INTRODUCTION

1.1 Background of the Study

Nations are said to co-operate when they trade with each other, negotiate treaties, or form alliances. Co-operation in its modern form, that is, as a voluntary democratic economic organization with social content is of recent origin in Nepal. In general, any working together, joint action or concurrence in action meets the dictionary definition of cooperation. The word ‘co-operation’ is derived from the Latin word ‘co-operari’, where ‘co’ means together and ‘operari’ means to work, which means working together. Thus, the literal meaning of co-operative indicates towards to fund a mental necessity of mankind mutual help among people. It has accepted as a mechanism of collection of scattered small savings and investing them in productive sectors for the benefit of the members or the weaker section in the society. The co-operative has the philosophy of equality and mutual help i.e. “self-help through mutual help”. Cooperation thus suits the poor more than the rich. People desirous to cooperate must have a common objective and urge and to fulfill it they must be prepared to work selflessly on the principle of “each for all and all for each”. The spirit of cooperative has been developed from the ancient time “Robert Owen” from England is the founder of modern co-operative and also assumed as father of cooperative movement. The group of 28 laborers founded a consumer’s co-operative society called “Rochdale Equitable Pioneers Society” on 24 October 1844, saving a pound each. It is the first co-operative society in the history of the world co-operative development. After then, it is extended to Germany, Italy, France and all over the world. As a result of the development of co-operative organization, International Cooperative Alliance (ICA) was established in England in 1895 AD.

The economic analysts have come with the opinion that only the government effort will be abortive to uplift the deplorable economic condition of Nepal. People’s participation and awareness are indispensable for the economic development. Needs and aspiration of the people grew higher and higher as the process of development took place. It became very hard to produce all kinds of goods to fulfill their own needs. For this, people had to seek the help of others. And the processes of exchanging the things are started gradually among the people. In this way, people developed the sense of working together, co-operating and helping one-another, which has emphasized promotion of interests, self-help and mutual aid among persons with common economic needs. Many scholars have found that cooperatives will be helpful and useful for that purpose. If we plunder on the history of co-operatives in Nepal, it has come a long way in the form of Dhikuti, Parma, Dharmabhakari, Guthi etc. First co-operative was institutionalized in Bakhanpur in Chitwan district since 20th Chaitra, 2013 as "Bakhan Credit Co-operative Ltd.". When the political awareness was started in the country, as a result, the government of Nepal enacted the co-operative laws were implemented in 2049 BS. After 2049 BS, many cooperatives, especially credit cooperatives, have come into existence. This step became the fertile land for cooperative campaign.

The word cooperation is quite familiar to a common man. For him cooperation is simply working together in any sphere of human activity. In this sense, the roots of co-operation can be traced as far back as the beginning of the human civilization. The modern biologists have claimed that cooperation or the group instinct in man which enabled him to live together, work together and help one another in times of difficulty, has been biologically one of the most important and vital instincts. However, we have also evidence available from the writings of great authorities like 'Propotkin' who have stressed sociability to be as important as law of nature as mutual struggle. In his Mutual Aid, he asserts that, the human society has been sustained on the basis of mutual aid. Broadly, on the basis of nature of things and the course of development, we can certainly conclude that despite competitive struggle for existence among men, cooperation has contributed significantly as a force in the voluntary development of man.

In this way, people get involved in co-operative spirit from the very beginning of the development of human civilization to come to this stage. In modern context, the concept of co-operative has been accepted as a means to earn property privately, to participative in organization at self-will and to get involved in co-operatives on the basis of one's needs to develop economic system and to acquire special prestige. Co-operative society is a socio-economic enterprise setup by economically weaker sections of society such as farmer, worker, consumers, small producers and also small traders etc. for improving their social and economic status as a voluntary based association with open membership, collectively owned funds and service oriented institutions.

Co-operative refers to work together for common benefits. A co-operative organization is voluntary association based on the principle of self-help through mutual help, is established by the economically poor people with a view to working in an organized way for their common economic uplift. Co-operative's origin is the result of the socio economic exploitation of users, landlords, and mill owners etc, the weak people thought to be united to fight against this depression. They concluded that the co-operative is the best way of getting rid off such exploitation. So, the co-operative is a form of organization of the economically weak people wherein actual users of certain goods and services voluntarily associate together as human beings on the basis of equality for the promotion of their economic interest honesty. It is regarded as the midway between capitalism and socialism.

A co-operative society, unlike a joint stock company, is an association of men and not of money. Cooperation is voluntary; hence it would be unrealistic to predict that all families in the village would join the society at once. Co-operative is a user-owned and user-controlled business that distributes benefits on the basis of use. According to the U.S. Department of Agriculture, co-operative is distinguished from other businesses by three concepts or principles. First, the user-owner principle, persons who own and finance the co-operative are those who use it. Second, the user-control principle, control of the co-operative is by those who use the co-operative. Third, the user-benefits principle, benefits of the co-operative are distributed to its users on the basis of their use. Co-operatives are commonly called non-profit corporations or patron-owned corporations. The distinction between co-operative and other businesses is that co-operatives return net income to users or to patrons, while other business firms return net income to users or to investment[1].

Indian first woman Prime Minister Indira Gandi's opinion is "No other instrument is potentially powerful and full of social purpose as co-operative movement. It helps the people to help themselves. It also enables the state to provide necessary support and resources without inhabiting their initiative and individuality. It is the only instrument capable of securing economics of large scale work without generating the evil consequences of economic concentration". From this, to develop the country the role of co-operative is more important.[2]

Co-operative society has two entities such as business enterprise and social

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[1] Bir Bahadur Karki, "Strategic Planning in Co-operative Sector: A Study on Dairy Co-operative", Journal of Nepalese Business Studies II, no.1 (2005), p.73.

[2] Punya Prabha Dawadi, "An Analytical Study of the Financial Performance of Co-operative with Reference to Janahit Finance Co-operative Society Ltd. and Future Star Co-operative Ltd.", T.U., MBS diss. 2005.

institution. Co-operative societies have to compete with private as well as public sector organization. The prime objective of co-operative societies is to serve the members to their best ability and responsibility. Although, it is a business enterprise, the force that governs its activities is not maximization of profit but the maximization of service to members. Co-operative societies can not go beyond the cooperative values and principles. At the same time, profit is also necessary for its existence, growth, and expansion. Profit is also taken to be one of the criteria for measuring its success. It should ensure its financial viability. So, co-operative societies have to satisfy twin objectives i.e. service as well as profit.

Cooperation, in a short period, has already created a visible impact on agricultural production; aroused people's enthusiasm for organized efforts and has established its potentiality of gainful application in other spheres of rural life. Along with reorganization and consolidation of the existing societies, there is growing need for taking up a programme of horizontal and vertical expansions of the movement. This would further extend the opportunities of pooling resources and maximizing their utility for the common good of all. The formation and proper functioning of the more important types of societies may on the one hand, strengthen the cooperative structure of the country and on the other, increase the ability and capacity of the peasantry and labour to lead a richer and happier life.

Through liquidity ratio, we have to observe the borrowing unit's ability to meet its current obligation. These ratios measure the short-term solvency of the concern. Higher the ratio better it is, because firm's capacity to meet its current obligations or liabilities are increased. To evaluate the liquidity position of the firm, two liquidity ratios are calculated and evaluated namely current ratio and quick ratio. Capital structure refers to the sources of long-term funds. Capital structure (leverage) ratios give insight into a firm's capacity to meet its long-term liabilities. Leverage ratios show the relationship between debt and equity financing in a firm. A firm's leverage is generally set equal to the estimated optimal capital structure. The optimal capital structure is the one that strikes the optimal balance between risk and return and thereby maximizes the firm's stock price. A firm, therefore, should try to find out the structure, which minimizes the value of the firm. The amount of debt contained in a firm's optimal capital structure is often referred to as the firm's debt capacity.

Profit is the excess of revenue over expenses. Profit is the unlimited output of a company and it has no future if it fails to make sufficient profit. Therefore, the financial manager should continuously evaluate the efficiency of its company in terms of profit. Profitability is the capacity to earn profit. Hence the profitability ratios measure the operating efficiency of the firm. The first measure is the profit margin and the second one is the return on investment. Profitability is a very important element, which influences the overall financial activities of the firm.

JMCL is located in Lamachaur VDC, Pokhara-2, Kaski. It was established in 2057 BS and was registered under Cooperative Act of Nepal. It was initiated its business with 25 founder members and Rs 2,500 total share capital. The cooperative, with the perception of tremendous business potentials, in a very short span of time is expanded having a total authorized share capital of Rs 193,17,200 and 7,070 member shareholders. Its activity and services also expanded by the means of micro finance in the rural area of Lamachaur VDC, since 2064 BS with the total fund of Rs 10,000. At the end of the FY 2064/065, it has collected the deposits of Rs 395,98,278 and invested loan with the amount of Rs 543,60,991. So far, net profit of the association was Rs 27,38,974 within the period of 32 Ashad, 2064.

SMCL is situated in Savagriha Chock, Pokhara-8, Kaski district. It was established in Chaitra 1st, 2056 and was registered under Cooperative Act of Nepal. It had initiated its cooperation with 48 founder members and Rs 5,00,000 total share capital. In the short period of nine years, at present, it has total authorized share capital of Rs 80,40,000 and 287 member shareholders (184 male and 103 female). It has collected the deposits of Rs 216,94,255 and also mobilized (lending) the funds of Rs 285,80,340 to its members. So, at the end of the FY 2064/065, it has expanded its net profit to Rs 5,46,456.

Both the cooperatives were established in 2057 BS as per the principle of cooperation in Kaski district. But, JMCL is rural based saving and credit cooperative and practicing the Micro-finance program from 2064 BS. And, SMCL is municipality based multipurpose cooperative. Both the cooperatives conduct the financial activities but JMCL enlarge the service with Western Union Money Transfer. The objective of both the cooperatives was to uplift the general public's economic status by providing congenial financing environment and develop and contribute in the productive sector.

1.2 Focus of the Study

The contemporary world is very much advanced in comparison to the past one. In this age, Nepal is also recognized as one of the poorest country in the world. About 85% of the total Nepalese people live in rural area. Therefore, a huge percentage of our national income is based on rural area, 90% are victims of poverty, illiteracy, unemployment, diseases and so on. Thus, we can conclude that the main causes of our poverty are geographical position, illiteracy, political instability, widespread corruption, pride, and prejudice of the bureaucrats etc. So, to solve this poverty problem, co-operative movement is one such a measure to ease and lower the blows of poverty and the condition of under development of rural based country. The farmers, small businessmen, and traders in the rural areas are not facilitating enough with banking services. So, in this contest only the co-operative can meet this requirement and can help to reduce the poverty.

Co-operative has been accepted all over the world as mechanism for collection of the spread saving and investing them in productive sector for the benefit of the poorer section of the society. It is also taken as means of getting rid of exploitation of landlords, moneylenders, property owners etc and discourages black marketing & artificial scarcity in the market. It helps to distribute wealth and profit equally to all. Co-operatives themselves must be financially and economically sound to serve the poorer sections of the society and uplift them. Financial strength and viability would be an essential factor for longer existence of the co-operative and to serve their members for long run.

Co-operative organization has distinct character in comparison to other organization due to its own co-operative values and principles. Cooperative values and principles are the foundation of cooperatives development as well as its success. The main challenges of cooperative organization are that it is a business organization as well. We should borne in mind that cooperative is also based on service motive. And, profit is the essential part of every organization, which measures the position of business in the market.

So, the present study focuses to measure the financial soundness of JMCL and SMCL in terms of financial structure, profitability, and liquidity for the period of 2060/061 to 2064/065.

1.3 Statement of the Problem

According to the Human Development Index report 2007, per capita income of Nepal is just US$290. About 38% of the total population of Nepal is below the poverty line and 80% of the total Nepalese people still depend on agriculture. They do not have any other alternative sources of income. The Himalayan and high hills cover about 77% of the total land of Nepal. This region is not favorable for agriculture but people practice the same due to the lack of any other source of their livelihood. People from rural areas are exploited by the loan at higher interest rate in the village. Co-operative encourages people for compulsory saving and they mobilize the saving in agriculture and small business. Co-operatives are very important to create employment opportunities, increase production and income by providing institutional loan and other services for the development of agriculture and cottage industry. Therefore, the co-operative has been accepted as a means of economic development of country in the world.

After enactment of co-operative act 2048, there is mushrooming growth of co-operatives. However, they are not running satisfactorily due to lack of specific and stable policy, lack of co-operative education and training, lack of proper fund, lack of loyalty, lack of efficient management, political interference, absence of good process of loan disbursement etc.

All types of organization including co-operative institution require financial sources and its prudent mobilization is required for desired outcome. Most of the organizations become failure due to improper financial health. So, the general problem of the study is concerned with the analysis of capital structure, profitability and liquidity position of JMCL and SMCL. More specifically, the study revolve around to assess the solution of the enlisted questions-

1. Is the management of capital structure effective of JMCL and SMCL?
2. What is the level of deposit and investment of JMCL and SMCL?
3. How far the sampled co-operatives are able to serve the debt?
4. What is the profitability status of the sampled co-operatives?
5. How efficient is the liquidity position of the sampled co-operatives?

1.4 Objectives of the study

The study will indicate the right picture of financial soundness of the co-operative. The purpose of the study is to analyze the financial variables and to suggest for improving the financial efficiency of the institution and it is also highlighted the concept, historical background etc regarding the co-operative. The general objective of the study is to analyze the financial structure, profitability and liquidity position of the institution, which are pointed below: -

1. To measure the effectiveness of capital structure management of JMCL & SMCL.
2. To determine the level of deposit and investment of the JMCL & SMCL.
3. To analyze the debt servicing capacity of JMCL and SMCL.
4. To measure the profitability position of JMCL and SMCL.
5. To assess the liquidity position of the sampled co-operatives.

1.5 Significance of the study

This study becomes fruitful to its concerned parties especially to the JMCL and SMCL for analyzing its financial soundness. This study suggests for improving the financial efficiency of the co-operative. It helps to decide the new idea and also helps to formulate the new policy as well as strategy. From this study the institution can determine- where we are, what is our liquidity position, how effective is capital structure, what is the status of profitability, is the co-operative growing or not.

It also adds new idea in literature to the researchers who want to carryout further research work regarding analysis of financial soundness of Nepalese co-operatives.

1.6 Limitation of the Study

This research study have been conducted within the following limitations and boundaries-

1) This study is focused on JMCL and SMCL of the Kaski district. So, it does not represent overall situation of the co-operative in general.
2) The study is limited on the period of five years: fiscal year 2060/061 to 2064/065 only, within the fence of secondary data.
3) The study is based on the data as provided by the selected co-operatives, Kaski District Co-operative Office, Kaski Co-operative Training Center and Division Office etc.
4) The study limits especially with the “effectiveness of capital structure ”, “profitability” and “liquidity position” of the co-operatives but it does not cover whole analysis of “PEARLS HIMAL” monitoring system.
5) Limited tools and techniques are used.

1.7 Organization of the Study

This study attempts to solve the research problem created with security analysis. To solve the research problem within scientific manner, the study has undergone within the prescribed format of T.U.

I. Introduction

The first chapter, Introduction deals with the subject matter of the study consisting background of the study, statement of the problem, objective of the study, significance of the study, limitation of the study and organization of the study.

II. Review of Literature

The second chapter, Literature Review includes conceptual framework and related different studies.

III. Research Methodology

The third chapter, Research Methodology includes research design, population and sample, nature and source of data, data gathering procedure, data processing, data analysis tools, and technique.

IV. Presentation and Analysis of Data

This chapter is the main body of this research work. It fulfills the objectives of the study by presenting the data, analyzing the data to draw the conclusion with the help of various methods mentioned in research methodology.

V. Summary, Conclusions and Recommendations

The last chapter deals about the summary, conclusions, and recommendations of the study.

REVIEW OF LITERATURE

2.1 Introduction

A literature review is an essential part of all studies. It is a way to discover what other researchers have covered and left in the area. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research works that relates to the present study. It is also a way to avoid investigating problems that have already been definitely answered. The purpose of literature review is to find out what research studies have been conducted in one's chosen field of study and what remains to do. The primary purpose of literature review is to learn not to accumulate. It enables the researcher to know[3]:

- What research has been done in the subject?
- What others have been done in the study?
- What theories have been advanced?
- The approach taken by the other researchers.
- Area of agreement or disagreement.
- Whether there are gaps that can fill through the proposed research?

This chapter presents the conceptual framework and relevant theories for the analysis of the study.

2.2 Conceptual Review

This sub chapter represents the theoretical aspect of the study regarding the concept of co-operative, principles of cooperative, benefits of cooperative, types of cooperative, evolution of co-operative in Nepal, objective of the co-operative, financial analysis, concept of capital structure, profitability and liquidity etc.

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[3] Howard K. Wolf and P.R. Pant, "Social Science Research and Thesis Writing", (Kathmandu: Buddha Academic Publishing and Distributors, 2005), p.34 & 35.

2.2.1 Concept of Co-operative

Simple meaning of cooperative is co-work, which is done through group of people for achieving certain goal and refers to mutual help for mutual benefit. The motto behind the cooperative is "each for all and all for each" and it's a system for self-help through mutual help. Cooperative has a particular approach to the problems of economic life with two germinal ideas: association and use. The significance of cooperative approach to economic life consists in its emphasis on social welfare. In its technical sense, it denotes special methods of doing business in which midway between capitalism and socialism is adopted. So, the association prefers more service to its members.

Dictionary meaning of co-operative is "a business or organization owned equally by all the people working there; a women-only housing co-operative/ a workers' co-operative"[4].

Some of the precisely oft-quoted definitions are as follows: -

James Peter Warbasse defines "cooperation as the way of life whereby people unite democratically, in the spirit of mutual aid to get the largest possible access to things and services they need"[5].

George Jacob Hollyoake, the well-known historian of the British Cooperation, observes: "Cooperation touches no man's fortune, seeks no plunder, causes no disturbance in society, gives no trouble to statesmen, enters into no secret association, needs no trade unions to protect its interests, contemplates no violence and subverts no order envies no dignity and accepts no gifts nor asks any favor keeps no terms with the idle and breaks no faith with the industrious. It means self-help, self-dependence"[6].

The definition of Mr. C.R. Fay is more specific and practical. He defines cooperative society as "an association for the purpose of joint trading originating among the weak and conducted always in a cooperative spirit, on such terms, that all who are prepared to assume the duties of membership may share in its rewards, in proportion to the degree in which they make use of their association"[7].

Sir Hoarce Plunkett, the founder of the Irish Cooperation, sums up the theory and practice of cooperation in three famous maxims: "Better farming, Better

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[4] Longman Contemporary English (2005), Pearson Education Limited, 4th ed., p.347.
[5] James Peter Warbasse, "The Co-operative Way", (Allahabad: Kitab Machal, 1973), p.12.
[6] C.B. Mamoria and R. D. Saksena, "Co-operation in Foreign Lands", 3rd ed. (Allahabad: Kitab Mahal, 1972), p.4.
[7] C. R. Fay, "Co-operation at Home and Abroad", Vol II, (India: Himalaya Publishing House, 1975), p.4.

business and Better living" and viewed cooperation as 'self-help made effective by organization'. This formula of three B's gives the essence of cooperation. Better farming refers to the betterment of production and Better business refers to a fair deal on the marketing side whether it may be sale or purchase. Better living refers to the establishment of cooperative stores for the supply of our daily requirements[8].

Dr. C.B. Mamoria & Dr. R.D. Saksena define cooperation "as a special technique of doing business in such a way so that a group of people may secure common good through self-help and mutual help. It grew not of any preconceived idea but out of circumstances as practical solutions of obvious difficulties. Its aim is to build fine human beings, based on all that is fundamentally lasting and good in human nature"[9].

One of the good definitions of cooperation is that given by M.T. Herrick, "cooperation is the act of persons voluntarily united for utilizing reciprocally their own forces, resources or both under their mutual management to their common profit or loss"[10].

Mr. V.L. Mehta, a veteran cooperator of India, describes cooperation, as "cooperation is only one aspect of a vast movement which promotes voluntary associations having common needs that combine together for the achievement of common economic ends"[11].

According to Dr. Katju "cooperation is self-help as well as mutual help. It is a joint association or enterprise of those who are not financially strong and are unable to stand on their own legs and therefore come together not with a view to get profits but to overcome disability arising out of want of adequate financial resources and thus better their economic conditions"[12].

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[8] C.B. Mamoria and R.D. Saksena, "Definition of Co-operation", Co-operation in Foreign Lands, 3rd ed. (Allahadad: Kitab Mahal, 1972), p.5.

[9] C.B. Mamoria and R.D. Saksena, "Definition of Co-operation", Co-operation in Foreign Lands, 3rd ed. (Allahadad: Kitab Mahal, 1972), p.7.

[10] P. C. Dhal, "A Text Book of Cooperative Management", (India: Konark Publishers Pvt. Ltd., 1989), p.25.

[11] Fatta Bahadur K. C., "Business Organization and Office Management", (Kathmandu: Sukunda Pustak Bhawan, 2056), p.19.

