, there was a high correlation between dividends paid and the

parameters; surplus, investments, liquidity, debt, past dividends and reserves as shown by the value of *0.972*.

R Square is the squared value of R. It is used to describe the goodness-of-fit or the amount of variance explained by a given set of predictor variables. For small *SACCOs 0.874*(87.4%) of the variance of dividends was explained by the independent variables while 12.6% of the variance was explained by other factors. For medium and large SACCOs the variance of dividends was explained by 0.97.4(97.4%) and 0.997(99.7%) by the independent variables respectively. For all SACCOs, the analysis indicated that 0.946(94.6%) of the variance of dividends paid was explained by the independent variables and only 5.6% by other factors.

The intercept i.e. b_0 shows that for small and large SACCOs if all the independent variables are equal to zero then they would pay no dividends as indicated by the negative sign. Medium SACCOs would pay some dividends as indicated by the positive sign. In the overall it is expected that if all the independent variables were equal to zero no dividends would be paid as evidenced by the value -0.85 in the overall column.

4.3 TESTS OF SINGNIFICANCE FOR THE INDEPENDENT VARIABLES

Statistical tests were carried out to find out whether the ratios of determinants of dividends were significant in the three classes of SACCOs and all SACCOs on overall. Tests were carried out on six major ratios, that is: S/NA, I/NA, WC/NA, D/NA, D_{t-1} and R/NA. The test followed the following steps:

1. Making assumptions (the hypothesis)

H_O: $b_1 = b_2 = b_3 = b_4 = b_5 = b_6 = 0$

H_A: $b_1 \neq b_2 \neq b_3 \neq b_4 \neq b_5 \neq b_6$

2. Obtaining the sampling distribution
3. Selecting a significance level and critical region

   The level of significance was .005(5%)
4. Computing the test statistic
5. Making a decision

A statistical decision is made by rejecting the null hypothesis if the test statistic lies in the critical region; or fails to reject null hypothesis. Hence the determinants do not provide enough evidence to support rejection of H_O and perhaps more sample investigation should be done.

6. Make a managerial decision.

Table 3: Hypothesis Tests for Small SACCOs

Coefficient	t Computed	t Critical	Ho
b_1	1.747	2.179	Accept
b_2	1.105	2.179	Accept
b_3	-1.128	2.179	Accept
b_4	0	2.179	Accept
b_5	8.325	2.179	Reject
b_6	-0.92	2.179	Accept

Source: Research Data Analysis

Table 3 shows results of the hypothesis tests of the independent variables for the small SACCOs. It depicts that surplus, investments, liquidity, debt and reserves are insignificant i.e. they have little explanatory power on dividends paid and that past dividends are statistically significant. However surplus income, investment income and past dividends seem to move in the same direction. Liquidity and reserves move in the opposite direction with dividends paid which means that as high dividends are paid the SACCOs will have less liquidity and low reserves. Since there are no debts reported by small SACCOs they have no significance in determining dividends in this case.

Table 4: Hypothesis Tests for Medium SACCOs

Coefficient	*t Computed*	*t Critical*	*Ho*
b_1	9.073	2.262	Reject
b_2	-1.278	2.262	Accept
b_3	1.809	2.262	Accept
b_4	-1.518	2.262	Accept
b_5	10.6	2.262	Reject
b_6	0.868	2.262	Accept

Source: Research Data Analysis

Table 4 shows the hypothesis tests of the independent variables for the medium SACCOs. It depicts that surpluses and past dividends are significant while investments, liquidity, debt and reserves have a low explanatory power of dividends paid. It also indicates that investments and debt ratios move in opposite direction with dividends paid .i.e. as more funds are invested and borrowed less is paid as dividends.

Table 5: Hypothesis Tests for Large SACCOs

Coefficient	*t Computed*	*t Critical*	Ho
b_1	15.015	2.228	Reject
b_2	-2.129	2.228	Accept
b_3	3.407	2.228	Reject
b_4	0.057	2.228	Accept
b_5	18.796	2.228	Reject
b_6	-2.583	2.228	Reject

Source: Research Data Analysis

Table 5 shows results of the hypothesis tests of independent variables for large SACCOs. This table shows that for large SACCOs' surpluses, liquidity, past dividends and reserves are significant i.e. they have a strong explanatory power on dividends paid while investments and debt are insignificant. However, investments and reserves move in the opposite direction to dividends paid.