[12] C.B. Mamoria and R.D. Saksena, "Definition of Co-operation", Co-operation in Foreign Lands, 3rd ed. (Allahadad: Kitab Mahal, 1972), p.7.

Mr. Calvert defines it as “A firm of organization wherein the persons voluntarily associate together as human beings on a basis of equality, for the promotion of economic interests of themselves”[13].

The International Co-operative Alliance’s meeting held at Manchester England in 1995 defined “A cooperative is an autonomous association of persons united voluntarily to meet their common economic social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise”[14].

The International Labour Organization has defined cooperative society as “an association of persons usually of limited means who have voluntarily joined together, to achieve a common end, through the formation of a democratically controlled business organization, making equitable contribution to the capital required, and accepting a fair share of the risks and the benefits of the undertaking”[15].

2.2.2 Principles of Co-operative

For systematic operation and development of co-operative institution, various principles are derived with passage of time. Co-operative principle was developed since the period of Rochdale Pioneers. It has its own international values, norms, and principles. There are several principles pertaining to co-operative movement. Initially there have been three types of co-operative system, which are based on more or less, on the same principle but differ from each other in the mode of operation. The three systems are: -

- Rochdale System
- Raiffeisen System
- Schulze System

Principles laid by Rochdale Pioneers are accepted all over the world. ICA studied Rochdale principles in 1937 and classified the principles into two groups[16]:

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[13] P.C. Dhal, “A Text Book of Co-operative Management”, (India: Konark Publishers Pvt. Ltd., 1989), p.25.

[14] Dr. Keshar Jang Baral, “Nepalma Sahakarita Prayog Ra Pravabkarita”, Smarika, (Kaski: Sahakari Sworna Mahotsab, 2063), p.1.

[15] Kanchan Man Sainju, “Comparative Financial Analysis of Bindhabasine Fund Co-operative Society Ltd. and Community Saving and Credit Co-operative Society Ltd.”, Nepal Commerce Campus, T.U., MBS diss. 2007, p.7.

[16] Co-operative Training Center, “Sahakarita Ra Nepalma Yasko Bikash”, New Baneshwor, Kathmandu 2058, p.24.

Compulsory Principles

Open and voluntary membership

Democratic control

Limited interest on capital

Patronage dividend

Optional Principles

Political and religious neutrality

Cash transaction

On going co-operative education

But in 1995 AD, International Co-operative Alliance (ICA) adopted the same principles with few modifications. From the general meeting of ICA held on Manchester in England, the norms, value and principles of co-operative are explained as follows:

Co-operative is based on independency, self-responsibility, democracy, equality, justice, and unity. The members of co-operative believe in honesty, value, openness, social responsibility, and tradition of helping others as their elders.

The principles are became guidelines to practice its concepts, norms and value. The principles can be explained as follows[17]:

Voluntary and Open Membership

Co-operatives are voluntary organizations, open to all persons able to use their services and willing to accept the responsibilities of membership without gender, social, political or religious discrimination.

Democratic Management

The control and management of co-operative organization is performed by its members through democratic systems. Every member enjoys equal in policy making and decision making of the organization and there is system of one-man one vote. Amount of capital does not determine the voting power like in joint stoke company.

Economic Participation

All the members of co-operative have an equal right to involve in economic activities. The co-operative members have equal participation and democratic control on the dividend of co-operative because at least some portion of its dividend is particularly common property of its member. The members get limit return from share capital if co-operatives can save through its transaction. Likewise,

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[17] Ibid p.30.

the co-operative societies make a provision for reserve fund co-operative education fund, loss compensation fund, employee's bonus fund etc.

Autonomy and Independence

Co-operatives are autonomous, self-help organization, controlled by their members. If they enter into agreements with other organization, including government or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their co-operative autonomy. The principle mainly emphasizes that there shouldn't be any interference from external organization in the operation of co-operative.

Education, Training and Information

Co-operatives provide education and training for their members, elected representatives, managers and employees so that they can contribute effectively to the development of their co-operatives. To keep alive co-operative movement and to enhance its qualitative aspect, it is essence to extend the co-operative education among the young generation and society. Such steps promote co-operative value and norms and positive attitude of community towards co-operatives.

Co-operation among Co-operative

Co-operatives serve their members most effectively and strengthen the co-operative movement by working together through local, national, regional and international structures. Co-operation, coordination and integration among co-operative organization definitely establish close relationship among them, which make co-operative movement strength.

Concern for Community

While focusing on member's needs, co-operatives work for the sustainable development of their communities through policies accepted by their members. Co-operative organization formulates the plan, policies and program that continuously help the community or society development.

2.2.3 Benefits of Co-operative

Co-operative organization directly or indirectly supports its members and all society. The benefits of cooperation can be viewed from different angles such as social, economic and educational etc. Advantages of co-operative can be described from various points of views[18]: -

Social Benefits:

A co-operative is basically a socio-economic organization with a constructive attitude towards the community. Since the relatively poor sections of the community form the majority, the economic benefits flowing out of cooperative action meant for them are bound to develop social benefits. In totality, cooperative actions contribute to a richer and "the ultimate aim of cooperation is to develop man to man with the spirit of self-help and mutual aid in order that individually they may rise to a full personal life and collectively to a full social life."

The objective of co-operative organization is to establish civilized and ideal society through benefiting the co-operative members. For this co-operative organization operated various social welfare programs. Operating such social welfare programs exists following social benefits.

1. Development of honesty
2. Spirit of unity
3. Experience of social responsibility
4. Development of leadership
5. Community development
6. Development of awareness

Economic Benefits:

When viewed from the economic angle, a cooperative society (enterprise) has enables the members to secure economic services of various kinds at lower costs; whether it is agricultural credit, production, marketing and processing irrigation, supplies or equipment, consumer goods and services, the members certainly enjoy the benefits of cooperative action in the economic spheres. These benefits are extended to members functioning in other sectors of the economy, such as industry, transport, housing, etc. Cooperatives working as a part of a structure have helped to realize production activities, distribution patterns, and have improved the strength and capacities of the relatively weak by improving their savings and purchasing power side by side, promoting and protecting their interests. In this sense cooperatives are an effective instrument of securing expeditious economic growth.

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[18] Devraj Bhurtel, "A Comparative Study of Saving and Lending Policy of Oriental Co-operative Ltd. and Kantipur Saving and Credit Co-operative Ltd.", Nepal Commerce Campus,T.U., MBS diss., 2008, p.8&9.

Co-operative organization provides the product and services according to member's needs and demands. Co-operative helps to solve financial problems of members and support or struggle against inequality, exploitation, and poverty. The co-operative organization provides the following economic benefits:

1. Able to gain means of production as well as technology and raw material through collective effort.
2. Work as a major instrument for economic development of the members.
3. Play effective role for poverty elimination.
4. Helps to get rid from economic exploitation.
5. Minimize economic and social disparity and inequality.
6. Provide the quantified products in reasonable price in right time.
7. Helps to maintain identical and stable price of goods in the market.
8. Maximum utilization of limited resources.

Educational Benefits:

Due emphasis has been placed on educational efforts by the cooperatives vis-a vis their members to facilitate the accomplishment of ideals of social-economic nature already stated. Education takes the form of teaching the basic values that go to enrich the life of the members covered by the movement. For immediate material benefits the education to members also aims at equipping them better for the pursuit of their day-to-day activities in a more efficient manner. If we keep in mind the class of people for which cooperative movement is intended, it becomes obvious that cooperation and education would have to go hand in hand for their uplift and continued progress and prosperity. Education to members will improve cultural and economic levels of members and facilitate smooth functioning of the organization. The continued educational process and programmes organized by the movement will lead to the formation of better organized and managed cooperatives in new sectors thus, further broad-basing the movement. The achievement of formal objectives of the cooperative movement such as promotion of thrift, self-reliance, participation in business management, limits and commitments would largely depend upon the educational efforts made by the cooperative organizations. Co-operatives society provide following educational benefits:

1. It extends the co-operative education to members, staff and local residence that promote co-operative's spirit.

2. Increase the economic, social, cultural and managerial knowledge of its members.
3. Aware the society.

2.2.4 Types of Co-operative

In the beginning of the co-operative movement, there exist various types of co-operative operating various functions. So, there is lack of uniformity about the types of co-operatives. On the basis of some criteria, co-operatives can be classified as follows[19]: -

On the basis of Legal Recognition:

On the basis of legal recognition, there are two types of co-operatives.

Non-registered co-operatives:

Such co-operatives don't get any legal recognition because they aren't registered under any act lay by law, rules, and regulation. Traditional types of co-operatives fall under this group. These types of co-operatives can be called as pre-cooperatives institution.

Registered co-operatives:

Such co-operatives are registered under the act, rules, and regulation of the country. These types of co-operatives have legal recognition as well as legal security.

On basis of Objectives:

Co-operative institutions are established to fulfill various objectives. On the basis of objectives co-operatives are:

Sole purpose co-operative:

These co-operatives only perform in particular purpose or subject as their name. In fulfilling the members' need these co-operatives are operating in certain boundary. Co-operatives having only or single objective lies under this type. For example, saving and credit co-operative, agricultural co-operative, producer co-operative etc.

Multi-purpose co-operatives:

Unlike role purpose co-operatives, multipurpose co-operatives aim to provide more than one service to its members. These co-operatives operate various

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[19] Co-operative Training Center, "Sahakari Sanstha Ko Kisim, Bisesata Ra Phaidhaharu", Vol. II, 2059, p.1.

functions on the priority basis for the development of member's social economic status.

On the basis of the Level:

On the basis of the level there are three types of co-operatives. They are as follows:

Primary level co-operatives:

They are formed only by members. In other words, primary co-operatives are established organizing individual.

Secondary or Regional co-operatives:

It includes various co-operatives established as country's physical and political distribution. For example, district level, zonal level and regional level co-operatives. No one can entry directly in these co-operatives. The co-operatives are formed by various co-operatives unity. For example, district co-operative association, subject wise co-operative association etc. Primary co-operatives will be the members in the secondary co-operatives.

National level co-operatives:

National level co-operatives are formed from the secondary level co-operative unity. Only the secondary level co-operatives get the membership of national level co-operatives. For example, National Co-operative Association.

On the basis of Working Area:

According to this criterion there are two types of co-operatives:

Co-operatives having limited working area:

Such co-operative extends its services with its certain geographical unit say village, municipality area, district region. If it provides services outside the certain limited area, it will be illegal.

Co-operatives having unlimited working area:

Such co-operatives don't determine the working area but formed to provide services all over the country and even worldwide.

Some prevalent co-operatives under this basis are housing co-operatives, worker co-operatives, producer co-operatives, farmer co-operatives etc.

2.2.5 Some Prevalent Co-operatives in Nepal

Some common co-operatives in Nepal can be shortly described as below: -

Producer's Co-operatives:

The producer or owner of products is involved in this co-operative. According to their production nature there are various co-operative. For example, milk producer's societies, dairy co-operatives, farmer co-operatives, handicraft and other craft co-operatives etc.

Consumer's Co-operatives:

Consumer's co-operative could be the best channel to supply essential consumer goods regularly. The importance of such society rise in the context of Nepalese economy where adulterations, under weighing of foodstuff etc. are common and transportation in rural area is almost nil. Likewise the price of goods and service rise creating artificial shortage. During first five-year plan, twelve consumer's co-operatives were registered and during 8th plan, 252 such societies were established.

Cottage Industrial Societies:

Nepal is agricultural country; about 80% of the total Nepalese people still depend on agriculture. There is lack of large industry. Geographical diversity and lack of resources and means are creating the high potentiality of cottage industry. It can play vital role to economic development as well as to increase income and employment opportunity especially in underdeveloped country like Nepal. During first five-year plan 18 industrial co-operatives were established and then in three-year plan 21 such societies were established.

Professional Co-operative Societies:

Now a day, various co-operatives are establishing. Among them one type of co-operative is profession based co-operative. In this co-operative such people are involved who have got a profession. Professional co-operative societies are of special and limited nature. Only people who involve in the same profession can be the member of such societies. These societies help to secure professional interest and authority, their prosperity, solving their common problem and facing challenges.

Transport Co-operative Society:

The Sajha Transport Co-operative was established in 1962 and has contributed greatly in the field of transport. However this society is likely to be proved as an inefficient one due to several reasons.

Multi-purpose Co-operatives:

Such types of co-operatives are not concentrated on only one special area. They focus on two or more than two functional areas. These co-operatives provide various services to their members. Likewise they serve as consumer co-operatives and also as producers and marketing societies. Large numbers of such co-operatives are running in Nepal.

Saving and Credit Co-operatives:

The main aim of these co-operatives is to provide financial services (saving and credit) to its members. Such organizations are mainly established to uplift socio-economic condition of their members. These organizations collect the scattered funds and raise large fund, which is used to uplift the economic of members. Basically these organizations inspire people to saving from their income for their secured future and collect scattered fund which is obviously a small in volume. It assumes that “Drop of water makes an ocean”.

The collected fund can be invested in operating small and middle industries, cottage industries, solving economic problems of its members by providing loan. Saving and credit co-operative societies are working for uplifting low-income groups through micro finance. Thus saving and credit co-operative societies are autonomous community based financial institution formed voluntarily by the people for mutual benefits and to meet their common goals of economic, social and cultural needs. It follows self-help development approach and runs under the credit union operating principles. Most importantly, it is owned and controlled by its members.

The history of saving and credit co-operative has been started since the establishment of 13 saving and credit co-operatives under Raptidun Multipurpose Program. The number of such co-operative is increasing day by day. This type of co-operative is working as base for other co-operatives. The success of this co-operative is inspiring other type of co-operative. These co-operatives strongly support to raise the economic and social status.

Other Co-operatives:

There are so many co-operatives of different kinds like health co-operatives, poultry farming co-operatives, women's co-operatives, dairy co-operatives, herbal co-operatives, communication co-operatives etc.

2.2.6 Co-operative Societies at Work

Co-operation, in practice, attempts at (a) enabling the members to leading a richer and fuller life, (b) harmonizing different interests of the community and (c) improving human character. For this purpose, various types of cooperative societies are organized. They take one of the three forms of cooperation, namely (i) single purpose cooperation e.g. credit society, consumer stores, (ii) multipurpose cooperation, such as, service cooperatives, marketing and processing societies and (iii) comprehensive cooperation, for example, cooperation farming, cooperative community etc. The establishment of a society is, however, not regarded as an end in itself but a means to achieving certain predetermined economic and social objectives.

At the end of the year 2064/065, there were 9,362 cooperative institutions and 12,34,542 members in Nepal of the following types: -

Table 2.1: Number and Types of Co-operatives in Nepal

S.N.	Types of Co-operatives	Number	Male Members	Female Members	Total Members
1.	Saving and Credit	3,241	2,26,881	1,66,945	3,93,826
2.	Multipurpose	2,402	2,77,023	95,454	3,72,477
3.	Dairy	1,564	59,841	31,035	90,876
4.	Agricultural	1,192	1,77,603	52,477	2,30,080
5.	Small Farmer	213	48,645	19,914	68,559
6.	Electricity	169	4,745	681	5,426
7.	Consumer	103	4,618	1,270	5,888
8.	Science, Technology, Transport and Communication	102	5,948	1,511	7,459
9.	Coffee Producers	65	937	594	1,531
10.	Health	28	2,206	262	2,468
11.	Herbal	24	817	269	1,086
12.	Tea Producers	22	512	532	1,044
13.	Other	237	24,380	29,442	53,822
	Total	9,362	8,34,156	4,00,386	12,34,542

Source: Official Web Site, National Co-operative Federation of Nepal Ltd., Kathmandu, Nepal, December12, 2008.
<http://www.ncfnepal.com.np/no. of cooperatives detail.html>

Table 2.2: Co-operative Societies in Kaski District

S.N.	Types of Co-operative	Number of Co-operative	Members
1.	Saving and Credit	95	15,403
2	Agriculture	31	1,311
3	Milk	22	1,710
4	Multipurpose	22	9,993
5	Coffee	5	144
6	Small Farmers	4	50
7	Science & Technology	3	78
8	Tea	4	30
9	Health	1	2
10	Herbal	1	26
11	Others	5	357
	Total	193	29,104

Source: Kaski Ko Gatibithi Sahakari Ek Sandarva Anek, (Kaski: Co-operative Training and Division Office, 2064, Ashad).

2.2.7. Historical Background of Co-operative:

2.2.7.1 A Short History of Co-operative Development in Foreign Lands

In the early day in Great Britain, cooperative movement contributed for the economic development. At the beginning of the 19th century, Robert Owen gave the idea of cooperative, but it was practically developed by a group of Rochedole pioneers called the “Consumer Society”. This was a successful cooperative society, which was started all over Great Britain, this society sold goods only for its members in the beginning, but later it started to sell goods to non-members also.

Manchester

In Manchester, the first cooperative college in the world was established in 1919. It was administered by the educational committee of the cooperative union, opened for the students from all parts of the world. After the cooperative society was recognized in 1944, the government of the Great Britain decided that boys and girls must attend a country college after leaving the school. The main objective of this was to produce good cooperative citizens within the Great Britain.

Japan

The cooperative movement in Japan had started after the Meiji Restoration of 1866. Although the modern cooperative movement in Japan took its birth in 1900 when the ‘Cooperative Law’ was passed on the lines of the German law, cooperation was found to be in ancient times. In the field of finance its origin can be traced from a very old and ancient system of the people's finance known as Ko or Mujin which later on came to be established in the form of the "Hotakushas". Its cooperative movement seems to have been influenced by the European cooperative movement. The credit cooperatives of Japan are like that of Germany and consumer cooperative like that of British cooperative.

Germany

In the middle of 19th century, two reformists emerged in Germany, who worked to eliminate the poverty and exploitation though the norm of mutual help and self-help in the form of cooperative. They were Herr Franz Schulze (1808-1883) and Herr F.W. Raiffeisen (1818-1888). Herr Schulze was Mayor and the judge of the small town Delizsch and the Town Bank owe their origin to his efforts. On the other hand, Herr Raiffeisen who established a rural credit society was retired from military career. Both of them started their work purely on humanitarian basis and out of love of their countrymen simultaneously, yet quite independently (one in the Eastern and the other in the Western part of the country) of organizing credit facilities on cooperative basis in their respective areas. But both started their cooperatives to free the poor from the exploitation of moneylenders and landlords in 1849. Cooperative credit societies were organized in Germany by these two Germans at the same time when Robert Owen and Rochdale pioneers were busy in their programmes of setting up consumers' stores in England. The aims and objectives of both Schulze and Raiffeisen were the same, namely, the relief of the poor through self-help. But, here lies the difference in the attempts of the two, Schulze set up an organization which was suited to urban conditions while Raiffeisen established societies suitable to the rural conditions.

Israel

With the colonization of the Jews in Palestine, the history of cooperation begins. In 1920 a Jewish foundation fund was created to provide short and long-term credit to the Jews settled on the land acquired by the National Funds. The two funds thus created, i.e.; the Jewish National Fund in 1901 and the Jewish Fund in 1920 became the financial institutions for the settlement of the Jews. During second world war as many members got themselves enlisted in the army there was shortage of labour and non-Jewish labour was not permitted to be employed. The conditions had become very difficult to settle there individually, so it was realized that they could achieve success only by joint efforts based on self-labour, mutual aid and new forms of cooperative settlement and cooperative farming in agriculture. So at this stage it was thought that the colonists should be settled in groups and recourse was made to cooperate enterprises. Thus the cooperative movement in Israel is essentially the Jewish cooperative movement. These settlements in Israel are known as “KVUTZA” which have become famous all over the world.

Italy

In the last year of the 19th century, cooperation was started in Italy as a socio-economic movement and it has got very solid and deep roots. The credit for starting cooperative movement in Italy goes to Luzzati who was professor of Economics at a Technical Institute in Milan, Minster and also Prime Minister in Italy, who made the cooperative movement to be the “Envy of Europe”. He first of all made an experiment by establishing friendly societies in 1864-65. Later on in 1866 he started the first Banca Populare or People’s Bank at Milan. Thus what Schulze-Delitzsch was to Germany, Luzzati had been to Italy. Though the Italian Credit Society started by Luzzati was modeled on the Schulze-Delitzsch Credit Society yet it had its own distinctive features.

Sweden

The cooperative movement in Sweden is said to have started between 1860 &1870. As late as 1870, the country was an agricultural, 60 to 70% people was living in rural areas. Up to this period, there has been a migration of labourers from rural to the industrial areas. Thus since 1870, there has been a definite change in her economy-from agricultural to industrial by developing her wood, hydroelectric and mineral resources. The rapid industrialization of the country gave birth to Consumers’ Co-operative movement. Till 1870, Consumers’ Store was established (few stores on the Rochdale pattern) but all these efforts proved a failure because the store of Rochdale type and the country was emerged in the industrialization. After the failure of these stores, those who were interested triad to establish cooperative credit societies on the German model but they too did not succeed because of the absence of the craftsman. The initiators, therefore, turned their attention towards the consumer’s stores. The existing stores were reorganized and a Central Institution known as “Cooperative Forbundet” (K.F.) was formed in 1899. Since this date the movement began to flourish.

Denmark

In Denmark, cooperative movement started from 1866 as consumer society as per the principles of Rochdale. However, Denmark made exemplary in dairies cooperatives. It has made a wide use of the application of the democratic cooperative principles in the field of agriculture and it has made it so much famous all over the world that this small country is called as “Cooperative Denmark”.

Switzerland

In Switzerland, the cooperative movement was started by Dairies. In 1847 and 1848 establishment of cooperative stores and a number of food societies were formed and at the same time Zurich consumers’ society was also performed. In 1851 a general union of Swiss cooperative store was formed at Barla and at the end of the century a wholesale cooperative store was established. Another contribution of cooperative is Holiday Home in Switzerland. Many more job opportunities were generated to young people.

Canada

In Canada, cooperative movement started by ‘Lancashire’ coal miners and iron and steel workers. In 1891, the Cooperative Butter and Cheese factories and united fruit company were organized by the government of Canada. But there was no progress until 1930. After the priests and teacher of St. Francis Xavier University started to study on cooperative for adults, cooperative wholesale and many new cooperative stores were opened in 1937. One of the remarkable and successful contributions of Canadian cooperative is British Canadian Cooperative Society of ‘Nova Scotia’.

China

In China, it is assumed that cooperatives started in 1912. At that time, China was trapped in poverty. The farmers were exploited by the loan of landlords. After Dr. Sun Yat Sen had taken the authority of the government he applied cooperative to improve its economy greatly. In the efforts of Sun Yat Sen, the Shanghai National Cooperative Saving Bank was established in 1919 by Prof. Hsieh. In 1928 the interest was taken by the state for the development of cooperatives, a Cooperative Union was also established to encourage its development in the country. An Act was passed in 1931, which assured full state support to the cooperative societies. Since then the Government took an increasing interest in its development and by 1935 the movement became purely governmental.

India

Jointly family system, Panchayat, Chit funds, Nidhis were the traditional form of co-operative in India. During the British rule in India, Nicholson a British Officer in India suggested to introduce Raiffersen model of German agricultural credit cooperatives. As a follow up of that recommendation, the first Co-operative Society Act of 1904 was enacted to enable formation of “agricultural credit co-operatives” in villages in India under Government sponsorship. With the enactment of 1904 Act, Co-operatives were to get a direct legal identity as every agricultural co-operative was to be registered under that Act only. The 1904 co-operative societies act, was repealed by 1912 cooperative societies act, which provided formation of cooperative societies other than credit. Under 1919 Administrative Reforms Act, Co-operatives was made a provincial subject making each province responsible for co-operative development. In 1942, the British Government enacted the Multi-Unit Co-operative Societies Act, 1942 with an object to cover societies whose operations are extended to more than one state. The impulses of the Indian freedom movement gave birth to many initiatives and institutions in the post independence era in India and armed with an experience of 42 years in the working of Multi Unit Co-operative Societies and the Multi Unit Co-operative Societies Act, 1942, the Central Government enacted a comprehensive Act known as Multi State Co-operative Societies Act, 1984, repealing the Act of 1942. Co-operatives have extended across the entire country and there are currently an estimated 230 million members nationwide. The co-operative credit system of India has the largest network in the world and cooperatives have advanced more credit in the Indian agricultural sector than commercial banks[20].

2.2.7.2 Traditional Forms of Cooperation in Nepalese History

Getting together with a view to helping each other on social occasions, like marriage, Shradha and the performing agricultural operations. Such as, ploughing, sowing, crop-protections, harvesting are traditional way of doing things in the rural, mountainous and even the growing urban areas of Nepal. When agriculturists perform farm operations jointly, it is popularly known as Manka-Jya and Parma. Various form of co-operative activities; Dharma Bhakari, Dhikuri, Parma, Manka-Jay and Guthi are used in practice from the remote past. In ancient time, the concept

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[20] Banishree Das, Nirod Kumar Palai and Kumar Das (2006), “Problems and Prospects of the Co-operative Movement in India under the Globalization Regime”, November 20, 2008. <www.helsinki.fi/iehc2006/papers2/Das72.pdf>

of co-operative emerged in the form of ‘Parma’ in hilly region by farmers, ‘Dhikuri’ in western part especially in Thakali society, ‘Manka-Jay’ and ‘Guthi’ in Kathmandu valley by informal groups of farmers, ‘Dharma Bhakari’ in some places of the country among the farmers.

The system of Dharma Bhakari is most popular throughout the country. Dharma Bhakari means a religious store, a kind of grain bank. Each family in the village is required to contribute voluntarily a fixed quantity of paddy, immediately after the harvest, to the bank. The total quantity of grains these collected is stored in a common godown. Generally, a farmer needs loan before the harvest, in distress or rainy days, and at the time of feasts and festivals. The grain bank advances loans only to these villagers who have contributed to the bank and agree to repay the loan in kind with interest. The rate of interest varies from 10% to 25% per annum. In the absence of proper godown facilities, a number of difficulties are being experienced in their efficient working.

Parma is practiced in the northwestern part of the country. Not only the farm operations but also non-agricultural operations like cutting wood are also performed by the labour contributed. In case, a member puts in additional work, i.e. over and above the prescribed common minimum, additional payment is made according to the market rates. The number of meals served to a member in the Parma while on work, depends on the nature of farm-operation. She/he is required to perform. For instance, for doing spadework and ploughing, a worker is served with breakfast, lunch, and dinner, i.e. three meals a day. It is a socio-economic organization in which farmers, neighbors, friends and relatives work together to promote their economic and social interests.

Dhikuri is another traditional form of rural co-operative, the best example of voluntary cooperation of Thakali. In order to enable the members of the clan to set up their own business, Thakalis a trading community, organize themselves into Dhikuri, which is similar to ‘Chit Fund’ of India. It is formed by the group of people for specific work. Dhikuri is one of the important and popular forms of cooperation in Nepal. This system of cooperative is utilized in all part of the country. The members prepare the rules and regulations. After preparing rules of such society, every member is required to contribute certain amount of capital towards the fund. The fund is to be contributed on the basis of financial requirement of the members.

2.2.7.3 A Short History of Co-operative Development in Nepal

In this way, the concept of cooperative in Nepal is not very new. It is familiar from those days when people had the knowledge to live together in a society or community with the development of human civilization. We can not ascertain the actual date when the cooperative movement was started but the organized cooperative movement started since 1954 AD in Nepal. Many types of informal cooperatives were running in different part of the country but those are not in a position to take formal slope of co-operative. If we turn over the history of cooperative movement of Nepal, the organized history can be traced back to about 54 years old. Formally the history of Nepal has been started after the establishment of cooperative department in the year 1953 AD under the Ministry of Agriculture for the promotion, supervision and evaluation of cooperative societies.

In the beginning cooperative movement in the real sense was greed up with the establishment of "Bakhan Saving and Credit Cooperative Ltd." in Rapti valley, Chitwan in 1956 AD as part of the resettlement program for the flood stricken people in Raptidun basis under the active support of United States Agency for International Development (USAID) on experimental basic. These cooperatives were previously registered under an executive order of His Majesty's Government of Nepal.

Table 2.3: Major Events of Co-operative Movement in Nepal

Year	Events
2010 BS (1953 AD)	• Establishment of co-operative division under the Ministry of Plan Development and Agriculture.
2011 BS (1955 AD)	• Establishment of Rapti Valley Multipurpose Development Project.
2013 BS (1956)	• Issue of executive order for the legal variety of co-operative societies by the government. • Government incorporated Bakhan Saving and Credit Co-operative Ltd in Rapti Valley, Chitwan by issuing executing order for its legal validity.
2016 BS (1958 AD)	• Co-operative department transferred under the Ministry of Food, Agriculture & Forest. • Issue of Co-operative Acts 2016.
2018 BS (1961 AD)	• Issue of Co-operative Regulation 2018. • First amendment of Co-operative Act 2016. • Establishment of Co-operative Development Fund. • Establishment of Sajha Sanstha Ltd.

2019 BS (1962 AD)	Establishment of Co-operative Training Center. Establishment of Co-operative Exchange & Loan Association. Issue of Co-operative Bank Act 2019.
2020 BS (1963)	Establishment of Co-operative Bank. Co-operative section had kept under the District Panchayat.
2021 BS (1964 AD)	Being of Agriculture Reorganization Program. Co-operative Division staffs transferred to Land Reform Program.
2023 BS (1966 AD)	Co-operative Division had been transferred under the Ministry of Land Reform Agriculture and Food.
2024 BS (1967 AD)	Formation of central investigation committee. Co-operative Bank had transferred into Agriculture Development Bank.
2026 BS (1969 AD)	Co-operative Division transferred under the Ministry of Land Reform. Operation of Co-operative Agriculture Development. At first compulsory saving (Anibarya Bachat) has converted into share of co-operative societies, Bakhanpur. Co-operative Exchange and Loan Association changed into District Co-operative Association.
2027 BS (1970 AD)	Second amendment in Co-operative Act 2016. Arrangement of central and district co-operative improvement committee. The management of co-operative societies has transferred to ADB/N.
2028 BS (1971 AD)	First amendment in co-operative regulation 2018.
2029 BS (1972 AD)	Operational of regular co-operative education program.
2033 BS (1976 AD)	Beginning of population education through co-operative. Occurrence of central Sajha Development Committee. Second amendment on co-operative regulation 2018. Compulsory saving converted into the share of Sajha.
2034 BS (1977 AD)	Fiscal Regulation 2034 issued for the Sajha Society management.
2035 BS (1978 AD)	Management of co-operatives transferred to operating committee from ADB/N. Issue of fiscal and administrative regulation for co-operatives.
2041 BS (1984 AD)	Sajha Society Act 2041 was issued.
2042 BS	Co-operative Department and Co-operative Training Center change into Sajha Department and Sajha Training Center.

2043 BS (1986 AD)	National co-operative seminar conducted. Issue of Sajha Society Regulation 2043.
2044 BS (1987 AD)	Members high level central coordination committee formed for the effective development of Sajha movement.
2045 BS (1988 AD)	Announcement to return of compulsory saving to the savers.
2046 BS (1990 AD)	Formation of adhoc committee for the formation of Central Sajha Society.
2047 BS (1991 AD)	Formation of 7 member central co-operative general association consulting committee and the committee submitted its report.
2048 BS (1991 AD)	Sajha Central Office dissolved. 11 members National co-operative development board established.
2049 BS (1992 AD)	Co-operative Act 2048 issued. District co-ordination committee and co-operative adhoc committee formed. Sajha Development Department transferred into Co-operative Department Sajha Training Center transferred into Co-operative Training Center.
2050 BS (1993 AD)	Co-operative Society Regulation 2049 issued. Formation of National Co-operative Federation. Establishment of Central Co-operative Federation. Establishment of National Saving and Credit Co-operative Federation. Establishment of Nepal Federation of Saving and Co-operative Union Ltd. Consumer and Saving and Credit Co-operative societies are established at the large scale all over the country.
2052 BS (1995 AD)	Formation of high-level committee for co-operative improvement and proposal submitted.
2054 BS (1997 AD)	Membership of ICA by National Co-operative Association.
2057 BS (2000 AD)	Conversion of Ministry of Agriculture into the Ministry of Agriculture and Co-operatives. Formation of the National Co-operative Development Advisory Working Team and submission of report. The first amendment in the Section 26 of the Co-operative Act 1992.
2058 BS (2001 AD)	Announcement of observance of International Co-operative Day by the Government.
2060 BS (2003 AD)	Establishment of National Co-operative Bank Ltd.

2061 BS (2004 AD)	• Structure of co-operative division changed according to the administrative improvement program. • Nepal Government constituted a high-level co-operative sector improvement consultative committee under governorship of the Ministry of Agriculture and Co-operatives submitted its report to the Government of Nepal. • Ministry of Finance constituted to study the legal framework and institutional development of the saving and credit co-operative & National Co-operative Bank. • Government of Nepal announced the policy of “Gau-gauma Sahakari Ghar Gharma Rojgari” through its budget fiscal year 2061/062.
2062 BS (2005 AD)	• District Co-operative Office changed into Division Co-operative Office. • Establishment of Regional Level Co-operative Training Office combining with Division Co-operative Office in Kailali, Surkhet, Kaski and Chitawan.
2063 BS (2006 AD)	• Celebration of Co-operative Golden Jubilee 2006/07 throughout the country.
2064 BS (2007 AD)	• Tele-serial about co-operative society in NTV. • Every year ‘Chaitra 20’ to be celebrated as co-operative revolution.

Source: Kaski Co-operative Training and Division Office, “Kaski Ko Gatibidhi Sahakari Ek Sandharva Anek”, 2064, p.18-22.

2.2.7.4 Financial/Ratio Analysis

Financial analysis is done by applying various financial tools such as capital budgeting, ratio analysis, cash flow statements etc. in order to have a clear picture on the viability of the project. The basic purpose of financial appraisal is to determine the financial soundness of the company. Financial appraisal deals with numeric values. The actual and projected financial spead is analyzed through numerous indicators. The financial analysis is done to ascertain the liquidity, profitability, capital structure, debt servicing, and interest servicing ability of the firm. For this, past balance sheets, profit & loss account, and income & expenditure statement of the unit for 3 to 5 years are spread. If the unit is a newly established one, projected final accounts are obtained. In the same way, cash flow statement and PL appropriation account are also obtained to have a bird’s eye view on its resource distribution. For large investments, various tools of capital budgeting are used while procuring fixed assets. Before analyzing the statements, one must have a better understanding of various components of balance sheet, profit and loss account, and what one has to observe on it.

The evaluation of financial performance involves a series of techniques that can be used to help identify the strengths and weaknesses of a firm. The strengths must be understood if they are to be used to proper advantage and the weaknesses must be recognized if a corrective action is to be taken. Financial analysis can be undertaken by the management of a firm or by parties outside the firm, viz. owners, creditors, investors, suppliers of long term debt, government and other stakeholders. Financial ratios, which use data from a firm's balance sheet, income statement, cash flow statement and certain market data, are often used when evaluating the financial performance of a firm. We start with annual reports to demonstrate the kinds of information that can be developed from this easily available source.

Ratio is the relationship between two figures. They provide two important facts about the management: the return on investment and the soundness of the company's financial position. A single ratio will not depict a true picture of the unit. Hence a combination of ratios must be analyzed to derive a true picture. After that, it must be compared either with the previous year's ratios of the same firm or with some leading firm's ratio or else with the industry level ratio. When the figures of final accounts of all the firms in the industry are added together, the average arrived at is the industry level. Ratio analysis can be taken as a diagnostic tool, which helps in identifying problem areas and opportunities for the company.

Ratio analysis is a tool of scanning the financial statements of the firm and can be used to predict the future of a firm. Through this, one comes to know in which areas it is weak. Ratios measure a firm's crucial relationships by relating its inputs (costs) with outputs (benefits) and facilitate comparisons over time and across firms. Ratio analysis is a widely used technique to evaluate the financial position and performance of a business. Ratio in isolation can bring home false conclusions. Hence, it must be a comparative study with either the previous year's figures or with some leading firm's ratio or with the industry level[21].

In this section, the financial condition (i.e. strength and weakness position) of various aspects of financial and operational structure of both the cooperatives is analyzed. For this purpose, based on the financial statement, various related ratios

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[21] Madhu Sundar Shrestha, "Fundamentals of Banking," Financial Analysis, 2nd ed. (Kathmandu: Buddha Academic Publishers & Distributers Pvt. Ltd., 2007), p.94.

have been computed in this section. Though there are a large number of ratios and its types, the study is confined within the scope of cooperatives financial analysis. The study is limited to leverage ratio, liquidity ratio, and profitability ratio. The study of each ratio has its own purpose, some communicates about the financial strength of the unit whereas some interprets the working capital need of the unit and some tells about the profitability of the unit. The trend that is established by the ratios will help to determine whether the proposal of the unit is favorable or unfavorable. The ratio broadly includes: -

1. Leverage or Capital Structure Ratio
2. Profitability Ratio
3. Liquidity Ratio

2.2.7.5 Capital Structure

Capital structure is a part of financial structure. "Capital structure is the permanent financing of the firm, represented by long-term debt, preferred stock and common stock but excluding all short-term credit. Thus a firm's capital structure is only a part its financial structure i.e. common stock, capital surplus and accumulated retained earning".[22] Capital structure or the capitalization of the firm is the permanent financing represented by long-term debt, preferred stock and shareholders equity. Thus, a firm's capital structure is only part of its financial structure[23]. The term capital structure is used to represent the proportionate relationship between debt and equity. The market value of share may be affected by the capital structure decision[24].

Leverage ratio shows the proportion of owner and loan capital and which indicates the long-term financial position of the firm. Generally, the debt of the firm is managed from two sources short-term sources and long-term sources. The short-term creditors like bankers, account holder of saving deposit and suppliers of raw materials are more concerned with the firm's current debt paying ability. The long-term creditors like debenture holders, financial institution are more concerned with the firm's long-term financial strength. Balance sheet is used to know the firm's

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[22] J. Fred Weston and Engene F. Brigham, "Management Finance", (New York: The Dryden Press, 1989).

[23] J. Fred Weston and Thomas E. Copeland, "Managerial Finance", (New York: The Dryden Press, 1992).

[24] I. M. Panday, "Financial Management", (New Delhi: Vikash Publishing House Pvt. Ltd., 1995).

capital structure position. As a general rule, there should be an appropriate mix of debt and owner's equity in financing the firm's assets.

It is also known as debt management or long-term solvency ratio. Leverage ratios give insight into a company's capacity to meet its long-term liabilities. There should be a sound combination of debts and owner's equity in financing the firm's assets. If a firm fails to make timely payment of its debts or its interest, it will face bankruptcy. On the other hand, debt is a valuable factor in financing the assets because it can be interest free, the firm can have tax benefits, it can help in exploiting additional business opportunity, and also it helps in the growth and expansion of the firm.

Capital Structure refers to the combination of long-term sources of funds such as; debentures, long-term debt, preference share capital and equity share capital including reserves and surpluses (i.e. retained earnings). Capital structure represents the relationship among different kinds of long-term sources of capital through the issue of common shares, sometimes accompanied by preference shares. The share capital is often supplemented by debt securities and other long-term borrowed capital. In some cases, the firm accepts deposits. In a going concern, retained earnings or surpluses too form a part of capital structure. Except for the common shares, different kinds of external financing i.e. preference shares as well as the borrowed capital carry fixed return to the investors. The term capital denotes the long-term funds of the firm. All of the items on the liabilities side of firm's balance sheet, excluding current liabilities, are sources of capital. Capital constitutes the fund employed by the shareholders and the funds retained in various reserves from its profit. Capital purports to any wealth employed for the production of more wealth. Generally, cooperative capital implies to the member's claim on it. Hence, deposits collected from members or customers and loans taken from other financial institutions are working capital of a cooperative but do not constitute its capital. The total capital can be divided into two components: debt capital and equity capital. Debt capital includes all long term borrowing incurred by the firm. Debt is a two-edged sword- it increases shareholder returns when the firm has high operating income, but makes them worse than they otherwise would be when the firm has low operating income. Equity capital consists of the long-term fund provided by the firm's owners, the stockholders.

Financial structure refers to the composition of all sources and amount of funds collected to use or invest in business. It is different from capital structure as capital structure includes only the long-term sources of financing while financial structure includes both long term and short-term sources of financing.

The relationship between capital structure and financial structure can be expressed in equation form -

Capital Structure = Financial Structure - Current Liabilities.

Following simplified Balance Sheet also shows the difference between capital structure and financial structure[25] –

Balance Sheet

<table>
<tr><th colspan="3">Capital and Liabilities</th><th>Assets</th></tr>
<tr><td>Common equity</td><td rowspan="4">Capital Structure</td><td rowspan="6">Financial Structure</td><td rowspan="6">All Assets</td></tr>
<tr><td>Preferred equity</td></tr>
<tr><td>Long term debt</td></tr>
<tr><td>(Non-current liabilities)</td></tr>
<tr><td>Current liabilities</td><td></td></tr>
<tr><td>(Short term financing)</td><td></td></tr>
<tr><td colspan="3">Total Capital and Liabilities</td><td>Total Assets</td></tr>
</table>

Capital structure decision is one of the most important decisions because capital structure decision affects cost of capital, value of the firm and risk position of the firm. A firm, therefore, should try to find out the structure, which minimizes the cost of capital and risk and maximizes the value of the firm. The optimal capital structure is the structure (combination of debt and equity) that minimizes the cost of capital and maximizes the price of the firm’s stock. As a result, the minimum cost of capital structure is called optimal capital structure. So, optimal capital structure should balance between risk and return to equity shareholders, that should support to achieve the firm’s goal. Some important objectives of optimal capital structure are as follows: -

1. To maximize return on equity capital.
2. To minimize cost of capital.
3. To maintain control power.
4. To minimize risk.