Table 6: Hypothesis Tests for the Overall (all SACCOs)

Coefficient	t Computed	t Critical	Ho
b_1	1.758	1.96	Accept
b_2	-0.012	1.96	Accept
b_3	1.080	1.96	Accept
b_4	-1.067	1.96	Accept
b_5	22.941	1.96	Reject
b_6	-2.283	1.96	Reject

Source: Research Data Analysis

Table 6 shows the hypothesis test of independent variables for all SACCOs. It shows that for all SACCOs' surpluses, investments, liquidity and debt have a low explanatory power for dividends

paid while past dividends and reserves are significant as determinants of future dividends. Investments, liquidity and reserves are adverse to dividends payment.

4.4 DISCUSSION

The study had the objective of identifying the determinants of dividends by SACCOs. The analysis conducted in this chapter reveals that by use of financial ratios past dividend is the major determinant of dividends paid by small SACCOs. It was also observed that for small SACCOs liquidity and reserves moved in the opposite direction to dividends paid.

For medium SACCOs, surpluses and past dividends were observed as the major determinants of dividends paid while investments and debt moved in the opposite direction.

For large SACCOs, surplus, liquidity, past dividends and reserves were observed as significant in determining dividends to be paid. Investments and reserves were observed as adverse to the payment of dividends.

However, on the overall, it was observed that past dividends and reserves were the major determinants of dividends for SACCOs. It was also observed that investments, liquidity and reserves were negatively correlated to dividends paid.

It was observed that although SACCOs paid dividends every year they were constrained by the law on the maximum rate to be paid i.e. 10% and had exceeded this rate.

In terms of surpluses this study found out that SACCOs had low rate of return on net assets due to high expenses in areas such as education and training, auditing, accounting services, management systems, committee expenses among others which could affect how much to be paid as dividends. It was also observed that surpluses were greatly affected by interest on members' deposits or rebate to members' which were regarded as expenses in the income and expenditure account. However, this problem was solved by regarding interest on members' deposits/ rebate to members' as dividends as envisaged earlier.

Investments of SACCOs in general, form a small proportion of their net assets. A critical analysis revealed that most SACCOs were limited to investments such as purchasing shares from entities such as Corporative Insurance Services, KUSCCO and Co-operative Bank of Kenya. Incomes generated from these investments were from dividends which seemed quite uncertain. Generally investments were not very significant as determinants of dividends for SACCOs.

The liquidity in SACCOs was high especially so when they regarded loans granted to members as accounts receivables. A large part of the SACCOs assets were in liquid form for the purposes of performing their core activity i.e. granting loans making it a weak determinant of dividends. This seems to confirm the findings and the conclusion of Karanja (1987) that a firm must not only consider its present cash requirements but also the future.

The analysis shows that only 4 out of 37 SACCOs i.e. 10.8% reported the usage of debt for their operations in the period of study. All the small SACCOs maintained the WOCCU standards of 0% debt target. Generally debts are low determinants of dividends since SACCOs are not constrained by debt contracts.

Reserves are determinants of dividends in the inverse direction i.e. the higher the SACCOs kept as reserves the lower the dividends paid. Some of the reserves are statutory i.e. 25% of SACCOs surplus had to be kept as statutory reserves before paying dividends. All the SACCOs were found to observe this requirement. However, it was observed that SACCOs kept very low levels of reserves in an attempt to reduce the costs associated with holding idle funds. It confirms the findings of Gachara (1990) that reserves formed a relatively small percentage (4.9%) of the total liabilities in such societies while the percentage established in this study was 6.1% a difference being attributed to time lapse and the size of the sample.

The above arguments portray that surpluses, investments, liquidity, debt, past dividends and reserves are determinants of dividends as supported by the multiple regression analysis carried out on each category of SACCOs and on the overall. The regression outputs show a very high correlation between the dividends and its determinants as depicted by Multiple R and R square.