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[25] Rishi Raj Gautam and Kiran Thapa, “Capital Structure and Financial Structure”, Capital Structure Management, 3rd ed. (Kathmandu: Asmita Books Publishers and Distributors, 2062), p.1.2 &1.3.

5. To increase flexibility.
6. To employ high-grade securities.

A financial manager should always consider the maximization of wealth or share price while making a capital structure decision. It is obtained when the market value per share is the maximum.

$$V_m(Max) = D_m+P_m+E_m(Max)$$

Where, V_m = Total market value of the firm (maximum).

D_m = Value of the firm.

P_m = Value of the firm's preferred stock.

E_m = Value of the firm's equity stock (maximum).

If there is an optimal capital structure for a company it will minimize the opportunity cost of capital and maximize shareholder's wealth.

Factors affecting capital structure –

1. Growth Rate of Sales	2. Cash Flow Stability	3. Industry Characteristics
4. Asset Structure	5. Management Attitudes	6. Lender Attitudes
7. Cost of Capital	8. Operating Leverage	9. Taxes
10. Profitability	11. Interest rates	12. Flexibility
13. Period of Finance	14. Legal Requirement	15. Loan Covenants
16. Dividend Policy	17. Nature of the fund needed	18. Control etc.

Some useful capital structure ratios are –

1. Debt to Assets Ratio
2. Debt to Equity Ratio
3. Capital Adequacy Ratios
4. Long-term Debt to Capital Employed Ratio

2.2.7.6 Profitability

Profit is the reward of entrepreneurships for risk taking. A labor leader might say that it is a measure of how efficiently labor has produced and that it provides a base for negotiating a wage increase. And investor will view it is a gauge of the return on their money. An internal revenue agent might regard it as a base for determining income taxes. The accountant will define it simply as the excess of firm's revenue in given fiscal period[26]. American Institute of Banking says, "under the free enterprise system like USA, the interest of the nation as well as those of the individual stockholders is supposed to be best served by vigorously seeking

[26] R. M. Lynch and R. W. Williamson, "Accounting for Management", (New Delhi: Tata McGraw- Hill Publishing Company Ltd., 1989).

profit. But the profit can not be a sole objective of an enterprise and an enterprise should not be evaluated just on the ground of the profit it earned. Neither bank nor the community will be best served it the banker unreasonably sacrifices safety funds of the liquidity of bank in an effort to increase income"[27].

Profitability is an important measure of operating success of an organization. There are two areas for judging profitability; (1) relationships in the income statement that indicate a organization's ability to recover costs and expenses, (2) relationships of income to various balance sheet measures that indicate the organization's relative ability to earn incomes from the assets employed. The first measure is the profit margin and the second one is the return on investment. The stockholder's primary concern is the profitability measure of the firm. Lenders also desire a minimum return on the borrower's investment to be on the safe side.

The market strength analysis is especially important for investors while analyzing information about an organization. This analysis helps the investors to decide about an organization as an investment opportunity at a point of time. These ratios are also known as stock market ratios, investment ratios or market test ratios[28].

The ratios under this category are as follows-

- Gross Margin Ratio
- Net Income Ratio
- Return on Investments
- Return on Shareholder's Equity
- Asset Turnover Ratio
- Interest Coverage Ratio

2.2.7.7 Liquidity

Short-term lenders such as suppliers and creditors use liquidity analysis to assess the risk level and ability of a firm to meet its current obligations. Satisfying these obligations requires the use of the cash resources available as of the balance sheet date and the cash to be generated through the operating cycle of the firm.

The concept of liquidity relies on the classification of assets and liabilities into 'current' and 'concurrent' categories. The traditional definition of current assets

[27] American Institute of Banking, "Principle of Banking Operation", USA, 1972.
[28] P. Bajracharya et al., "Profitability Analysis" Managerial Accounting, 2nd ed. (Kathmandu: Asmita Books Publishers & Distributors, 2005), p.1024.

and liabilities is based on a maturity period of less than one year or (if longer) the operating cycle of the company.

- Cash and cash equivalents,
- Marketable securities,
- Accounts receivable,
- Inventories,
- Prepaid expenses

And the three categories of current liabilities-

- Short-term debt,
- Accounts payable,
- Accrued liabilities

By definition, each current asset or liability has a maturity (the expected date of conversion to cash for an asset; the expected date of liquidation of cash for a liquidity) of less than one year. However, in practice, the line between current and non-current asset and liability has been blurred in recent years.

The ratios used in short-term liquidity analysis evaluate the adequacy of the firm's cash resources relative to its cash obligations. Its cash resources can be measure by (1) the firm's current cash balance and potential sources of cash or, (2) its (net) cash flows from operations, whereas the firm's cash obligations can be measured by either (1) its current obligations or, (2) the cash outflows arising from operations.

The first three ratios to be described compare different measures of the present level of cash resources with the present level of obligations. The current ratio uses all current assets to define cash resources: inventory and accounts receivable are converted into cash as they move through the operating cycle.

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current Liabilites}}$$

Current Assets are those assets, which can be converted within cash with a short time period or, less than a year and current liabilities are those liabilities, which should be paid within a year. Current assets normally include cash, bank, stock or inventory, prepaid expenses, sundry debtors, account receivables, bills receivable, short-term investment, marketable securities, unexpired insurance, accrued income etc. Similarly current liabilities consist of accounts payable, short-term notes payable, current maturities of long-term debt, accrued income taxes, bank overdraft, provision for tax & dividend etc. A more conservative measure of liquidity, the quick ratio, is defined as

$$\text{Quick ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}$$

It excludes inventory from cash resources, recognizing that the conversion of inventory into cash is less certain both in terms of timing and amount. The other assets in the numerator are “quick assets” because they can be more quickly converted into cash. Finally, the cash ratio, defined as

$$\text{Cash ratio} = \frac{\text{Cash } \Gamma \text{ Marketable Securities}}{\text{Current Liabilities}}$$

is the most conservative of these measures as it includes only actual cash and cash equivalent balances to measure cash resources.

The use of the current (or quick) ratio implicitly assumes that the current assets will eventually be converted into cash. Realistically, however, it is not anticipated that firms will actually liquidate their current assets to pay down their current liabilities. Certain levels of inventories and receivables, as well as payables and accruals (which finance inventories and receivables), are always needed to maintain operations. If all the current assets and liabilities are liquidated, then, in effect, the firm has ceased operations, rather it is assumed, as suggested earlier in our schema of a firm’s operating cycle that the process of generating inventories, collecting receivables, and so on is ongoing. These ratios therefore measure the “margin of safety” provided by the cash resources relative to obligations.

Liquidity analysis is not independent of activity analysis. Poor receivables or inventory turnover limits the usefulness of the current and quick ratios, as the reported amounts of this component of current assets may not truly represent the sources of liquidity. Obsolete inventory or uncollectible receivables are unlikely to be sources of cash. Thus short-term liquidity ratios should be examined in conjunction with turnover ratios.

The cash flow from operations ratio, defined as

$$\text{Cash flow from operations ratio} = \frac{\text{Cash (flow) from operations}}{\text{Current Liabilities}}$$

This addresses the issues of actual convertibility into cash, turnover, and the need for minimum levels of working capital (cash) to maintain operations by measuring liquidity through a comparison of actual cash flows (instead of current and potential cash resources) with current liabilities.

An important limitation of the preceding analysis of liquidity ratios is the absence of an economic or “real- world” interpretation of these measures. Unlike the cash cycle liquidity measure, which reflects the number of days cash is tied up in the firm’s operating cycle, it is difficult to react intuitively to a current ratio of 1.5.

The defensive interval is one tool that provides intuitive “feel” for a firm’s liquidity, albeit a most conservative one. It compares the currently available “quick” sources of cash (cash, marketable securities, and accounts receivable) with the estimated outflows needed to operate the firm: projected expenditures. There are various forms of the defensive interval as well as various methods one can use to arrive at the projected expenditures. We present here only the basic form[29]:

Average number of days payable outstanding = $365 \mid \dfrac{\text{Average account payable}}{\text{Purchases}}$

Current ratio= $\dfrac{\text{Current Assets}}{\text{Current Liabilities}}$

Quick ratio = $\dfrac{\text{Cash } \Gamma \text{ Marketable Securities } \Gamma \text{ A/c payable}}{\text{Current Liabilities}}$

2.3 Relevant Review

Prior to this study, there are few thesis and research papers submitted to the libraries of Tribhuvan University and its affiliated colleges on the related topics. But besides this, there are some other thesis, which is related to this study to some extends, the review, and the extract from them are presented in this section. This sub chapter includes the study of dissertations, articles, books, and documents etc of different authors and writers.

Review of related articles

Mr. Badal in his book named, “Sahakari Sidhanta Ra Prayog” examined and evaluated the practicing of cooperative principle in the context of Nepalese circumstances. According to him, to face the increasing challenge of WTO, development of competitive capacity for cooperator is necessary and necessary to announce this by the state as policy. It is not only associated with agriculture. Its relation and possibility is broad with non-agriculture area also. It is concern with

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[29] P. Bajracharya et al., “Liquidity Analysis” Managerial Accounting, 2nd ed. (Kathmandu: Asmita Books Publishers & Distributors, 2005), p.1018-1020.

agriculture, land, industry, commerce, economy, water resources, forest, female, transportation, health, and education. Thus separate ministry is necessary to go forward speedily. He also added, it has included theoretical, practical, and technical subject to continuous training, research, and development is necessary. Saving and credit co-operatives must operatives must operate in every villages and town. We should give the emphasis to form its own separated union[30].

Dr. Baral has conducted the study on "Financial Health Check-up of Pokhara Royal Co-operative Society Ltd. (PRCSL) in the Framework of PEARLS". His findings were PRCSL has made sufficient loan loss provision to cover the possible loan losses from doubtful and sub-standard loan. It has invested most of its funds in more productive assets and less in non-earning and less productive assets and managed the sources of funds effectively from saving deposits. But, it has a weak institutional capital base as a second line of defense against non-performing assets. Percentages of delinquent loan ratio and non-earning assets were greater than the standard set of the WOCCU model. Similarly, percent of net zero cost funds were less than the set benchmark. Operation and administration expenses of PRCSL were within the set limit but the yield on loan was not enough to contribute institutional capital and paid the returns on member share capital. The decreasing percent of liquid cash reserves to satisfy deposit withdrawal request showed the deteriorating liquidity position. The highly fluctuating growth rates in key financial variables implied that PRCSL did not have sound strategy for sustainable growth in its business. But the sign of growth of key variables except to institutional capital showed that it has achieved desirable growth during the study period.[31]

Mr. Adhikari conducted the research work in "A Study of Financial Soundness and Sustainability of Nepalese Co-operative Organizations: A Case Study of Selected Rural Based Saving and Credit Co-operative Organizations in Kaski". This study has shown the profitability ratio: in the case of return to total assets, the mean ratios of all three co-operatives were almost equal (i.e. of Janasewa Saving & Credit Cooperative, Janahit Saving & Credit Cooperative and Women Multipurpose Saving & Credit Cooperative were respectively 4.65, 4.73 and 4.72), of which the mean ratio of Janahit Saving and Credit Co-operative was slightly higher than that of others two cooperatives. All three co-operatives had almost same profitability

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[30] Keshav Badal, "Sahakari Sidhanta Ra Prayog", Sahakari Sahayog Samuha, Magh 2061.

[31] Keshar J. Baral, "Financial Health Check-up of Pokhara Royal Co-operative Society Limited in the Framework of PEARLS," The Journal of Nepalese Business Studies, Vol III, (Pokhara: Faculty of Management, Prithivi Narayan Campus, 2006).

position and Janahit Saving and Credit Co-operative was comparatively in a better position than that of Janasewa Saving and Credit Co-operative and Women Multipurpose Saving and Credit Co-operative. In general, he has concluded that the position of these co-operatives was satisfactory[32].

Mr. Lamsal conducted the research work with the topic of "Financial Performance Analysis of Nepalese Co-operative Societies: With Special Reference to District Co-operative Association Ltd., Kaski. The study found that the liquidity position of the association was satisfactory, the association had sufficient amount available for the payment of current obligation for all years. On an average the association had current assets more than 3 times as compared to its current liabilities. Altogether the current assets of the association were 64.11% of total assets whereas current liabilities were 19.49% during the study period. Average quick ratio of the association was 2.18:1 times both current and quick ratios were always above the standard (i.e. 2:1 and 1:1times). Though the liquidity position of the association was satisfactory, it has concluded that the association had invested most of its fund in current assets unnecessarily. It indicates that the association had not efficient planning and management of working capital[33].

Mr. Ale conducted the research work with the topic of "Diagnosis of Financial Health of Paschimanchal Grameen Bikash Bank Ltd. in the Framework of PEARLS". The study has found that Paschimanchal Grameen Bikash Bank Ltd has maintained the ratio of loan delinquency to total loan portfolio with PEARLS standard for FY 2059/60. In later 4 years, it exceeded the standard of PEARLS standard below or, equal to 5%. The highest ratio was 9.01% in FY 2062/63. This was due to increase in delinquency. The growth of delinquency exceeded with respect to increase in total portfolio. The study also has shown the ratio of liquid investments to total assets of Paschimanchal Grameen Bikash Bank Ltd was decreasing consecutively from FY 2059/60 to FY 2062/63. The highest ratio was 12.08% in FY 2059/60 and the lowest in FY 2062/63 and maintained within PEARLS standard[34].

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[32] Mitra Lal Adhikari, "A Study of Financial Soundness and Sustainability of Nepalese Cooperative Organizations: A Case Study of Selected Rural Based Saving and Credit Cooperative Organizations in Kaski", T.U., MBS diss., 2004.

[33] Toya Nath Lamsal, "Financial Performance Analysis of Nepalese Co-operative Societies: With Special Reference to District Co-operative Association Ltd., Kaski", (MBS diss. T.U. 2000).

[34] Hum Bahadur Ale, "Diagnosis of Financial Health of Paschimanchal Grameen Bikash Bank Ltd. in the Framework of PEARLS", (MBS diss. T.U. 2063).

A study has taken by Mr. Bhurtel on “A Comparative Study of Saving and Lending Policy of Oriental Co-operative Ltd. and Kantipur Saving & Credit Co-operative Ltd., Kathmandu”. The objective carried by the study was to compare and analyze the lending and saving policies of both cooperatives on the basis of financial statement. In his study, the primary as well as the secondary data were used, first processed and analyzed comparatively to obtain the desired objectives. The arranged data have been analyzed and interpreted through percentage method as well as various statistical tools such as correlation coefficient, central tendency, and diagram. Economic activities start from the collection of saving amount. Scattered money should be changed to accumulated capital by the means of saving in the co-operatives.

The Oriental Co-operative Ltd has introduced four types of saving schemes in 2059/060 BS i.e. Regular Saving, Regular Fixed, Time (Fixed) Deposit, Other Deposit (Khuturke). All the savings and number of members were in increasing trend so that the deposited amount of the members was highly increased. Door to door daily collection of saving created the good conception in the members, so that, the co-operatives were escaping after collecting huge fund. Also door-to-door collection developed the relationship between members and co-operative. To maintain the required liquidity position, it has prohibited depositing in time. Interest on loan collection growth rate was highly increased in FY 2063/064. He has concluded that this fluctuation can generate low risk to the co-operative. Also, there exists highly positive correlation between loan investment and interest on loan collection throughout the study period. The correlation between them was 0.99 i.e. nearly 1.00.

Kantipur Co-operative Ltd has introduced three types of saving schemes, which were Time (Fixed) Deposit, Home Saving, and Special Saving. All the savings were in increasing trend as the membership trend was increased but in the FY 2063/064 saving trend was dramatically got decrease. The co-operative got success to collect the interest on loan amount. Loan collection growth rate was increased. The interest collection growth rate hit maximum point at 34.68% in the year 2060/061 but increased in the year 2062/063. Also, he found that there exists highly positive correlation between loan investment and loan collection throughout the study period. The correlation between them was 0.98, which was nearly 1.00.[35]

Ms. Nakarmi conducted the research work in the topic of "A Comparative Financial Analysis of Bindhabasini Saving Fund Co-operative Society Ltd. (BISCOL) and Chandesori Saving and Loan Co-operative Society Ltd. (CSCSL), Kavre". The study has undertaken to examine and evaluate comparative financial strengths and weaknesses of BISCOL and CSCSL. The annual report for the financial year 2054/055 to 2058/059 has examined for the purpose of the study. The study has used mainly two secondary data–profit and loss account and balance sheet, which were first processed and analyzed as demanded by the study. The arranged data have been analyzed and interpreted through the financial tools– ratio analysis and fund flow analysis. Likewise unstructured questionnaire and interviews were also used to find out the facts about the co-operative for the purpose of the study.

Current ratio of both co-operatives was taken as unsatisfactory. Quick ratio of both the societies remained generally low for the study period, which indicate that the society has insufficient amount of cash available for meeting payments of immediate calls by depositors. Therefore, she has concluded that it needs to improve this situation by keeping sufficient cash at bank so that it will have no problems if depositors' call increases. Return on total assets of both the co-operatives was unsatisfactory. The cash and bank balance to deposit ratio of both co-operatives was in fluctuating trend, so they were very risky. Return on total assets of the co-operatives was in lower ratio. So, she concluded that the investment should be kept in current assets otherwise big problems may come in the future. It would be improved by utilizing funds in productive sectors. Return on capital employed ratio of the co-operatives was satisfactory having higher ratio above 10%.[36]

Mr. B.K. conducted the research work with the topic of "A Financial Performance Analysis of Nepalese Co-operative Societies with Reference to District Co-operative Association Ltd., Banepa". The objective carried by this study was to analyze the strengths and weaknesses, financial ratios of the association on the basis of financial statements and their behavior over the study period. The study

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[35] Devraj Bhurtel, "A Comparative Study of Saving and Lending Policy of Oriental Co-operative Ltd. and Kantipur Saving & Credit Co-operative Ltd.", (MBS diss., Nepal Commerce Campus, T.U., 2008), p.82-90 & 114-117.

[36] Uma Nakarmi, "A Comparative Financial Analysis of Bindhabasini Saving Fund Co-operative Society Ltd. and Chandesori Saving and Loan Co-operative Society Ltd., Kavre", (MBS diss., Central Department of Management, T.U., 2003), p.57-66.

concluded that the organization's liquidity position was satisfactory but it had invested its fund in current assets unnecessarily. The assets utilization position of the organization was not satisfactory due to loss and inefficient debtor management. The association had not maintained its appropriate leverage position due to its improper management of funds and sundry creditors. The association was suffering from the operating loss throughout its study period. On an average there was an operating loss of 0.92% per year. The financial performance of the association was found very weak. He has concluded that if it continues the association may face the winding up, because of previous old ruling system (Panchayat System) and lack of freedom to decide about association. He has suggested that the Government should give a grant or loan for co-operative association and the co-operative should maintain the political neutrality. If it managed and utilized properly, co-operative could be the backbone for the economic development of the country. It was the best way to mobilize the scattered saving of the small farmers and laborers. The country would have been moving towards a golden tomorrow walking on the way of co-operative movement. The co-operative education and training was a must for the development of the co-operative societies in the country.[37]

Mr. Sharma conducted the research work in the topic of "A Comparative Study on the Financial Performance of Co-operatives with Reference to Samjhana Multiple Co-operative Society Ltd. (SMCSL) and Nabakshitij Co-operative Society Ltd. (NBCSL)" for the period of 2049 BS to 2054 BS. The main objective of his study was to find out the comparative financial position of the SMCSL and NBCSL by analyzing different ratios. The study has shown that both the cooperatives' deposit utilization rate was satisfactory. However, SMCSL's deposit utilization rate was higher in comparison to NBCSL over all the years of the study period. It implies that SMCSL was more active in creating investment opportunities and enhancing business activities than NBCSL. He concluded that SMCSL could be taken as successful and progressing saving and credit cooperative than that of NBCSL in terms of profitability. Liquidity position of both the cooperatives was above the normal standard current ratio 2:1. Both the cooperatives should maintain an appropriate current ratio to meet its liquidity and profitability position. In case of activity ratios, the position of SMCSL was far better than that of NBCSL. He has

[37] Man Bahadur B.K., "A Financial Performance Analysis of Nepalese Co-operative Societies with Reference to District Co-operative Association Ltd., Banepa, Kavre", (MBA diss., Central Department of Management, T.U., 1994).

concluded that SMCSL was more efficient in utilizing its resources for generating profit. The capital structure of NBCSL was highly leveraged in comparison to SMCSL. The total debts to assets ratio, total debts to equity ratio, long term debts to total assets, long term debts to capital employed, net fixed assets to net worth ratio and adequacy ratio of the NBCSL was very high than that of SMCSL. His study found NBCSL has used more outsiders' fund for the benefit of its shareholders. He has shown that such a highly leverage ness might be advantageous for the solvency of the firm. The profitability position of the NBCSL was very poor; therefore, high leverage of NBCSL might be dangerous for its financial strength. Interest coverage ratio in case of NBCSL was better than that of SMCSL, so NBCSL had greater ability to handle the creditors. The profitability, activity, and capital structure ratio of SMCSL were better and favorable in comparison to NBCSL. So, he analyzed that the SMCSL had better financial strength than NBCSL. He concluded that both the cooperatives were running in a very slow pace. However, in his analysis, it was evident that SMCSL relatively promises a better future. Also, he concluded that co-operative still lacked the business principles and were developing at a very slow pace.[38]

A study made on the topic "Comparative Study of Lending and Saving Policy of Sidhi Ganesh Saving & Credit Co-operative Society Limited (SGSCCL) and Bhaktapur Saving & Credit Co-operative Society Limited (BSCCSL), Bhaktapur Municipality", by Mr. Duwal has given more ideas about the saving, and credit co-operatives with the main objective of lending and saving policies of the cooperatives. In his study, he found that the lending policy of co-operative was difficult that other types of financial institutions because co-operatives had to balance of profitability and services. Further he found that, BSCCSL charged different rate of interest for different types of credit. Mainly it determined little bit lower rate for the productive sector than the non-productive sector. But, SGSCCSL charged uniform rate of interest i.e. 17% for the different types of credit except some. Both the cooperatives invested more loans in the productive sector. He recommended that the current situation of saving and credit cooperatives were losing the confidence of people since they escaped after collecting deposits from people. So, to create trustable atmosphere for cooperatives by various ways establishing transparent, reliable, and sound accounting system could regain the

[38] Gokul Raj Sharma, "A Comparative Study on the Financial Performance of Co-operatives with Reference to SMCSL and NBCSL", (MBA diss., Central Department of Management, T.U., 1999), p.121-123.

confidence from people. On his study, he focused to increase the member's participation in co-operative activities and introduced various educational programs and training to enhance the capacity and knowledge could sustain cooperatives in long run. Finally, he concluded that the government to stop the quantitative and haphazard growth of cooperatives and it must focus its attention toward the qualitative growth of cooperatives, which could really promote the economic growth of the country.