However, by carrying out test of significance taking into account the error term a different scenario arises. For small SACCOs, of all the six tests of significance, only one rejected the null hypothesis (b_5), the rest failed to reject the null hypothesis. Thus, we can conclude that past dividends have a high explanatory power on dividends followed by surpluses. For medium SACCOs two out of six tests rejected the null hypothesis (b_1 and b_5) concluding that surpluses and past dividends were significant in dividends paid. In large SACCOs, three out of six tests rejected the null hypothesis (b_1, b_3 and b_5) concluding that surpluses, liquidity and past dividends are significant as determinants of dividends. On the overall, two out of six tests rejected the null hypothesis (b_5 and b_6) concluding generally that past dividends and reserves were significant as a determinant of dividend paid followed by surpluses.

CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS AND CONCLUSIONS

The major objective of the study was to identify the determinants of dividends paid by SACCOs in Nairobi.

The objective was achieved by extracting secondary data generated from financial reports of the sampled SACCOs. The data was analyzed using growth ratios, liquidity ratios, profitability ratios and dividend ratios. The SACCOs used in this analysis were further broken down into small, medium and large according to the average amount of share capital held by each. Those SACCOs which had an average of less than Kshs.10m share capital were regarded as small, between Kshs. 10m and Kshs.60m as medium and above Kshs 60m as large. Seven financial ratios were computed from each of the SACCOs and averaged in their respective categories. The ratios were obtained both from the balance sheets and income and expenditure accounts of the selected SACCOs thus portraying both static and dynamic measures of liquidity, profitability, growth and dividends. An interesting characteristic of SACCOs is the preference of equity over debt finance such that throughout the period 33 of the 37 SACCOs (89%) listed zero long-term debt. This may suggest that SACCOs pay high dividends to their members due to lack of debt obligations which is contrary in this study. Table **1a** shows that SACCOs generally paid dividends at the rate of 5.485% to the share which is within the 10% rule. A few individual large SACCOs however, paid dividends which exceeded the 10% of their surplus.

The study also revealed that investments, debts and reserves formed a small part of the SACCOs net assets while the net working capital formed a large part of the SACCOs assets.

The study, through the use of multiple regression analysis, revealed that there was a high correlation between dividends and the selected variables for the study that is surplus, investments, liquidity, debt and reserves. However, this relationship depends on the size of the SACCO.

Through the tests of significance, the study revealed that past dividends and surpluses were highly significant as determinants of dividends while investments, liquidity, debts and reserves had a low explanatory power.

5.2 RECOMMENDATIONS

Better performance of SACCOs is called for and the members should demand this from the management. This can be done by insisting on continued accountability and transparency on all the operations of the SACCOs which would lead to high dividends.

SACCOs are financial institutions, like the rest of the private sector they must strive to be efficient and be able to diversify their investments other than investing in shares of a few institutions. This would ensure high dividends to members and by doing this they would attract more members as well as retaining the existing ones. However, investment decisions should be taken with utmost attention to prevent incurring losses in future.

The government should reconsider the 10% rule in order not to give the management a reason not to pay high dividends if the SACCOs perform well. The members should not only benefit from getting loans at low interest rates but also be in a position to earn good dividends as well as be able to make capital gains.

5.3 LIMITATIONS OF THE STUDY

The study encountered some limitations. It is highly important that users be aware of some of these so that they make appropriate decisions.

Stratification: The study attempted to stratify SACCOs according to the average amount of share capital held by them. However, these SACCOs are formed by members drawn from different sectors and grouping them together may lead to some biased ness due to their unique characteristics.

Coverage: The study was carried out on SACCOs based in Nairobi province. This was due to lack of time and other resources. A study of SACCOs outside Nairobi could give different conclusions.

Manipulation: Given that the data used in this study was obtained from published financial statements, users must be cautious of the limitations associated with such data. This data may have some degree of manipulation by the management of a SACCO to present a rosy view of the SACCOs' position. The possibility of the conclusions of this study being contaminated by this manipulation has been controlled to some extent by the use of six financial ratios to identify the determinants of dividends of SACCOs instead of just one.

t-distribution: The t-distribution in used in this study assumed that sampling was done from a population that is approximately normal. However, the users should note that there are cases where the statistical approach used brings in bias, rendering the assumption useless.

5.4 SUGGESTIONS FOR FURTHER RESEARCH

A study should be carried out to identify the determinants of dividend payments by other types of co-operative societies such as producer co-operative societies.

A study should be done to identify the determinants of dividend payments by SACCOs based outside Nairobi.

A study should be carried out to find out whether payments of high dividends by SACCOs would lead to increase of savings by members.

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APPENDICES

APPENDIX 1

DATA COLLECTION SHEET

Name of the SACCO: _____

Year	Surplus/ (Deficit) KShs.	Dividends+ Interest on Deposits KShs.	Investments KShs.	Share capital + Members deposits KShs.	F/ Assets KShs.	C/ Assets KShs.	C/ Liabilities KShs.	Debts KShs.	RF KShs.
1997									
1998									
1999									
2000									
2001									
2002									

Where:

- F/ Assets- Fixed Assets
- C/ Assets- Current Assets
- C/ Liabilities- Current Liabilities
- RF-reserve funds and includes- General Reserve Fund, Capital Reserve Fund, Retained earnings and Statutory Reserve Fund.

APPENDIX 2

LIST OF SACCOs USED IN THE STUDY

NUMBER	NAME OF SACCO
1	KENYA POLICE
2	WANANYUMBA
3	INDUSTRIAL DEVELOPMENT BANK
4	POST BANK
5	CORPORATIVE IINSURANCE SERVICES
6	KENCHIC
7	EXAMS
8	NURU
9	UTABIBU
10	KARI
11	ALICO
12	USITAWI
13	BAICO
14	TOPHARD
15	UNITED WORKERS
16	CONCORDE
17	NZIGE
18	MAO
19	KABAGE MWIRIGI
20	COPY CAT

21	COMOCO
22	ONSAFARI
23	KIMBO
24	KENPIPE
25	PEUGEOT
26	STIMA
27	SHERIA
28	UKULIMA
29	ASILI
30	ENERGY
31	KEWISCO
32	WANAANGA
33	KEMRI
34	BACISTA
35	MAGEREZA
36	NATION
37	UKAGUZI

APPENDIX 3

COMPUTED RATIOS ON EACH SACCO

1. KENYA POLICE

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.063	0.007	0.026	0.63	0	0.044	0.33
1999	0.079	0.0068	0.025	0.67	0	0.063	0.30
2000	0.078	0.0075	0.024	0.69	0	0.079	0.28
2001	0.088	0.020	0.028	0.86	0	0.075	0.13
2002	0.075	0.01	0.028	0.86	0	0.088	0.089
MEAN	**0.0766**	**0.0103**	**0.0262**	**0.742**	**0**	**0.0704**	**0.386**

2. WANANYUMBA

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.73	0.037	0.05	0.95	0	0.084	0.072
1999	0.55	0.028	0.055	0.94	0	0.73	0.066
2000	1.1	0.057	0.057	0.94	0	0.55	0.086
2001	1.52	0.077	0.082	0.92	0	1.10	0.10
2002	1.31	0.065	0.078	0.91	0	1.52	0.12
MEAN	**1.042**	**0.0528**	**0.0644**	**0.932**	**0**	**0.7968**	**0.0492**

3. INDUSTRIAL DEVELOPMENT BANK

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.02	0.056	0.023	0.98	0	0.796	0.047
1999	0.983	0.059	0.018	0.98	0	1.02	0.048
2000	0.827	0.042	0.019	0.97	0	0.983	0.046
2001	0.204	0.0198	0.0198	0.97	0	0.827	0.044
2002	0.614	0.0397	0.018	0.97	0	0.204	0.046
MEAN	**0.7296**	**0.0433**	**0.0196**	**0.974**	**0**	**0.766**	**0.0462**

4. POST BANK

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.64	0.085	0.0086	0.98	0	1.38	0.022
1999	1.75	0.0899	0.007	0.99	0	1.64	0.019
2000	1.875	0.096	0.0058	0.99	0	1.75	0.023
2001	1.77	0.089	0.0049	0.99	0	1.875	0.022
2002	1.77	0.090	0.0298	0.97	0	1.77	0.021
MEAN	**1.761**	**0.09**	**0.0112**	**0.984**	**0**	**1.683**	**0.0214**

5. CORPORATIVE INSURANCE SERVICES

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.01	0.05	0.0082	0.99	0	1.13	0.0096
1999	1.28	0.072	0.0099	0.99	0	1.01	0.00898
2000	1.4	0.072	0.036	0.96	0	1.28	0.0084
2001	1.05	0.059	0.028	0.97	0	1.4	0.0083
2002	0.696	0.041	0.087	0.91	0	1.05	0.0093
MEAN	**1.0872**	**0.0588**	**0.0338**	**0.964**	**0**	**1.174**	**0.00892**