Mr. Dahal undertook a study on the topic of "Financial Performance of Cooperative Society Ltd., Inaruwa, Sunsari" with the objective of to compute and interprete the financial position of cooperative society Inaruwa, Sunsari for the period of 2046 to 2050 BS. He found on his study that the liquidity position of the society was improving. The capital structure of the cooperative society in the Sunsari was not sound and the margin of safety to the creditors was negative. That was the dangerous situation for the creditors, he found. There was heavy debt capital as compared to equity or ownership capital. The society did not have issuing share for the collection of capital but most of the funds had been collected by rising of loans and by deposit collection in those periods. He also found that there was no proper flow of funds in profitable sector of the society. At the last of this study he has recommended that, high cost of goods sold, heavy interest expenses, heavy operating and non-operating expenses, heavy debt capital, low owners capital, inability to employ funds in profitable sector, low sales, traditional concept of financial management, traditional pricing policy etc. were the main variables which reflect the poor financial performance of cooperative society in Sunsari, Therefore, he suggested that the society must try to remove these variables and then improve its financial performance[39].

Mr. Basnet has conducted a study on "Capital Structure, Capital Adequacy and Profitability Management of Domestic Private Banks in Nepal: A Comparative Case Study between Bank of Kathmandu Ltd. & Machhapuchhre Bank Ltd.". The objective of this study was to examine the ratio of debt & equity capital, analyze the debt servicing capacity, evaluate the profitability position, measure the capital adequacy ratio of sampled banks and provide suggestion & recommendation for their improvement. The study has covered the period of five years i.e. FY 2001/02 to 2005/06. In this study, he has used different financial ratios via. Capital

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[39] Sushil Dahal, "Financial Performance of Co-operative Society Ltd., Inaruwa, Sunsari", (MBA diss., Central Department of Management, T.U., Kritipur, 2053), p.73-77.

structure, current ratio, activity ratio, profitability ratio, capital adequacy ratio and statistical tools. The study has found that the profitability position of Bank of Kathmandu Limited is better than Machhapuchhre Bank Limited on the basis of tested profitability ratio and both the banks were running with adequate capital with sound and strong financial position[40].

Mr. Pathak has carried out a study on “Capital Structure and Profitability: A Comparative Case Study between Nepal Indosuez Bank Limited and Nepal Grindlays Bank Limited”, has found that both banks are highly leveraged of capital structure and suggested that the banks are required to maintain improved capital structure by increasing equity base i.e. issuing more capital expanding general reserve and retaining more earning. Both banks having geared up capital structure position and in sufficient return representing weak aspect of these two banks are suggested to use the resources into the most forfeitable sector[41].

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[40] Sujan Bahdur Basnet, “Capital Structure, Capital Adequacy and Profitability Management of Domestic Private Banks in Nepal: A Comparative Case Study between Bank of Kathmandu Ltd. & Machhapuchhre Bank Ltd.”, (MBS diss., Prithivi Narayan Campus, Pokhara, T.U., 2007), p.7 & 93.

[41] Kamal Raj Pathak, “Capital Structure and Profitability: A Comparative case study between Nepal Indosuez Bank Ltd. and Nepal Grindlays Bank Ltd.”, (MBS diss., T.U., Kritipur, 1999).

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is a systematic way to solve the research problem. In other word, research methodology describes the methods and process applied in the entire aspect of the study. Research methodology refers to the various sequential steps to be adopted by researcher in studying a problem with certain objectives in view. Thus the overall approach to the research is presented in this chapter. This chapter deals with the research design, population & sample, nature & source of data, data collection procedure and data processing & analysis.

3.2 Research Design

Research design is the conceptual structure in which research is conducted. It is the arrangement of condition for collection and analysis of data in manner that aims to combine relevance to the research purpose with economy in procedure. Research design is the plan, structure and strategy to investigation conceived so as to answers to research questions and to control variance. Naturally, research design does not do these things: only the investigator does[42]. The descriptive research design specially a case study has been followed. It also has included analytical, comparative and evaluative study of the collected data.

3.3 The Population and Sample

Around 9500 co-operatives are running in Nepal. Altogether, there are 193 co-operative organizations registered in the Kaski district. Out of which, 95 co-operative societies are saving and credit co-operatives and 22 co-operative societies are multipurpose co-operatives in Kaski district. 3 saving and credit co-operatives are run under Lamachaur VDC and 5 multipurpose co-operatives are run

[42] Fred N. Kerlinger, Foundations of Behavioral Research, (Delhi: Surjeet Publications, 2000), p.300.

under Pokhara Sub-Metropolitan City[43]. Out of 3 saving and credit co-operatives in Lamachaur VDC, JMCL is sampled one and out of 5 multipurpose co-operatives in Pokhara Sub-Metropolitan City, SMCL is sampled one. However, JMCL is rural based saving and credit co-operative and SMCL is municipal based co-operative. This study covers the sample of two co-operatives i.e. JMCL & SMCL.

3.4 Nature and Source of Data

The study has highly based on secondary sources such as annual reports, documents, journals, articles, books, web sites, various published and unpublished dissertations etc. Taking personal inquiries as per requirement of the study, primary source also has been used.

3.5 Data Collection Procedures

The study mainly based on secondary data but not avoiding the primary data as per study requirement. Secondary data has been collected from annual report of selected co-operatives. In addition to this, the secondary data has been collected through District Co-operative Office Kaski, Co-operative Training Center & Division Office Kaski, Co-operative Department, and National Co-operative Development Board etc. And, data has been collected from various libraries, different journals & magazines as well as different published and unpublished reports.

Primary data has been collected by forming the unstructured questionnaires and personal meetings. Secondary data and primary data have been assembled as per topic source and nature of data.

3.6 Data Processing

Data obtained from different sources were processed manually and computerized as per requirement of the information. So that, the study objective were achieved and raw data were converted into required form.

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[43] Dhurba Raj Neupane, Kaski Ko Gatibidhi Sahakari Ek Sandarva Anek, (Kaski: Co-operative Training and Division Office, 2064), p.76.

3.7 Data Analysis Tools and Technique

Various financial tools (i.e. profitability ratios, liquidity ratios, capital structure ratios etc.) and statistical tools (i.e. mean, correlation coefficient, coefficient of variance etc.) have been used to calculate the collected raw data according to the research problems and objectives. Charts and bar-diagrams have been used to simplify the presentation if it is needed. Raw data collected by different sources are classified and tabulated in a simple way as far as possible.

3.7.1 Financial Tools

To make rational interpretations, keeping with the objectives of the study, various analytical financial tools have been used in the study, which are mentioned below-

I. Total Debt to Assets Ratios

Total debt to assets ratio indicates extends of debt financing on the total assets and measure the financial safety/security to the outsiders. In general, creditors are interested in a low debt ratio as sufficient cushion against the liquidation. The owners, however, interested in a low debt ratio because it signifies their earnings on the one hand enable to maintain their concentrated control over the firm on the other. This ratio is used to appraise the capital structure of a cooperative. Debt assets ratio can be determined in the following model-

$$\text{D/A Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

Where,

D/A Ratio = Debt to Assets Ratio

Total Debt = Long-term Debt + Current Liabilities.

Total Assets = All the assets of right hand side of the Balance Sheet.

II. Total Debt to Equity Ratio

It is also called debt to net worth and external internal equity ratio. This ratio indicates the contribution of debt capital and equity capital fund to the total investment. It measures the relative claim or contribution of creditors and owners against the firm's assets. High ratio indicates increase in external fund, increase interest expenses, and also increase risk, and low ratio indicates it's vice-versa. Debt equity ratio can be calculated by the following model: -

$$\text{D/E Ratio} = \frac{\text{Total Debt}}{\text{Total Equity Capital}}$$

Where,

D/E Ratio = Debt to Equity Ratio.

Total Debt = Long-term debt + Current Liabilities.

Total Equity Capital = Share Capital + Share Premium + Reserve.

III. Capital Adequacy Ratio

Capital adequacy ratio is used to measure the strength of the capital structure adequacy of the capital and financial soundness of the cooperative. It is the numerical relationship between total capital fund and total deposit. It is worked out by using the following model: -

$$\text{CAR} = \frac{\text{Total Capital Fund}}{\text{Total Deposit}}$$

Where,

CAR = Capital Adequacy Ratio.

Capital Fund = Paid up Capital + Reserve + Surplus

Total Deposit = Regular Saving + Normal Saving + Fixed Deposit.

IV. Long-term Debt to Capital Employed Ratio

This ratio indicates the contribution of proportionate share of the long-term debt to the permanent capital. A low ratio indicates safe side to the creditors as well as shareholders under adverse business conditions. It is computed by the following expression –

$$\text{Debt to Capital Employed Ratio} = \frac{\text{Long - term Debt}}{\text{Capital Employed}}$$

Where,

Long-term Debt = Fixed Deposits + Loan.

Capital Employed = Net worth + Long-term Debt.

V. Net Interest Margin

Net interest margin is the expression of numerical relationship between net interest income and net earning assets of a firm. The ratio measures how large a spread between interest revenues and interest costs. Earning assets are loans and investment on securities made by a firm for generating interest or fee income. Management has the pursuit of the cheapest sources of financing. For the study purpose following model is used to determine the net interest margin-

$$\text{Net Interest Margin} = \frac{\text{Net Interest Income}}{\text{Net Earning Assets}}$$

Where,

Net Interest Income = Interest Income – Interest Expenses.

Net Earning Assets = Investment on Securities + Loan & Advances.

VI. Interest Coverage Ratio

Interest coverage ratio measures the debt servicing capacity of a firm, which is determined by dividing EBIT to interest charges. It indicates how many times the interest charge is covered by the EBIT out of which they will be paid. Thus the ratio is used to analyze the debt servicing capacity of the cooperatives. Following is the expression of interest coverage ratio-

$$\text{ICR} = \frac{\text{EBIT}}{\text{Interest Charges}}$$

Where,

ICR = Interest Coverage Ratio.

EBIT = Earning Before Interest and Taxes.

Interest Charges = All the interest payable on the deposits and borrowings.

VII. Return on Assets

Return on assets expresses the relationship between net profit and total assets. The objective of computing this ratio is to determine how efficiently the total assets have been used by management. It evaluates the present return on the total assets as a guide for returns expected on future purchase of assets. Higher the ratio, more efficient is the operating management and vice-versa. It is computed by the following model-

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

Where,

ROA = Return On Assets.

VIII. Return on Capital Employed

Return on capital employed provides the clear vision that indicates how well management has used the funds supplied by creditors and owners. It measures a profitability related to the sources of long-term funds. Higher ratio shows the more efficiency use of funds to generate surplus. This ratio can be expressed in the following pattern-

$$\text{ROCE} = \frac{\text{Net Profit before Interest}}{\text{Capital Employed}}$$

Where,

ROCE	= Return On Capital Employed.
Net Profit before interest	= Net Profit + Interest.
Capital Employed	= Net worth + Long-term Debt + Net Profit.

IX. Return on Total Deposit

It examines whether the management has been capable to mobilize and utilize the deposit and also measure the overall performance basically profitability of the firm. Higher ratio indicates better utilization of deposited funds and lower ratio vice-versa. It is most significant to identify whether the organization is well efficient or not in mobilizing its total deposits so that the corrective action could be taken. It uses the following condition-

$$\text{ROTD} = \frac{\text{Net Profit}}{\text{Total Deposit}}$$

Where,

ROTD = Return on Total Deposit.

X. Return on Equity

Return on equity indicates the relationship between net profit and total equity capital. It indicates how well a firm has used the resources of the owners to earn profit. Higher ratio is the more favourable for the shareholders, which represents the sound management and efficient mobilization of the owner's equity. The ratio can be expressed as follows-

$$\text{ROE} = \frac{\text{Net Profit}}{\text{Total Equity Capital (or, Net Worth)}}$$

XI. Current Ratio

This ratio measures a relationship between current assets and current liabilities. The objective of computing this ratio is to measure the ability of a firm to meet its short-term obligations and reflect the short-term financial solvency of a firm. It measures the short-term safety margin available for the current creditors. Current ratio is computed by using the following expression-

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Where,

Current Assets = Cash & Bank Balance + Short-term investment + Rent in advance + Account Receivable + Prepaid expenses + Inventory.

Current Liabilities = Saving Deposits + Accounts payable + Bank overdraft.

XII. Quick (Acid Test) Ratio

This ratio establishes a relationship between cash & bank balance and current liabilities. The objective of computing this ratio is to measure the ability to convert its current assets into cash or equivalent at a very short notice so as to meet its current liabilities at the shortest notice. Quick ratio is calculated by the following formula-

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

Where,

Quick Ratio = Cash and Bank balance to Deposit Ratio.

Quick Assets = Cash balance + Bank balance.

Current Liabilities = Total deposit + Accounts Payable + Bank Overdraft

3.7.2 Statistical Tools

Besides financial tools as mentioned above, statistical tools are also used to verify the relationship between the variables and to identify the difference between variables of one firm to another. After data is collected, coded, and tabulated, the statistical analysis is performed. In this study, average, standard deviation, coefficient of variation, correlation coefficient, and probable error are used for the analysis.

I. Average/Mean

In this study, simple arithmetic mean (AM) has been used to find out the average value of different financial ratio of sampled cooperatives. AM is simply the ratio of observations. The average is expressed as-

$$\overline{X} = \frac{X}{n}$$

Where,

$\overline{X}$ = Mean of the values.

ΣX = Sum of all observations.

n = Total number of observations.

II. Standard Deviation

In this study, standard deviation (SD) has been employed to know the dispersion of different ratio of sampled cooperatives in absolute term. It is the best measure of variation in the given distribution. Smaller the value of SD, the less will be the variability of the given distribution. Standard deviation is determined in the following way-

$$\text{S.D. } (\sigma) = \frac{\sqrt{\sum (X - \overline{X})^2}}{n}$$

Where,

X = Individual value (observations).

$\overline{X}$ = Simple arithmetic mean.

n = Total number of observations.

III. Coefficient of Variation

The coefficient of variation (C.V.) is defined as the ratio of standard deviation (σ) to the mean ($\overline{X}$) expressed in percentage figure. The C.V. is the best tool to compare the extent of variability in two distributions. In this study, C.V. is calculated in order to know and compare the variability of observed data between the two selected cooperatives. Smaller C.V. is said to be more uniform (or stable or consistent or homogeneous) than the other distribution having larger C.V.

$$\text{Coefficient of Standard Deviation} = \frac{\sigma}{\overline{X}}$$

$$\text{C.V.} = \frac{\sigma}{\bar{X}} \times 100\%$$

Where,

σ = Standard Deviation.

$\bar{X}$ = Average or Mean.

IV. Correlation Coefficient

It is the most commonly used technique of analyzing the data, is used to determine the relationship (or association) between two or more variables and to test the significance of relationship. In this study, Karl Pearson's correlation coefficient (r) is used, and its value always lies between –1 and +1 (i.e. $-1 \leq r \leq 1$). If the correlation between two variables is positive, then it explains that both the variables are moving in the same direction and vice-versa. Karl Pearson's correlation coefficient (r) measures the intensity or degree of relationship between the two variables and is given by the following formula-

$$r_{xy} = \frac{\text{Cov}(X, Y)}{\sigma_x . \sigma_y}$$

Where,

$$\text{Cov}(X, Y) = \frac{1}{n} \sum (X - \bar{X})(Y - \bar{Y})$$

$$\sigma_x = \sqrt{\frac{\sum (X - \bar{X})^2}{n}}$$

$$\sigma_y = \sqrt{\frac{\sum (Y - \bar{Y})^2}{n}}$$

n = number of pairs of observations.

V. Coefficient of Determination

The coefficient of determination (r^2) measures the degree of linear association of correlation between two variables. It helps to indicate the percentage of variations in dependent variable (Y) due to the variations in independent variable (X). It is calculated to find out how good the line of best fit really.

Coefficient of Determination = Square of correlation = r^2

VI. Probable Error

The probable error is used to measure the reliability and test of significance of correlation coefficient. The degree of reliability of computed correlation can be judged with the help of probable error (P.E.) and is given by-

$$P.E. = 0.6745 \left| \frac{(1-r^2)}{\sqrt{n}} \right.$$

Where,

r = the value of correlation coefficient.

n = number of pairs of observations.

P.E. is used in interpretation whether the calculated value of correlation (r) is significant or not.

If r< P.E., then the correlation coefficient is insignificant i.e. there is no evidence of correlation.

If r>6 P.E., then correlation coefficient is highly significant.

VII. Time Series

While analyzing the time series data, on certain economic variables, trend, seasonal variation, irregular fluctuations, and the cyclical fluctuations are applied. Time series analysis helps to cope with uncertainty about the future. To find the trend line, by using least square method, the straight line trend between the dependent variable Y and the independent variable X (i.e. based on time) is represented by the following equation-

$$Y = a + bX \text{ ----------- } (1)$$

The values of 'a' and 'b' are obtained by solving the following two normal equations-

$$\Sigma Y = n.a + b.\ \Sigma X \text{ ----------- } (a)$$

$$\Sigma XY = a.\ \Sigma X + b.\ \Sigma X^2 \text{ --------- } (b)$$

Where 'n' is the number of years for which the data are given. The values of 'a' and 'b' [obtained by solving equations (a) and (b)], when substituted in equation (1), gives the equation of the trend line.

CHAPTER-IV

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

This chapter deals with the presentation and analysis of relevant data and information. It includes an analysis of various financial ratios and statistical tools. As such comment on cooperatives development has been incorporated. The purpose of this chapter is to present, interpret, and analyze the available relevant data of JMSCC Ltd. and SMC Ltd. in line with the objectives stated in 1.4. The analysis and presentation of data has been made for the purpose of finding out liquidity position, profitability position, and financial structure of both the cooperatives with the help of the financial statement of JMSCC Ltd and SMC Ltd for the period of 2060/061 to 2064/065. For the purpose of analysis research methodology mentioned in the earlier chapter has been followed.

4.2 Leverage or Capital Structure Ratio

There should be a sound combination of debts and owner's equity in financing the firm's assets. Capital structure ratio measures the extent to which a firm is using debt financing and degrees of safety afforded to creditors.

4.2.1 Analysis of Debt to Assets Ratio

D/A ratio or total debt is divided by total assets, is a financial tool to evaluate the capital structure of a firm. It measures the financial safety to the outsiders. So, it is used to analyze the long-term solvency of a firm. In this regard of capital structure, D/A ratio is widely used to measure the relative proportion of total debt and assets. The high ratio is dangerous to the firm because the large sum of profit goes to the debt as an interest. As in present context, the total debts include short-term as well as long-term and various deposits, the degree of D/A ratio is strictly influenced by the flow of the deposits in the cooperative. In other words, higher flow of the deposits could intensify the degree of total debt to assets ratio. So, the ratio may fail to reflect the actual requirement of debts in financing the total assets. This ratio does not reveal the extent of long term financing on total assets, so another precise ratio should be resorted.

Table 4.1: Debt Assets Ratio

(in Percentage)

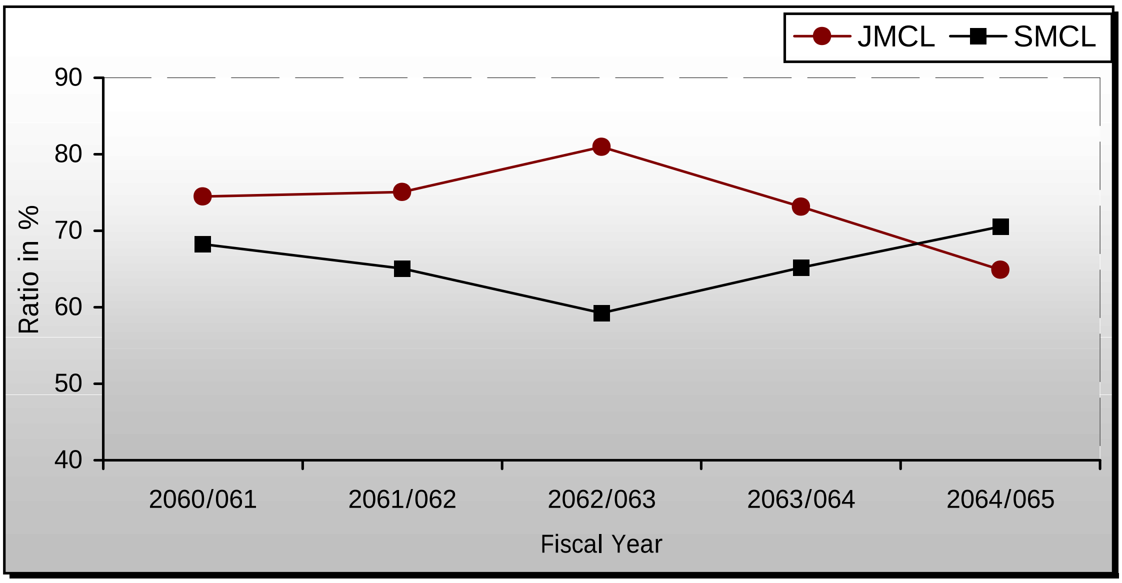
Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	74.47	75.06	80.97	73.13	64.88	73.70	5.78	7.84
SMCL	68.25	65.06	59.23	65.20	70.54	65.66	4.26	6.48

Source: Worked out in Appendices 7 and 8.

Table 4.1 presents the D/A ratio of JMCL and SMCL for the period from FY 2060/061 to 2064/065. The figure presented in the above table shows that the D/A ratio of JMCL is increasing from base year up to the FY 2062/063, thereafter decline during the study period. JMCL has 74.47%, 75.06%, 80.97%, 73.13%, and 64.88% D/A ratio over the study period respectively from the FY 2060/061 to 2064/065. The average debt to assets ratio, absolute measure of standard deviation and relative measure of CV are 73.70%, 5.78%, and 7.84% respectively.

The D/A ratio of SMCL is in decreasing trend from the base year up to the FY 2062/063, thereafter increase over the study period. SMCL has 68.25%, 65.06%, 59.23%, 65.20%, and 70.54% D/A ratio respectively over the study period. The average debt to assets ratio, absolute and relative measures are 65.66%, 4.26%, and 6.48% respectively.

Figure 4.1: Debt to Assets Ratio



Above figure clears that the D/A ratio of JMCL is moving upward in the beginning year of the study period and it moves downward in FY 2063/064 and FY 2064/065. Similarly, in the case of SMCL, debt to assets ratio is moving downward in the beginning year of the study period and it moves upward in the FY 2063/064 and FY 2064/065. D/A ratio of both the cooperatives has reverse relation so that its trend goes in opposite direction.

Low D/A ratio is good news for the organization because of the lower risk for paying the interest on debt and has higher margin of safety. But, the owners, however, interested in high D/A ratio because it signifies the earnings on the one hand and in another enables to maintain their managerial control over the firm. Average D/A ratio of JMCL is higher than of SMCL. So, the JMCL is more risky than SMCL because the cooperative using more debt proportion pays the large amount of interest on debt from its income.

4.2.2 Analysis of Debt to Equity Ratio

D/E ratio shows the relationship between the debts and shareholder's equity. The objective of calculating this ratio is to judge the effectiveness of the long-term financial policy of the organization. It also establishes the relative proportion of debt and equity in financing the assets of the organization. It also reflects the relative claims of creditors and shareholders against the assets of the organization. D/E ratio has important implications from the viewpoint of creditors, owners, and the firm itself. The creditors prefer low D/E ratio because it gives the sufficient protection against losses in all the time, more specifically, in the event of liquidation. Similarly, the owners prefer a high D/E ratio because the higher use of debt magnifies their earnings and protection from the dilution of control over the firm, which is the golden chance for owners to maximize their value and return by taking advantage of leverage. Likewise, high D/E ratio is a bad news for outsiders due to the high risk in their investment and lower margin of safety.

Higher D/E ratio indicates that the outsiders have invested more in the firm than the owners. Thus, creditors will loss more than the owners in the time of financially distress. On the other side, a low D/E ratio shows the lower contribution of outsiders to the total financing of a firm. It reflects that the firm is unable to take the advantage associated with the financial leverage.

Table 4.2: Debt to Equity Ratio

(in Percentage)

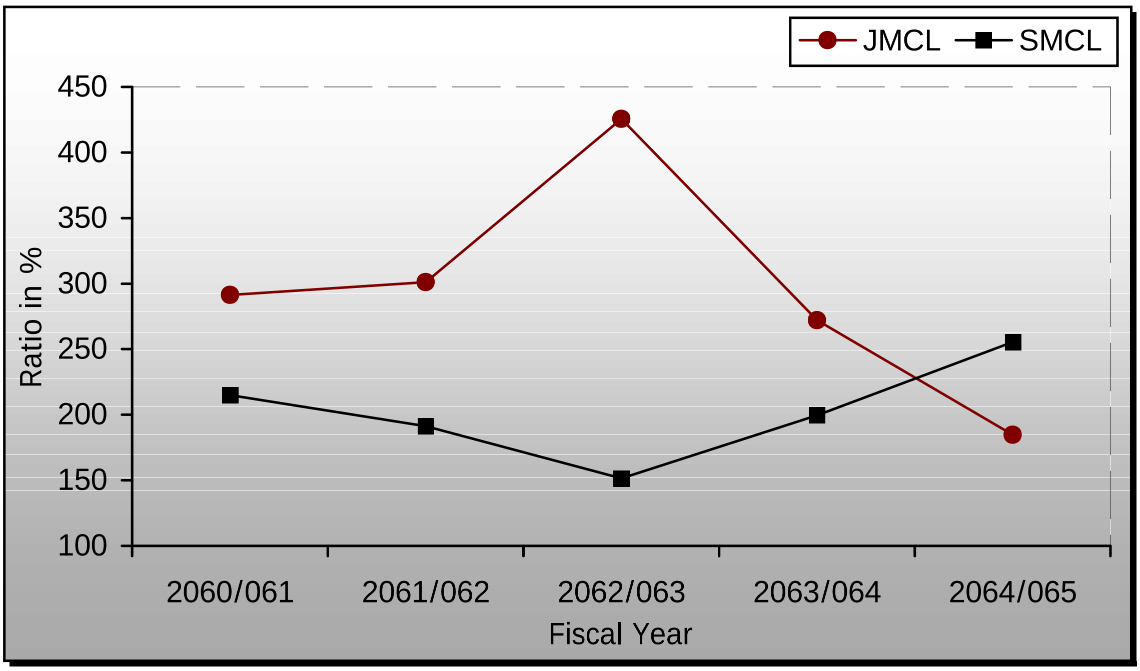
Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	291.46	301.03	425.48	272.15	184.75	294.97	86.24	29.24
SMCL	215.08	191.18	151.56	199.50	255.50	202.56	37.75	18.63

Source: Worked out in Appendices 7 and 8.

Table 4.2 clearly reveals that the total debt to equity ratio of JMCL is 291.46%, 301.03%, 425.48%, 272.15%, 184.75%, and 294.97% for the FY 2060/061 to 2064/065 respectively. The D/E ratio of JMCL is increasing from base year up to the FY 2032/063; thereafter it decreases to 272.15% in FY 2063/064 and 184.75% in FY 2064/065. The average debt to equity ratio, absolute measure of standard deviation and relative measure of CV are 294.97%, 86.24%, and 29.24% respectively of JMCL.

The debt to equity ratio of SMCL is decreasing from base year up to the FY 2062/063, thereafter increase to 199.50% in FY 2063/064, and it also increases to 255.50% in the FY 2064/065. The average debts to equity ratio, absolute, and relative measure of SMCL are 202.56%, 37.75% and 18.63% respectively.

Figure 4.2: Debt Equity Ratio



The above figure clearly shows that the D/E ratio of JMCL is moving upward in the beginning year of the study period and it moves downward in FY 2063/064 and FY 2064/065. Similarly, in the case of SMCL, the debt to equity ratio is very high in the base year and it declines in FY 2061/062 and in FY 2062/063 but it starts to move up from FY 2063/064 and in the last year it is very high. The D/E ratio of both the cooperatives is fluctuating over the study period. The above figures clear that the two cooperatives have gone in the opposite direction.

The increasing D/E ratio indicates that the higher growth in total debt than equity capital and vice-versa. Debt to equity ratio of JMCL is quite higher than SMCL in terms of average by 92.41% (i.e. 294.97%-202.56%) due to large amount in debt. A high D/E ratio means the higher contribution of creditors (deposit holders) in total financing and in total assets than the owners. Thus the creditors are investing more in total financing of JMCL than SMCL over the study period. The variation in absolute and relative terms of JMCL are 86.24% and 29.24% which are more than 37.75% and 18.63% of SMCL respectively, which indicates SMCL has more consistency in comparison of JMCL.

4.2.3 Analysis of Capital Adequacy Ratio

Financial strength is measured by capital adequacy of bank or financial institution. The nature of cooperatives under the study is banking sort. So, this ratio is significant to determine the capital adequacy of the JMCL and SMCL. A high or low capital adequacy ratio is undesirable in terms of lower solvency respectively. Thereafter, appropriate capital adequacy is needed but the appropriate capital adequacy ratio is a controversial matter. Higher capital adequacy ratio permits to increase the business much further. Higher capital adequacy ratio also indicates that the sound and strong financial position, higher security to depositors and adequacy in capital. Similarly, lower CAR shows that the lower in its internal sources, comparatively weak financial position, and lower level of security to depositors.

Table 4.3: Capital Adequacy Ratio

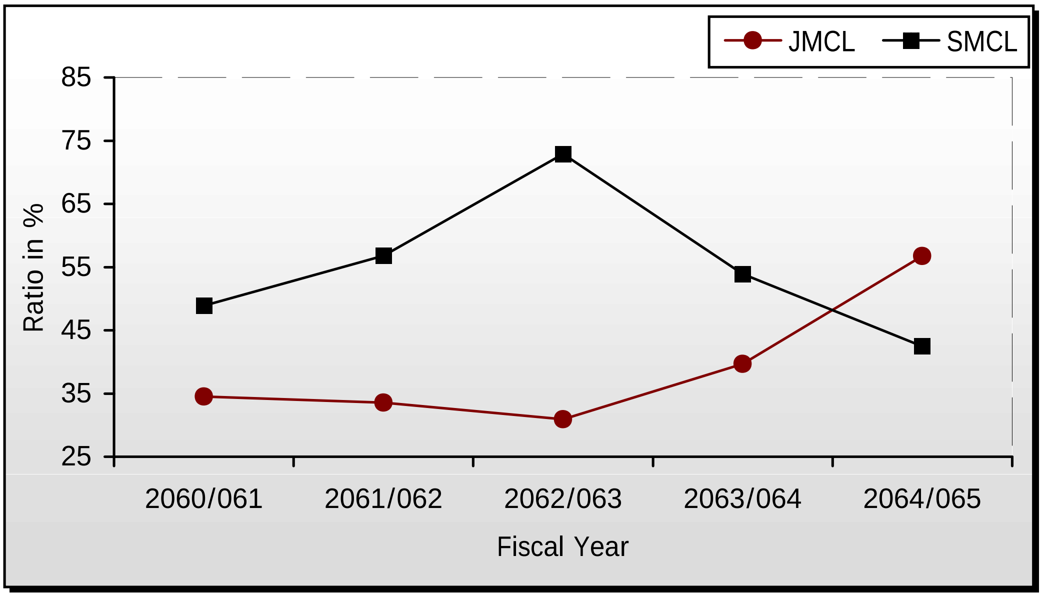
(in Percentage)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	34.54	33.54	30.91	39.69	56.74	39.08	10.37	26.54
SMCL	48.89	56.80	72.90	53.93	42.45	54.99	11.40	20.73

Source: Worked out in Appendices 7 and 8.

The data given in the table 4.3, exhibits that CAR of both the cooperatives have remained unstable. JMCL has minimum capital adequacy ratio in FY 30.91% and maximum in FY 2064/065 with average of 39.08%. The CARs of JMCL are 34.54%, 33.54%, 30.91%, 39.69%, and 56.74% in FY 2060/061 to FY 2064/065 respectively. An absolute measure in standard deviation is 10.37% and relative measure in CV is 26.54% of JMCL. Similarly, CAR of SMCL is minimum of 42.45% in FY 2064/065 and maximum of 72.90% in FY 2062/063, with an average ratio of 54.99%. The actual ratios of SMCL are 48.89%, 56.80%, 72.90%, 53.93%, and 42.45% for the FY 2060/061 to FY 2064/065 respectively.

Figure 4.3: Capital Adequacy Ratio



Above figure has shown that the CAR of two cooperatives is fluctuating during the study period. Average CAR of SMCL is high so, it is financially sound and has higher security to the depositors. Higher CV of JMCL indicates less consistency in the management of CAR. SMCL has 11.40% risk on absolute measure and 20.73% in relative measure of CV. Thus lower level of CV indicates more consistency in its operation. But, JMCL has only 10.37% risk on absolute measure and 26.54% in relative measure of CV; more CV indicates less consistency for the smooth operation of the bank in terms of management of CAR in comparison of SMCL.

4.2.4 Analysis of Long-term Debt to Capital Employed Ratio

Long term debt to capital employed ratio is a financial tool to evaluate the capital structure of a firm. The ratio shows the contribution of proportionate share of the long-term debt to the permanent capital. A low ratio indicates safe side to the creditors as well as shareholders under adverse business conditions.

Table 4.4: Long Term Debt to Capital Employed Ratio

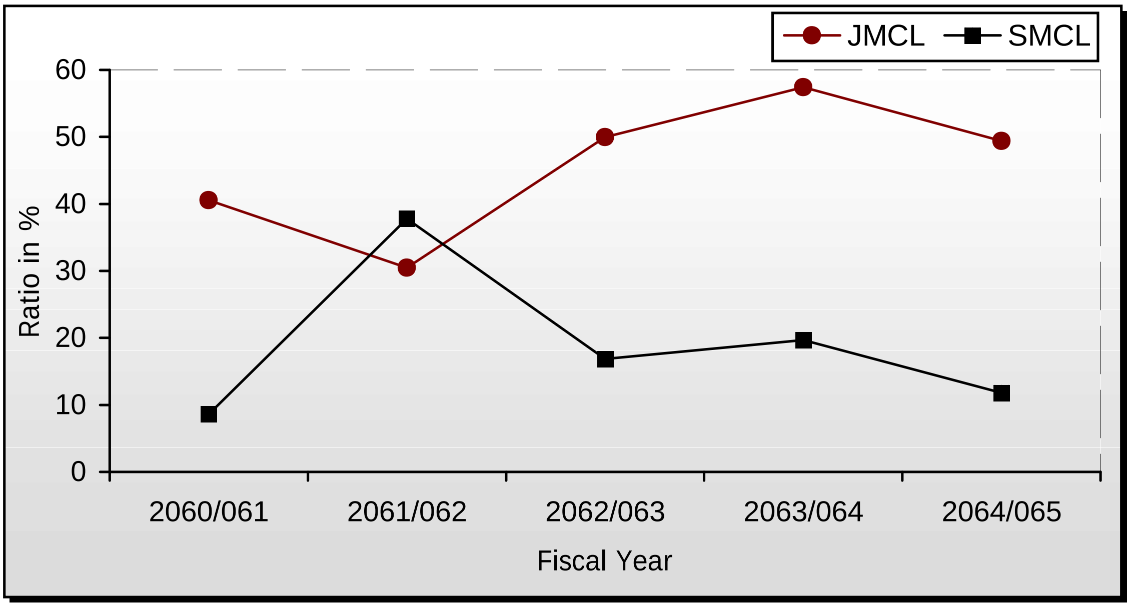
(in Percentage)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	40.58	30.46	49.95	57.44	49.38	45.56	10.34	22.70
SMCL	8.61	37.78	16.84	19.69	11.79	18.94	11.38	60.06

Source: Illustrated in Appendix 7 & 8.

The data presented in the table 4.4 shows the LTD to CE ratio of JMCL and SMCL, which are 40.58%, 30.46%, 49.95%, 57.44% & 49.38% and 8.61%, 37.78%, 16.84%, 19.69% & 11.79% in FY 2060/061 to 2064/065 respectively. At the beginning of the study period, JMCL has 40.58% LTD to CE ratio and it is decreased to 30.46% in the FY 2061/062 thereafter it is started to increase and in the last year of the study period little. JMCL has an average ratio of 45.56%, absolute measure of 10.34% and relative measure of 22.70%. Similarly, LTD to CE ratio of SMCL has 8.61% at the beginning year of the study period and in the FY 2061/062 the ratio has gone up to 37.78% and thereafter the ratio is decreased to 11.79% at the end of the study period. SMCL has an average ratio of 18.94%, absolute measure of 11.38% and relative measure of 60.06%.

Figure 4.4: LTD to CE Ratio



The LTD to CE ratio is fluctuating over the study period in both the cooperatives. The figure 4.4 clears that the ratio of JMCL is moving upward and it moves downward only in the FY 2061/062 over the study period. Lower level of CV of JMCL indicates more stable in the ratio. A lower average ratio of SMCL indicates the safe side to the creditors as well as to the member shareholders with comparison to JMCL.

4.3 Analysis of Debt Servicing Capacity

Debt servicing capacity or, Interest coverage ratio is one of the most conventional coverage ratios, which measures the debt servicing capacity of an organization. The ratio indicates how many times the interest charge is covered by the EBIT out of which they will be paid. The ratio shows the numbers of times the interest charges are covered by the earning that are normally available for payment. Larger the interest coverage ratio, greater will be the ability of the firm to handle the fixed charges and more assurance for payment of interest to the creditors. However, the higher ratio is desired from the viewpoint of outsiders. But the high ratio reflects the unused debt capacity or the firm is missing the opportunity to take the advantage of financial leverage. Similarly, lower value of the ICR indicates the lower debt servicing capacity. A low ratio is an alert signal that the firm is using excessive debt and does not have the capacity to service the debt properly.

Table 4.5: Interest Coverage Ratio

(in Times)

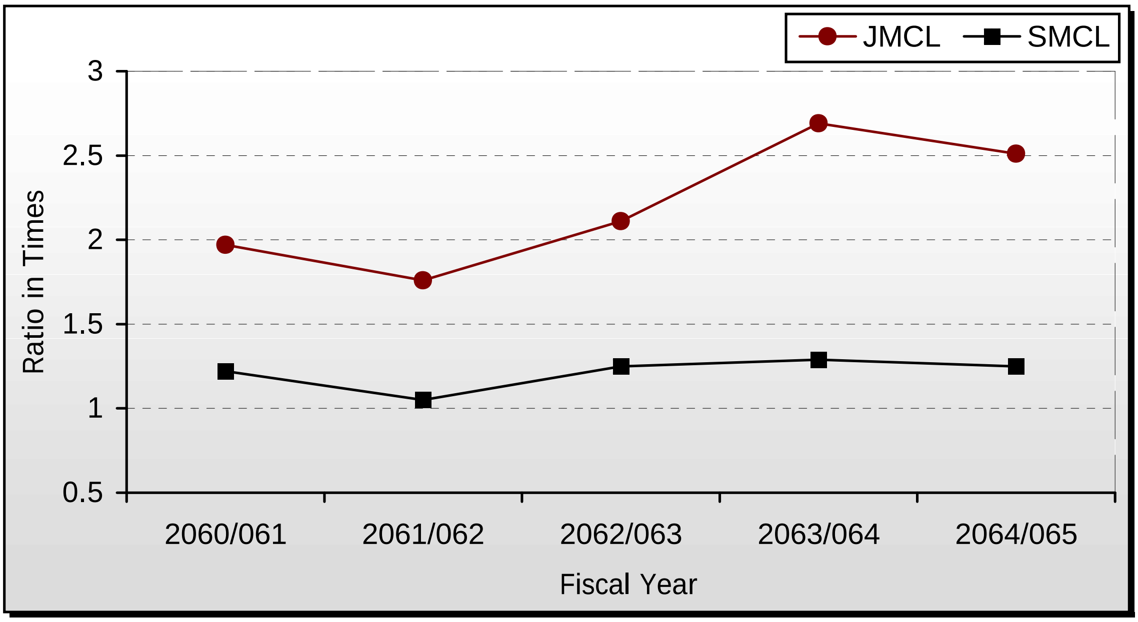
Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	1.97	1.76	2.11	2.69	2.51	2.21	0.38	17.40
SMCL	1.22	1.05	1.25	1.29	1.25	1.21	0.09	7.75

Source: Worked out in Appendix 7 and 8.