6. KENCHIC

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.88	0.093	0.0049	0.99	0	0.89	0.12
1999	1.27	0.07	0.005	1.01	0	0.88	0.070
2000	1.48	0.073	0.013	0.99	0	1.27	0.070
2001	1.6	0.080	0.011	0.98	0	1.48	0.060
2002	1.32	0.079	0.0087	0.99	0	1.6	0.0497
MEAN	**1.31**	**0.079**	**0.0283**	**0.992**	**0**	**1.224**	**0.0739**

7. EXAMS

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.33	0.069	0.006	0.99	0	1.00	0.025
1999	1.1	0.0596	0.0046	0.990	0	1.33	0.02
2000	1.2	0.062	0.0032	1.04	0	1.1	0.019
2001	1.4	0.071	0.0023	0.997	0	1.2	0.014
2002	1.4	0.071	0.0018	0.997	0	1.4	0.012
MEAN	**1.286**	**0.0665**	**0.00358**	**1.00280**	**0**	**1.206**	**0.018**

8. NURU

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.29	0.024	0	0.998	0	0.33	0.0183
1999	0.28	0.041	0	0.999	0	0.29	0.029
2000	0.28	0.25	0	0.99	0	0.28	0.026
2001	0.15	0.023	0	0.99	0	0.28	0.03
2002	0.26	0.045	0.0025	0.997	0	0.15	0.05
MEAN	**0.252**	**0.0361**	**0.0005**	**0.9966**	**0**	**0.266**	**0.031**

9. UTABIBU

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.25	0.062	0.013	0.98	0	1.38	0.066
1999	1.18	0.061	0.013	0.98	0	1.25	0.057
2000	0.99	0.062	0.024	0.97	0	1.18	0.049
2001	1.38	0.071	0.006	0.99	0	0.99	0.05
2002	1.81	0.089	0.005	0.99	0	1.38	0.05
MEAN	**1.322**	**0.069**	**0.0122**	**0.982**	**0**	**1.236**	**0.0544**

10. KARI

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.95	0.05	0.0026	0.99	0	1.21	0.044
1999	1.22	0.067	0.0028	0.99	0	0.95	0.046
2000	1.26	0.076	0.0028	0.99	0	1.22	0.057
2001	1.3	0.073	0.0024	0.99	0	1.26	0.076
2002	1.2	0.062	0.0015	0.99	0	1.3	0.1
MEAN	**1.186**	**0.0656**	**0.00274**	**0.99**	**0**	**1.188**	**0.0646**

11. ALICO

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.12	0.067	0	1	0	0.752	0.0165
1999	0.9	0.059	0	1	0	1.12	0.027
2000	0.79	0.049	0	1	0	0.9	0.022
2001	1.795	0.1	0.0009	0.99	0	0.79	0.028
2002	1.64	0.089	0.0007	0.99	0	1.795	0.027
MEAN	**1.249**	**0.0728**	**0.00032**	**0.996**	**0**	**1.0714**	**0.0241**

12. USITAWI

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.61	0.085	0.0077	0.99	0	1.640	0.063
1999	1.46	0.078	0.006	0.99	0	1.610	0.057
2000	1.36	0.076	0.0054	0.99	0	1.460	0.053
2001	1.32	0.073	0.0055	0.99	0	1.360	0.06
2002	1.27	0.072	0.0045	0.99	0	1.320	0.051
MEAN	**1.404**	**0.768**	**0.00582**	**0.99**	**0**	**1.478**	**0.0568**

13. BAICO

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.53	0.07	0.00004	0.99	0	0	0.11
1999	1.87	0.095	0.00004	0.99	0	1.53	0.089
2000	1.22	0.066	0.00002	0.99	0	1.87	0.056
2001	1.38	0.072	0.000015	0.99	0	1.22	0.04
2002	1.5	0.078	0.000012	1	0	1.38	0.035
MEAN	**1.5**	**0.0762**	**0.000817**	**0.992**	**0**	**1.2**	**0.066**

14. TOPHARD

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.65	0.086	0	1	0	1.46	0.01
1999	1.69	0.087	0	1	0	1.65	0.013
2000	1.42	0.07	0	1	0	1.69	0.014
2001	0.87	0.049	0	1	0	1.42	0.015
2002	0.75	0.0499	0	1	0	0.87	0.0180
MEAN	**1.276**	**0.684**	**0**	**1**	**0**	**1.418**	**0.0140**