Table 4.5 presents that the ICR of JMCL is in very fluctuating trend over the study period than the ICR of SMCL. As shown in the above table, the ICR of JMCL and SMCL has disclosed as 1.97, 1.76, 2.11, 2.69, 2.51 times and 1.22, 1.05, 1.25, 1.29, 1.25 times during the study period respectively. ICR of JMCL is 1.97 times in the initial year but it is declined to 1.76 in FY 2061/062, thereafter it starts to increase so that the ICR becomes 2.51 times in the FY 2064/065. Similarly, in case of the SMCL, the ICR is not so fluctuating which is in the range of 1.05 to 1.29 times.

It has found that the ICR of JMCL is gradually rising, which indicates that the cooperative has been able to maintain sufficient EBIT to meet the interest obligation. JMCL has an average ratio of 2.21 times, absolute measure of 0.38 times and relative measure of 17.40 times. Similarly, SMCL has average ratio of 1.21 times, absolute measure of 0.09 times and relative measure of 7.75 times. Both the cooperatives are seemed to be conscious to have sufficient EBIT to be able to service the debt.

Figure 4.5: Interest Coverage Ratio



From this analysis, it can be concluded that the ICR of JMCL is higher than SMCL's ICR. So, JMCL is in better position in this sense. But, higher level of standard deviation and CV indicates higher level of risk and less consistency (more variable) in the management of ICR.

4.4 Profitability Ratio

Co-operative society is also business organization. So, cooperative must earn sufficient profit as business organization for the expansion, growth, and long-term sustains in the competitive business environment. The term profit refers to the difference between revenues and expenses over a period of time. It is also an indication of the firm's efficiency and overall measuring rod of the business. Thus profit is the ultimate return of a business and it will have no future if it fails to make sufficient profit.

The financial analyst must attempt to understand whether the firm's profit is in the rising trend. In the initial years of establishment of a firm, the profit will be in the lower side, but slowly, year-by-year, profit gradually starts to rise. Profit depends on the product life cycle, market conditions, cost of fund and managerial & operational expenses etc. The analyst must compare the profits with the industry average or, with the same type of business firm and establish whether the share value of the company is rising or falling or is stable. The present study has been basically focus on the objective of assessing the profitability ratio of the two sampled cooperatives. The profitability ratio of the cooperatives has been analyzed in the following categories -

4.4.1 Net Interest Margin

The difference between interest income and interest expenses is called net interest income. And, net-earning assets is the total sum of investment of government securities and loan & advances. Thus, the NIM is the ratio of net interest income as percentage of net earning assets. Management of assets and liabilities is affected by the spread between the interest earned on the cooperatives assets and the interest costs on its liabilities. This ratio is examined to measure the profitability of these earning assets. A high margin reflects the better efficiency in utilizing the resource in interest generating sections and vice-versa. So, low level of net earning assets, low interest expenses, and high interest revenues will increase the NIM and vice-versa. NIM of JMCL and SMCL are presented in the table 4.5.

Table 4.6: Net Interest Margin

(in Percentage)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	4.67	5.12	5.67	7.13	5.53	5.62	0.93	16.50
SMCL	3.15	1.88	4.57	4.36	2.12	3.22	1.24	38.50

Source: Worked out in Appendices 7 & 8.

The figure presented in the table 4.7 reveals that the net interest margin of both cooperatives has in fluctuating trend. The NIM of JMCL and SMCL are observed as 4.67%, 5.12%, 5.67%, 7.13%, 5.53% and 3.15%, 1.88%, 4.57%, 4.36%, 2.12% respectively during the study period. The minimum NIM of JMCL is 4.67% in FY 2060/061 and the maximum is 7.13% in FY 2063/064. The average ratio of 5.62%, absolute measure on standard deviation of 0.93% and relative measure on CV of 16.50%, which reflects the very low level of risk and more consistency in the NIM ratio. Likewise, in the case of SMCL, the minimum NIM is 1.88% in FY 2061/062 and maximum NIM is 4.57% in FY 2062/063. The average ratio of 3.22%, risk on standard deviation of 1.24% and relative measure on CV of 38.50% reflects high deviation and not consistency in terms of variables of NIM.

Figure 4.6: Net Interest Margin

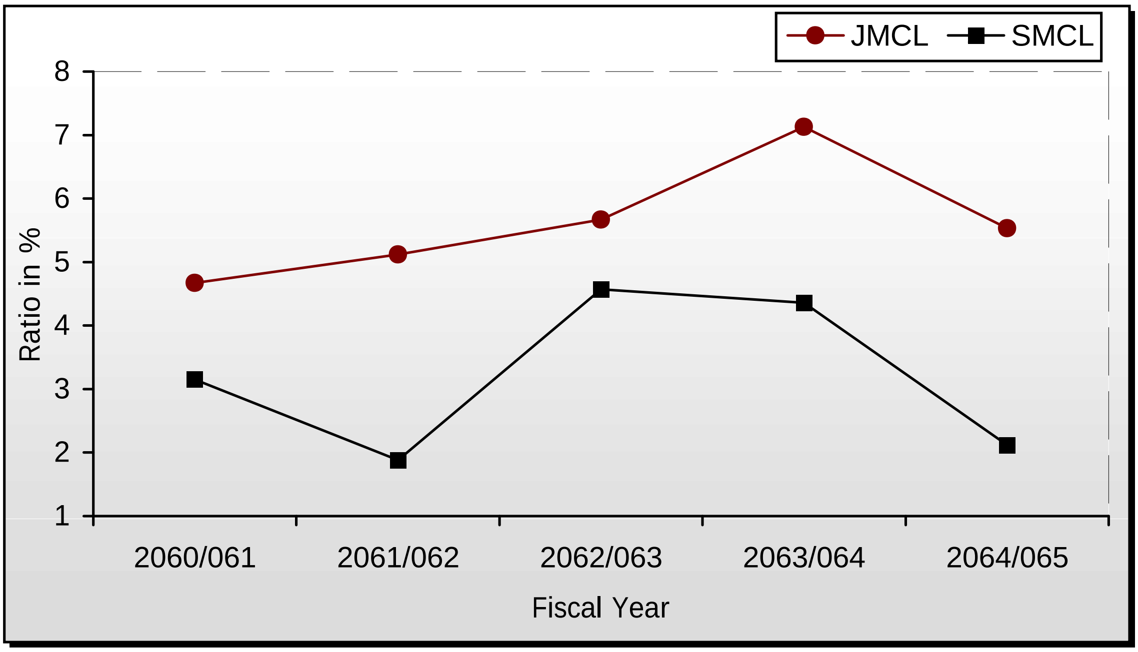


Figure 4.7 has shown that the ratio of JMCL is in increasing trend but in the last year it is declined to 5.53%. The ratio of SMCL is highly fluctuated due to high dispersion on the ratios, high absolute risk, and relative measure. Comparatively, the average ratio of JMCL is higher than SMCL. It shows the higher rate of return on net earning assets. Similarly, lower level of risk of 0.93% and relative measure on CV of 16.50% of JMCL seems more consistency in terms of these ratios during the study period. It also indicates that the increasing trend of NIM and lower level of CV with lower level of risk of JMCL, the manager has done good job of assets and liability management in interest generating purpose as compared to SMCL during the study period.

4.4.2 Total Expenses to Total Income Ratio

The ratio of total expenses to total income is used as a proxy measure of the quality of management. So the management always tries to maximizing earning and minimizing the expenses. Generally, cooperatives earned incomes from interest on loan investment, commissions, fees, and other miscellaneous income. Likewise, the major components of expenses of cooperatives are interest on deposits, staff salary, provision for bonus, allowances, provident fund and other operating expenses like rent, water, electricity, fuel expenses, provision for possible losses, provision for income tax etc. A low level of expenditure in productive activities may reflect an efficient of management. So, a low or decreasing ratio of expenses to total income indicates efficient profitability of the cooperatives and vice-versa.

Table 4.7: Total Expenses to Total Income Ratio

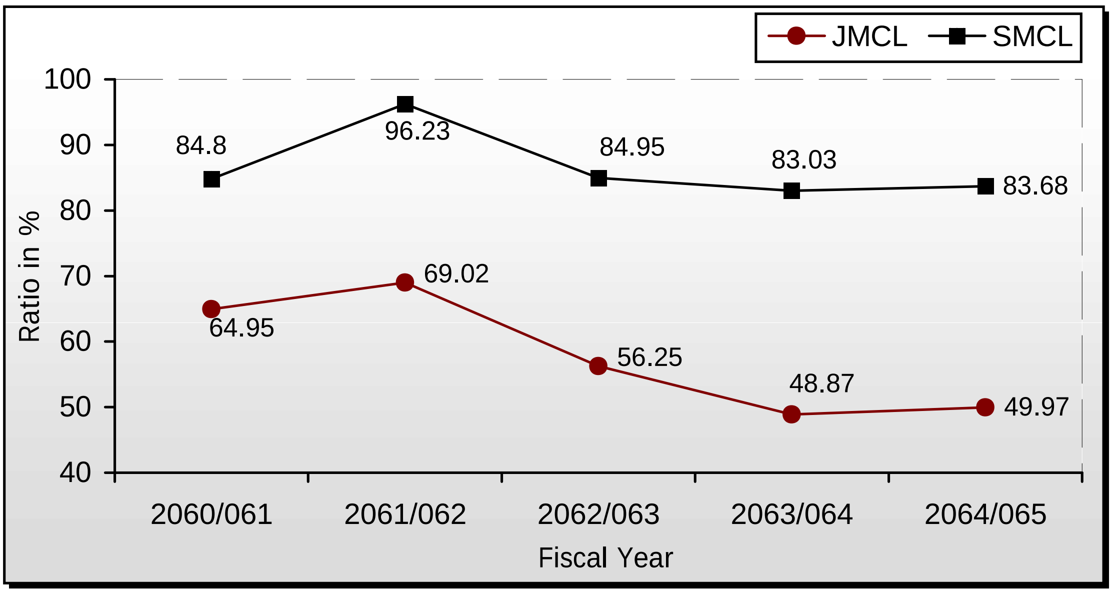
(in Percentage)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	64.95	69.02	56.25	48.87	49.97	57.81	8.95	15.48
SMCL	84.80	96.23	84.95	83.03	83.68	86.54	5.48	6.33

Source: Worked out in Appendix 7 & 8.

The data shown in the table 4.7 exhibits that the total expenses to total income ratio of JMCL and SMCL within the FY 2060/061 to FY 2064/065. The observed ratios of JMCL are in decreasing trend, where maximum ratio of 69.02% in FY 2061/062 and minimum ratio of 48.87% in FY 2063/064 with average ratio of 57.81%. The ratios are 64.95%, 69.02%, 56.25%, 48.87%, and 49.97% of JMCL over the study period respectively from FY 2060/061 to FY 2064/065. An absolute measure in standard deviation of 8.95% and relative measure in CV of 15.48% are existed. Similarly, total expenses to total income ratio of SMCL is minimum of 83.03% in FY 2063/064 and maximum of 96.23% in FY 2061/062 with average ratio of 86.54%. The ratios of SMCL are 84.80%, 96.23%, 84.95%, 83.03%, and 83.68% over the study period respectively. An absolute measure in standard deviation of 5.48% and relative measure in CV of 6.33% are in existent. The total expenses to total income ratios of both the cooperatives reflect that the ratios are in highly fluctuating over the study period.

Figure 4.7: Total Expenses to Total Income Ratio



The figure 4.7 has shown the total expenses to total income ratio of JMCL and SMCL, which depicts the ratios are in decreasing trend but in the FY 2064/065 it is little increased. The lower level of relative measure of CV, 6.33% in SMCL indicates more consistent and uniformity. But, the higher level of relative measure of CV, 15.48% in JMCL indicates not consistent and more variable.

4.4.3 Return on Assets

It is one of the significant tools for measuring the profitability of all financial sources utilized by the firm. ROA is a useful measurement tool of how well a manager is doing the job because it indicates how well the firm's assets are being utilized to generate the profit. The ratio explains net income for each unit of assets, indicates overall effectiveness of management in generating profit with its available assets. It is more useful tool for judging the operational efficiency of a firm. A high ratio usually indicates the high efficiency in utilizing its overall resources and vice-versa. A cooperative society has to earn satisfactory return on assets for its survival with smooth long run. The calculated return on total assets of JMCL and SMCL has been presented in table below.

Table 4.8: Return on Assets

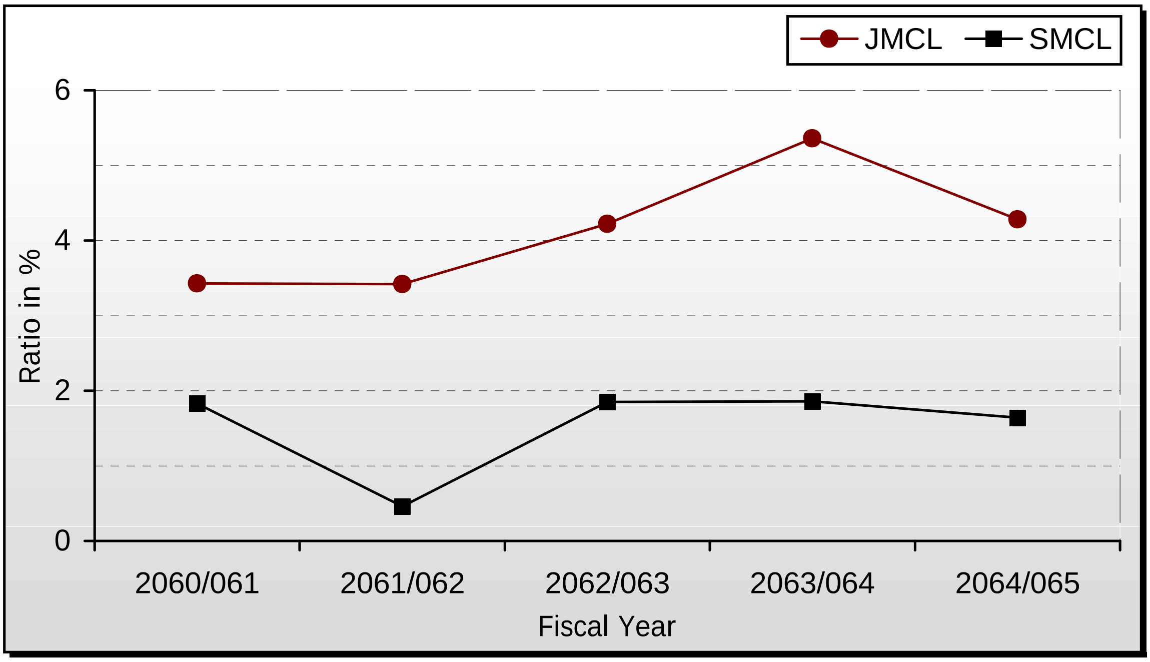
(in Percentage)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	3.43	3.42	4.22	5.36	4.28	4.14	0.80	19.23
SMCL	1.83	0.46	1.85	1.86	1.64	1.53	0.60	39.52

Source: Worked out in Appendix 7 & 8.

Table 4.9 presents the ROA ratio of JMCL and SMCL for the period from FY 2060/061 to FY 2064/065. The data shown in the table exhibits that the ROA ratio of JMCL is increasing year by year during the study period but the last year it is decreased by little. An average return of 4.14%, absolute measure on standard deviation of 0.80% and relative measure on CV of 19.23% indicates more favorable in terms of return, high risk and more consistent on the ratio with comparing to SMCL. The ROA ratios of JMCL are 3.43%, 3.42%, 4.22%, 5.36% & 4.28%, and the ratios of SMCL are 1.83%, 0.46%, 1.85%, 1.86% & 1.64% over the study period respectively. The ratio of SMCL in the FY 2061/062 decreases then after it is started to increase but in the FY 2064/065 it is again decreased by little percentage. Moreover, an average ratio of 1.53%, absolute measure on standard deviation of 0.60% and relative measure on CV of 39.52%, which indicates low favorable, low risk and less consistent with comparing to JMCL. In the FY 2064/065, ROA ratio of both the cooperative is decreased due to increasing amount of investment in assets but the net profit of the cooperatives has not increased in the same proportion as the total assets has increased.

Figure 4.8: Return on Total Assets



Comparatively, JMCL has higher return on total assets ratio with comparison to SMCL, which reflects the JMCL has been able to utilize its resources in most profitable sectors than SMCL. On the basis of CV, the ratio of JMCL seems to be more consistent than SMCL due to lower CV of JMCL than of SMCL.

4.4.4 Return on Capital Employed

The ROCE ratio is the measurement tools of profitability related to the sources of long-term funds. It can be obtained from Net Profit before Interest divided by Capital Employed. It is used to evaluate the cooperative's performance by the investors, so that the investors can know how well the management has used the funds. It shows the productivity of permanent capital in terms of return. Higher ROCE ratio indicates that more efficient use of funds and signifies that the permanent capital, which has explicit cost of capital, has been soundly utilized to generate profit. The table 4.9 shows the observed value of ROCE ratio of JMCL and SMCL.

Table 4.9: Return on Capital Employed Ratio

(in Percentage)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	14.28	19.36	17.26	11.25	9.13	14.26	4.19	29.43
SMCL	27.21	16.38	18.79	19.24	24.58	21.24	4.48	21.11

Source: Worked out in Appendices 7 & 8.

Table 4.9 presents that the ROCE ratio of JMCL and SMCL for the financial year 2060/061 to 2064/065. The presented figure shows the ROCE ratio of JMCL and SMCL are as 14.28%, 19.36%, 17.26%, 11.25%, 9.13% and 27.21%, 16.38%, 18.79%, 19.24%, 24.58% for the FY 2060/061 to 2064/065 respectively for the respective cooperatives. Maximum ROCE ratio of JMCL is 19.36% in the second year of the review period and then after it is decreased year by year. Likewise, maximum ROCE ratio of SMCL is 27.21% in the first year of the review period and minimum is 16.38% in the second year of the review period and then after it is increased year by year. On average, ROCE ratio of SMCL is higher than that of JMCL i.e. 21.24%>14.26%. Coefficient of variation of SMCL is lower than that of JMCL i.e. 21.11%<29.43% which means the ratio of JMCL is more variability and less consistent in comparison to SMCL.

Figure 4.9: Return on Capital Employed Ratio

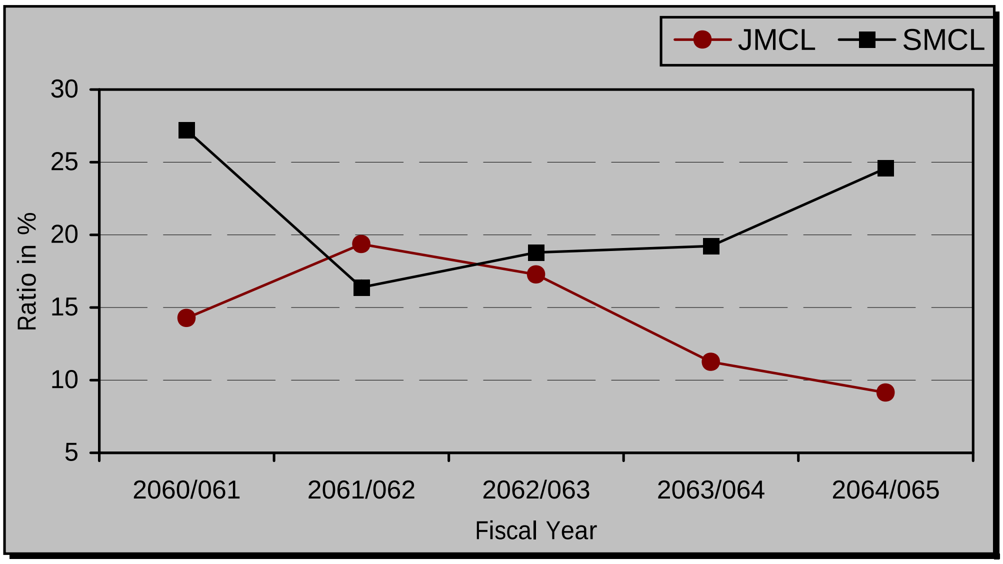


Figure 4.9 presents the ROCE ratio of JMCL and SMCL during the study period. It shows the ratio of JMCL is in decreasing trend although in the FY 2061/062 it is little more. But in the case of SMCL, ROCE ratio in the FY 2061/062 it is too low then after it is in the increasing trend.