15. UNITED WORKERS

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.85	0.04	0.0086	0.99	0	0.48	0.08
1999	0.52	0.025	0.0074	0.998	0	0.85	0.07
2000	0.4	0.028	0.0063	0.999	0	0.52	0.07
2001	0.54	0.033	0.0059	0.998	0	0.4	0.073
2002	0.56	0.05	0.0051	0.999	0	0.54	0.083
MEAN	**0.574**	**0.0352**	**0.00666**	**0.9968**	**0**	**0.558**	**0.0752**

16. CONCORDE

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.44	0.039	0.0077	0.98	0	0.42	0.028
1999	0.39	0.028	0.006	0.99	0	0.44	0.024
2000	0.4	0.028	0.0047	0.98	0	0.39	0.021
2001	0.53	0.033	0.0036	0.988	0	0.4	0.019
2002	0.33	0.003	0.0029	0.988	0	0.53	0.023
MEAN	**0.418**	**0.0262**	**0.00498**	**0.98520**	**0**	**0.436**	**0.0230**

17. NZIGE

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.15	0.05	0.0038	0.99	0	1.7	0.134
1999	0.81	0.042	0.003	0.99	0	1.15	0.11
2000	0.47	0.023	0.003	0.99	0	0.81	0.09
2001	0.44	0.021	0.0027	0.997	0	0.47	0.08
2002	0.46	0.023	0.0024	0.99	0	0.44	0.075
MEAN	**0.666**	**0.0318**	**0.00298**	**0.9914**	**0**	**0.914**	**0.0978**

18. MAO

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.58	0.04	0.0007	0.99	0	0	0.018
1999	0.68	0.041	0.058	0.94	0	0.58	0.02
2000	0.67	0.037	0.167	0.83	0	0.68	0.033
2001	0.61	0.033	0.23	0.766	0	0.67	0.037
2002	1.15	0.067	0.27	0.73	0	0.61	0.038
MEAN	**0.738**	**0.0436**	**0.1464**	**0.8532**	**0**	**0.508**	**0.0292**

19. KABAGE MWIRIGI

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.71	0.11	0.52	0.48	0	1.30	0.035
1999	1.83	0.11	0.57	0.43	0	1.71	0.024
2000	1.48	0.089	0.43	0.57	0	1.83	0.03
2001	1.30	0.07	0.39	0.61	0	1.48	0.03
2002	1.14	0.63	0.68	0.32	0	1.30	0.03
MEAN	**1.492**	**0.0884**	**0.518**	**0.482**	**0**	**1.524**	**0.0298**

20. COPYCAT

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.79	0.047	0.037	0.96	0	0.48	0.019
1999	0.399	0.027	0.034	0.97	0	0.79	0.017
2000	0.43	0.03	0.03	0.97	0	0.399	0.016
2001	0.60	0.03	0.029	0.97	0	0.43	0.018
2002	0.64	0.038	0.024	0.98	0	0.6	0.017
MEAN	**0.572**	**0.0364**	**0.0308**	**0.97**	**0**	**0.539**	**0.0174**

21. COMOCO

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.61	0.04	0.013	0.98	0	0.72	0.05
1999	0.63	0.03	0.011	0.97	0	0.61	0.057
2000	1.05	0.058	0.0099	0.97	0	0.63	0.058
2001	1.10	0.059	0.009	0.98	0	1.05	0.05
2002	1.03	0.07	0.008	0.980	0	1.10	0.055
MEAN	**0.884**	**0.0514**	**0.0102**	**0.976**	**0**	**0.82**	**0.054**

22. ONSAFARI

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.4	0.07	0.012	0.99	0	0	0.11
1999	1.01	0.068	0.0064	0.99	0	1.4	0.115
2000	0.81	0.08	0.0053	0.99	0	1.01	0.14
2001	0.9	0.09	0.0043	0.99	0	0.81	0.16
2002	1.09	0.085	0.0035	0.99	0	0.9	0.17
MEAN	**1.04**	**0.0786**	**0.0279**	**0.99**	**0**	**0.824**	**0.139**

23. KIMBO

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.7	0.089	0.015	0.988	0	1.9	0.081
1999	1.6	0.082	0.013	0.98	0	1.7	0.06
2000	2.3	0.11	0.012	0.98	0	1.6	0.1
2001	2.17	0.11	0.011	0.99	0	2.3	0.056
2002	2.06	0.1	0.01	0.99	0	2.17	0.05
MEAN	**1.996**	**0.0982**	**0.0338**	**0.984**	**0**	**1.934**	**0.0694**

24. KENPIPE

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.23	0.06	0.0016	0.99	0	1.20	0.02
1999	1.60	0.08	0.0012	0.99	0	1.23	0.03
2000	1.50	0.075	0.00087	0.99	0	1.60	0.03
2001	1.48	0.076	0.00066	0.99	0	1.50	0.02
2002	1.51	0.078	0.00046	0.99	0	1.48	0.019
MEAN	**1.464**	**0.0738**	**0.0054**	**0.99**	**0**	**1.402**	**0.0238**

25. PEUGEOT

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.61	0.04	0.06	0.93	0	0.57	0.03
1999	0.75	0.05	0.065	0.92	0	0.61	0.1
2000	0.55	0.035	0.067	0.92	0	0.75	0.04
2001	0.56	0.035	0.06	0.93	0.04	0.55	0.04
2002	0.59	0.03	0.06	0.93	0.14	0.56	0.04
MEAN	**0.612**	**0.038**	**0.0624**	**0.926**	**0.036**	**0.608**	**0.05**

26. STIMA

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.15	0.06	0.0038	0.99	0	1.1	0.013
1999	1.22	0.066	0.0028	0.98	0	1.15	0.017
2000	1.40	0.07	0.002	0.99	0	1.22	0.018
2001	1.50	0.07	0.00195	0.99	0	1.4	0.017
2002	1.40	0.07	0.002	0.95	0	1.5	0.018
MEAN	**1.334**	**0.0672**	**0.00611**	**0.98**	**0**	**1.274**	**0.0166**

27. SHERIA

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.07	0.05	0.05	0.94	0	1.14	0.03
1999	1.03	0.05	0.05	0.94	0	1.07	0.015
2000	1.07	0.05	0.05	0.93	0	1.03	0.02
2001	1.00	0.05	0.03	0.96	0	1.07	0.03
2002	1.03	0.05	0.03	0.96	0	1.00	0.04
MEAN	**1.04**	**0.05**	**0.042**	**0.946**	**0**	**1.062**	**0.027**

28. UKULIMA

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.07	0.05	0.03	0.740	0	1.3	0.15
1999	1.05	0.05	0.03	0.740	0	1.07	0.15
2000	1.07	0.05	0.03	0.76	0	1.05	0.148
2001	1.07	0.06	0.03	0.76	0	1.07	0.145
2002	1.02	0.049	0.03	0.8	0	1.07	0.11
MEAN	**1.056**	**0.0518**	**0.03**	**0.76**	**0**	**1.112**	**0.1406**

29. ASILI

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0	0.0026	0.013	0.5	0	0	0.145
1999	0	-0.0016	0.0125	0.87	0	0	0.14
2000	0.335	0.018	0.129	0.87	0	0	0.08
2001	0.47	0.024	0.133	0.86	0	.335	0.101
2002	0.24	0.017	0.12	0.88	0	0.47	0.140
MEAN	**0.209**	**0.012**	**0.1034**	**0.796**	**0**	**0.094**	**0.1212**

30. ENERGY

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.49	0.04	0.09	0.91	0.03	0.41	0.06
1999	0.55	0.04	0.07	0.93	0.03	0.49	0.074
2000	0.66	0.04	0.09	0.895	0.03	0.55	0.074
2001	0.596	0.035	0.097	0.89	0.029	0.66	0.07
2002	0.563	0.033	0.1	0.89	0.027	0.596	0.07
MEAN	**0.5718**	**0.0376**	**0.089**	**0.903**	**0.029**	**0.541**	**0.0696**

31. KEWISCO

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.4	0.07	0.046	0.950	0	1.7	0.03
1999	1.74	0.087	0.03	0.97	0	1.4	0.04
2000	1.65	0.08	0.027	0.97	0	1.74	0.057
2001	1.66	0.08	0.019	0.98	0	1.65	0.047
2002	1.36	0.068	0.015	0.99	0	1.66	0.048
MEAN	**1.562**	**0.077**	**0.0274**	**0.972**	**0**	**1.63**	**0.0444**

32. WANAANGA

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.80	0.045	0.05	0.95	0	0.76	0.045
1999	0.99	0.05	0.001	0.98	0	0.80	0.057
2000	1.31	0.06	0.008	0.99	0	0.99	0.1
2001	1.71	0.07	0.0058	0.99	0	1.31	0.187
2002	2.03	0.08	0.0045	0.990	0	1.71	0.26
MEAN	**1.368**	**0.061**	**0.0157**	**0.98**	**0**	**1.114**	**0.1298**

33. KEMRI

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.15	0.06	0.008	0.99	0.002	1.10	0.07
1999	1.145	0.05	0.008	0.99	0	1.15	0.07
2000	1.04	0.05	0.009	0.99	0.00008	1.145	0.079
2001	1.08	0.05	0.0077	0.986	0.000007	1.04	0.068
2002	1.1	0.047	0.0087	0.99	0.119	1.08	0.06
MEAN	**1.103**	**0.0514**	**0.00828**	**0.989**	**0.0402**	**1.103**	**0.0694**

34. BACISTA

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	0.69	0.039	0	0.99	0	0.86	0.022
1999	0.86	0.046	0	0.99	0	0.69	0.024
2000	0.95	0.05	0	0.99	0	0.86	0.025
2001	1.29	0.067	0	0.99	0	0.95	0.026
2002	1.15	0.059	0	0.99	0	1.29	0.029
MEAN	**0.988**	**0.052**	**0**	**0.99**	**0**	**0.93**	**0.0252**

35. MAGEREZA

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.6	0.088	0.023	0.94	0	1.59	0.027
1999	1.64	0.089	0.010	0.96	0	1.6	0.029
2000	1.52	0.082	0.0097	0.96	0	1.64	0.027
2001	*1.5*	*0.079*	*0.0086*	*0.970*	*0*	*1.52*	*0.04*
2002	0.92	0.049	0.0076	0.940	0	1.5	0.055
MEAN	**1.436**	**0.0774**	**0.0118**	**0.954**	**0**	**1.57**	**0.0356**

36. NATION

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.73	0.09	0	0.99	0	1.20	0.016
1999	2.97	0.18	0	0.99	0	1.73	0.029
2000	2.54	0.21	0	0.99	0	2.97	0.047
2001	3.17	0.19	0	0.99	0	2.54	0.045
2002	3.16	0.19	0	0.99	0	3.17	0.042
MEAN	**2.714**	**0.172**	**0**	**0.99**	**0**	**2.322**	**0.0358**

37. UKAGUZI

YEAR	D_t	S/NA	I/NA	WC/NA	D/NA	D_{t-1}	R/NA
1998	1.04	0.061	0.085	0.91	0.0041	1.06	0.022
1999	1.17	0.068	0.077	0.92	0	1.04	0.017
2000	1.74	0.097	0.078	0.92	0	1.17	0.018
2001	*1.08*	*0.058*	*0.0081*	*0.98*	*0*	*1.74*	*0.015*
2002	1.58	0.082	0.0068	0.99	0	1.08	0.015
MEAN	**1.312**	**0.0732**	**0.0510**	**0.944**	**0.00082**	**1.218**	**0.0174**

APPENDIX 4

SACCOs ACCORDINGTO SIZE

Small SACCOs

3 I.D.B
5 C.I.S
8 NURU
10 KARI
11 *ALICO*
12 USITAWI
13 BAICO
14 TOPHARD
15 U.TD WORKERS
17 *NZIGE*
18 MAO
19 K MWIRIGI
20 *COPY CAT*
22 ONSAFARI

Medium SACCOs

2 *W.NYUMBA*
6 KENCHIC
7 EXAMS
9 UTABIBU
16 CONCORDE
25 *PEUGEOT*
30 ENERGY
31 KEWISCO
32 WANAANGA
33 KEMRI
34 *BACISTA*

Large SACCOs

1 KENYA POLICE
4 POST BANK
21 COMOCO
23 *KIMBO*
24 KENPIPE
26 STIMA
27 SHERIA
28 UKULIMA
29 *ASILI*
35 MAGEREZA
36 NATION
37 UKAGUZI