4.4.5 Return on Deposits

Return on deposit ratio or ROD ratio can be computed by dividing net profit by total deposits. ROD is a useful measurement tool of how well a manager is doing the job because it indicates how well the deposits are being used to generate profit. Generally, higher ROD ratio indicates better utilization of deposits and lower ratio indicates lower utilization of deposits. The major function of such types of cooperative is to mobilize and invest the deposits effectively; so higher ratio indicates better efficiency and vice-versa. Hence, the ratio enables to measure its efficient towards its deposit mobilization so that the corrective action could be taken. From the viewpoint of judging operational efficiency, the return on deposits is more significant tool. The cooperative has to earn proper return on total deposits for its smooth operation. Table 4.10 exhibits the ROD of JMCL and SMCL for the period of FY 2060/061 to 2064/065.

Table 4.10: Return on Deposits Ratio

(in Percentage)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	4.64	4.59	6.86	7.92	6.92	6.19	1.49	24.16
SMCL	2.82	0.76	3.45	3.06	2.52	2.52	1.04	41.32

Source: Worked out in Appendices 7 & 8.

The figure presented in the table 4.10 reveals that the ROD of JMCL has decreased for the FY 2061/062 and has increased in the FY 2062/063 and FY 2063/064 and again has decreased in the final year of the study period. The highest ROD ratio is 7.92% in FY 2063/064 and the lowest ratio is 4.59% in FY 2061/062 with average ratio of 6.19% of JMCL. An absolute measure on standard deviation is 1.49% and relative measure on CV is 24.16%. Similarly, ROD ratio of SMCL has decreased in FY 2061/062, has increased in FY 2062/063, and again has decreased in FY 2063/064 and FY 2064/065. The highest ratio is 3.45% in FY 2062/063 and the lowest ratio is 0.76% in FY 2061/062 with the average ratio of 2.52% of SMCL. An absolute measure on standard deviation is 1.04% and relative measure on CV is 41.32%.

Figure 4.10: Return on Deposits Ratio

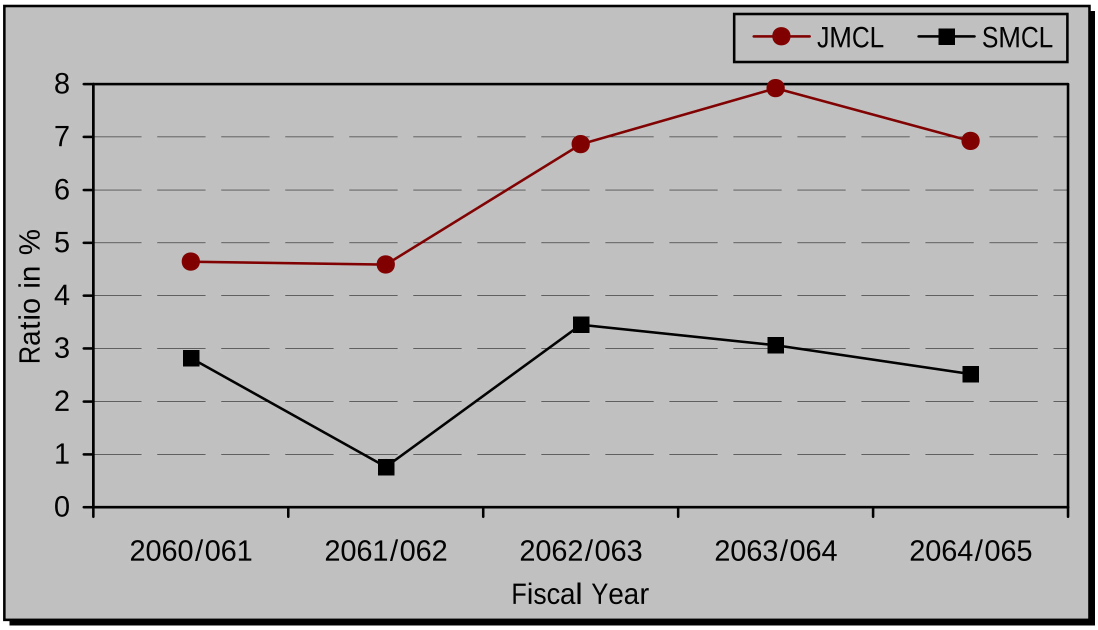


Figure 4.10 shows the observed ratio of ROD of JMCL and SMCL during the study period. It reflects the ROD of JMCL is moving upward in comparison to SMCL. The figure clearly shows that the ROD of SMCL is not favorable and more variable with comparing to JMCL due to lower level of average return, higher level of relative measure on CV. Comparatively, the ROD of JMCL seems favorable and more consistent being higher level of average return and lower level of relative measure but higher level of absolute measure indicates more risky.

4.4.6 Return on Equity

Return on equity, ROE is one of the important ratios to judge whether the firm has earned a satisfactory return on its equity or not. So, this ratio reveals how efficiently the owner's funds have been utilized by the firms (here cooperatives). Higher ratio indicates the more efficiency of management on using shareholders fund and firm's ability of generating profit per rupee of their funds.

Table 4.11: Return on Equity Ratio

(in Percentage)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	13.43	13.70	22.19	19.95	12.19	16.29	4.47	27.43
SMCL	5.77	1.34	4.73	5.68	5.93	4.69	1.93	41.16

Source: Worked out in Appendices 7 & 8.

Table 4.12 presents the ROE ratio of JMCL and SMCL for the period of FY 2060/061 to FY 2064/065. The figure presented in the table reveals that the ROE of

JMCL has increased in the FY 2063/064 and 2064/065 for the period. The highest ratio is 22.19% in FY 2062/063 and the lowest ratio is 12.19% in FY 2064/065 of JMCL with average ratio of 16.29%. An absolute measure on standard deviation is 4.47% and relative measure on CV is 27.43%. Similarly, ROE ratio of SMCL in the FY 2061/062 has decreased then after it is increased within the study period. The maximum ROE ratio of SMCL is 5.93% in FY 2064/065 and minimum is 1.34% in FY 2061/062 with average ratio of 4.69%. An absolute measure on standard deviation is 1.93% and relative measure on CV is 41.16% of SMCL.

Figure 4.11: Return on Equity Ratio

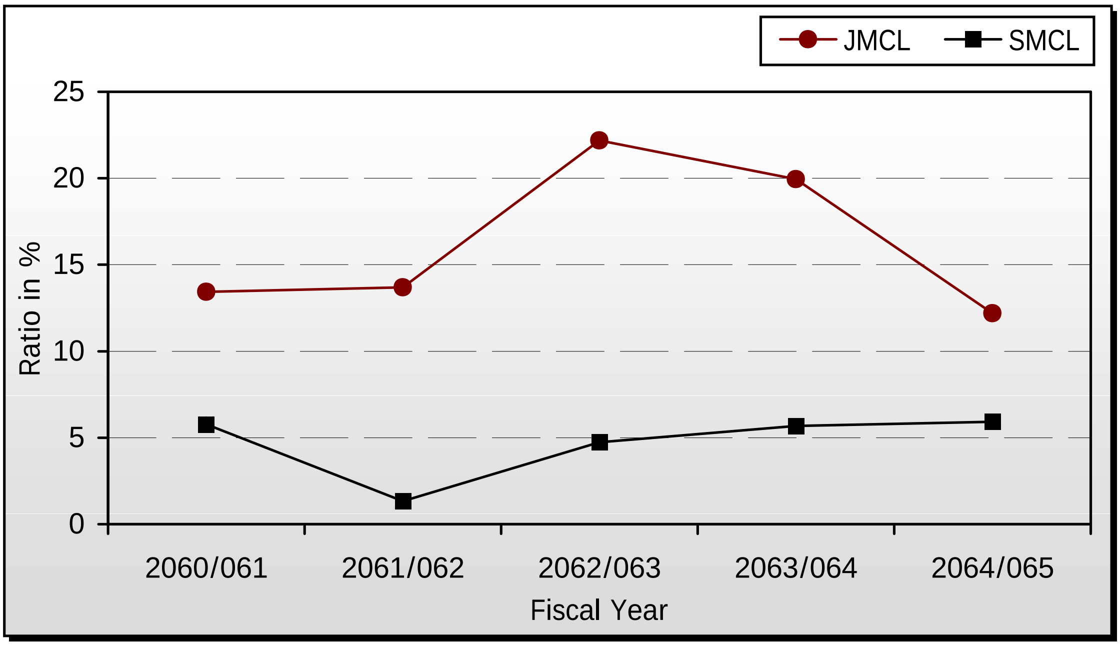


Figure 4.11 shows the observed value of ROE of JMCL and SMCL during the study period. It reflects the ROE of JMCL is moving upward in comparison to SMCL. The figure shows that the ROE of JMCL is favorable due to higher level of average return but more risky due to higher level of SD. SMCL is said to be more variable or not consistent due to higher level of relative measure on CV.

4.5 Liquidity Ratio

Liquidity ratio helps to evaluate a firm's ability to meet its short-term obligation and reflects the short financial strength of a firm. Liquidity ratios are determined to assess the capacity of the firm to meet immediate maturing liabilities and efficiency of working capital utilization. It measures the short-term solvency of the society.

4.5.1 Current Ratio

The current ratio is the most commonly used measure of short term solvency, since it indicates the extent to which the claims of short-term creditors are covered by assets that are expected to be converted to cash in a period roughly corresponding to the maturity of the claims. Current ratio is computed by dividing current assets by current liabilities. Ratio should be compared with either industry average of past performance or normal standard established. A ratio of 2:1 (or, 200%: 100%) is considered as healthy condition (or standard) for management of current assets and current liabilities. If the ratio is less than 2:1 then it is said that company is not properly managing its short terms funds whereas if the ratio is more than the standard it is said that company has idle investment in current assets than needed. But these assumptions and analysis depends upon the nature of the business.

Current ratio indicates the availability of a rupee of current assets for every rupee of current liabilities. A high current ratio indicates excessive investment in current assets leading to under utilization of firm's resources and causes to lower profitability position but greater the margin of safety for short-term creditor. In the same way, a low ratio indicates inability to meet its short-term obligation that may lead to loss of goodwill and lower margin of safety. So, the satisfactory level of current ratio can lead the firm able to maintain short-term solvency. Financial performance of JMCL and SMCL in relation to current ratio is presented in the following table-

Table 4.12: Current Ratio

(in Percentage)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	131.77	131.29	122.59	135.64	152.19	134.70	10.88	8.08
SMCL	26.27	18.12	24.69	45.26	20.58	26.98	10.72	39.71

Source: Worked out in Appendices 7 & 8.

Table 4.12 discloses the observed result of current ratio of JMCL and SMCL during the period of FY 2060/061 to 2064/065. The data given in the table exhibits that the current ratio of JMCL is maximum of 152.19% in FY 2064/065 and minimum of 122.59% in FY 2062/063 with average of 134.70%. The ratios of JMCL are 131.77%, 131.29%, 122.59%, 135.64%, and 152.19 for the respective year of the study period. An absolute measure in standard deviation of 10.88% and relative measure in CV of 8.08% of JMCL are obtained. Similarly, the current ratio of SMCL is maximum of 45.26% in FY 2063/064 and minimum of 18.12% in FY 2061/062, with an average ratio of 26.98% that reflects the ratio is highly fluctuating over the study period. The ratios are 26.27%, 18.12%, 24.69%, 45.26%, 20.58% and 26.98% FY 2060/061 to 2064/065 respectively. And, an absolute measure in standard deviation of 10.72 and relative measure in CV of 39.71% of SMCL are obtained. Having smaller CV of JMCL is said to be more uniform or stable than the SMCL having larger CV.

Figure 4.12: Current Ratio

The above figure clearly indicates that the current ratio of JMCL is very high than the SMCL over the study period. A high current ratio indicates excessive investment in current assets leading to under utilization of firm's resources causing to lower profitability position. In the same way, a low ratio indicates inability to meet its short-term obligation that may lead to loss of goodwill and lower margin of safety. So, the satisfactory level of current ratio can leads the firm into higher profitability position and makes the firm able to maintain short-term solvency. Current ratio of SMCL is always below than the theoretical norms of 2:1, which means the society has invested its assets in current assets less than the necessary. So, it has high risk of losing the image of goodwill due to not meeting its short-term obligation. Similarly in the case of JMCL, the current ratio is always below the standard ratio of 2:1 in the study period but higher than the current ratio of SMCL. The average current ratio of JMCL is 134.70% which is better situation of resource utilization and low risk of losing the image of goodwill. SMCL has very high risk because they can't give the return on saving account on time due to very lower current ratio.

4.5.2 Quick Ratio

With quick ratio, the ability of the firm to convert its current assets into cash quickly, to meet its current obligations is observed. When inventory and prepaid are deducted from the current assets and divided by the current liability, quick ratio is obtained. Inventory is deducted because they take more time to be converted in assets, and can hardly be converted into cash. This is a more penetrating test than current ratio, where 1:1 (or, 100%: 100%) is considered generally as an acceptable range. A high ratio would be advantageous as it provides cushion for no fixed deposits. However, too high ratio is disadvantageous as capital is tied up in the unproductive assets i.e. cash and bank balance.

Table 4.13: Quick Ratio

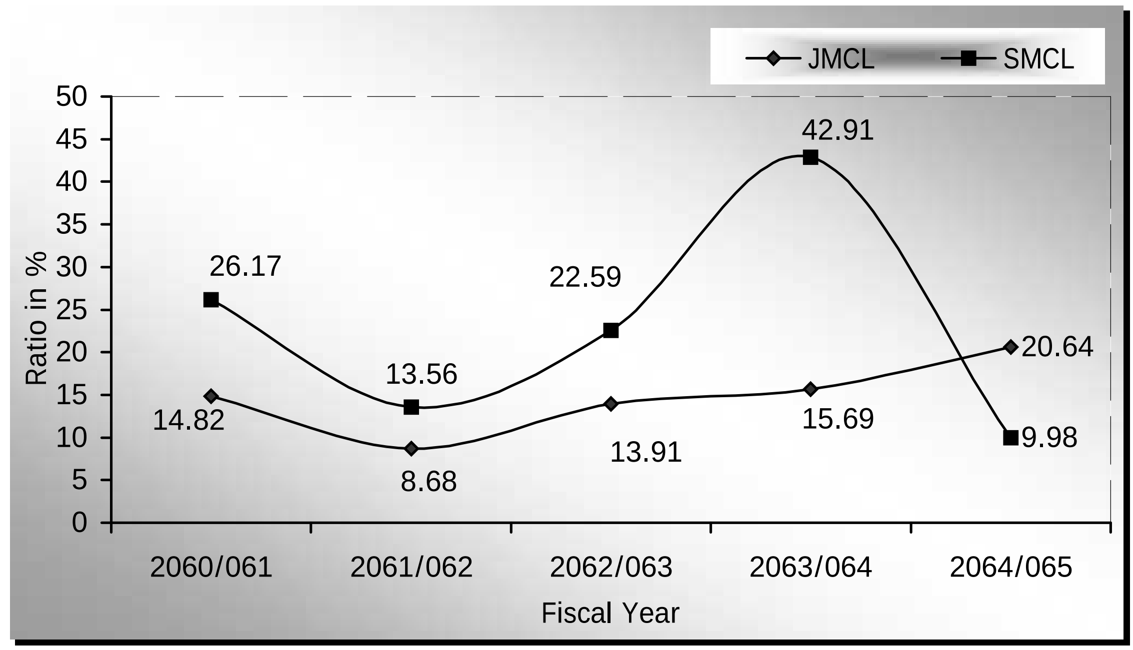
(in Percentage)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	14.82	8.68	13.91	15.69	20.64	14.75	4.28	28.99
SMCL	26.17	13.56	22.59	42.91	9.98	23.04	12.90	55.97

Source: Worked out in Appendices 7 & 8.

Table 4.13 reveals that cash and bank balance to current liability ratio of SMCL is quite higher than that of JMCL in average over the study period. JMCL has quick ratio of 14.82%, 8.68%, 13.91%, 15.69% and 20.64% respectively during the study period with an average of 14.75%. In the base year, quick ratio is 14.82% of JMCL but in FY 2061/062 it is 8.68% thereafter it is increased year by year. Similarly, SMCL has cash and bank balance to current liability ratio of 26.17%, 13.56%, 22.59%, 42.91%, and 9.98% respectively during the study period with an average ratio of 23.04%. The cash and bank balance to current liability ratio of both the societies have less than standard norms of 1:1 over the study period with fluctuating trend. Comparatively, the ratio of SMCL is quite fluctuating than SMCL over the study period. SMCL has higher ability to pay its quick financial obligation than JMCL.

Figure 4.13: Quick Ratio



In addition, JMCL has 4.28% risk on absolute measure and 28.99% in relative measure of CV. Thus, lower level of CV indicates more consistency of cooperative operation. But, SMCL has 12.90% risk on absolute measure and 55.97% in relative measure of CV; more CV indicates less consistent for the smooth operation of the cooperative in terms of management of quick ratio of comparison to JMCL. The ratio of JMCL is in increasing trend and the ratio of SMCL is in fluctuating trend but the last year of the study period it is heavily decreased.

4.6 Statistical Analysis

Statistical tools are also used for the study purpose, to analyze the data for achieving the objectives and analyzing of relationship of different variables.

4.6.1 Coefficient of Correlation between Debt and Return

The prime intention/purpose of computing the correlation coefficient is to examine whether the debts are significant in generating more returns or not, which may assist the cooperative to take sufficient decisions pertaining to their capital structure. The correlation between return (Y) and debt (X), return being dependent on debt, of the cooperatives is analyzed in order to know whether increase in debt capital portion in the capital structure increases return or not. The following result has been obtained for the JMCL and SMCL over the study period –

Table 4.14: Correlation Coefficient between Debt and Return

Co-op	r	r^2	P.E.	6 P.E.	Relationship	Condition	Sig./Insig.
JMCL	0.9627	0.9269	0.0221	0.1323	Positive	r > 6 P.E.	Significant
SMCL	0.9668	0.9346	0.0197	0.1184	Positive	r > 6 P.E.	Significant

Source: Worked out in Appendix 9(A) & 9(B).

As shown in table 4.14, coefficient of correlation between debt and return of JMCL and SMCL, has been found 0.9627 and 0.9668 respectively, which shows the positive correlation. The positive correlation indicates that the increasing level of debt amount increases the returns of cooperatives. Similarly, coefficient of determinant (r^2) indicates that 92.69% of the variation in return is explained by debt amount of JMCL whereas 93.46% of variation in return is explained by debt amount of SMCL. It has been found that the value of correlation coefficient (r) is greater than 6 times of probable error (P.E.) in both the cooperatives. It indicates that the value of 'r' is significant having positive relationship. Although, there is significant relation between the tested variables, on the basis of coefficient of determinant (r^2) SMCL is most significant than JMCL due to higher variation of 93.46% in SMCL than that of 92.69% variation in JMCL.

4.6.2 Coefficient of Correlation between Interest Charges and EBIT

The correlation between interest charges (X) and EBIT (Y) is evaluated to measure the relationship of debt-servicing capacity of the cooperatives. Here, the correlation between interest charges and EBIT, EBIT (Y) being dependent on interest charges (X) of both the cooperatives, is analyzed in order to know whether increase in interest charges requires to increase the EBIT or not. The table 4.15 shows the relationship between the specified variables of JMCL and SMCL over the study period.

Table 4.15: Correlation Coefficient between Interest Charges & EBIT

Co-op	r	r^2	P.E.	6 P.E.	Relationship	Condition	Sig./Insig.
JMCL	0.9940	0.9881	0.0036	0.0215	Positive	r > 6 P.E.	Significant
SMCL	0.9917	0.9836	0.0049	0.0297	Positive	r > 6 P.E.	Significant

Source: Worked out in Appendix 9(C) & 9 (D).

Table 4.15 exhibits the correlation coefficient between interest charges and IBIT, interest charges being independent on EBIT of JMCL and SMCL, has been found 0.9940 and 0.9917 respectively. There is high degree positive relationship in both the cooperatives, which implies that increases in interest charges, increases the EBIT. Coefficient of determination (r^2) of JMCL shows that 98.81% of variation in EBIT is explained by interest charges of SMCL. It also has been found that the value of 'r' is greater than 6 times of P.E. in both the cooperatives; therefore the correlation coefficient is highly significant in both the cooperatives.

4.6.3 Coefficient of Correlation between Deposit and Investment

The correlation coefficient between deposit and investment is evaluated to measure the relationship between them. Here investment (Y) is dependent variable and deposit (X) is independent variable. The investigator tries to find out where increase in deposit requires increasing in investment or not. The table 4.16 shows the comparable evaluative measure of correlation coefficient between JMCL and SMCL during the study period.

Table 4.16: Correlation Coefficient between Deposit and Investment

Co-op	r	r^2	P.E.	6 P.E.	Relationship	Condition	Sig./Insig.
JMCL	0.9988	0.9976	0.0007	0.0043	Positive	r > 6 P.E.	Significant
SMCL	0.9895	0.9792	0.0063	0.0376	Positive	r > 6 P.E.	Significant

Source: Appendix 5 & 6.

Table 4.16 has shown that the correlation coefficient (r) between deposit and investment of JMCL and SMCL are 0.9988 and 0.9895 respectively. Both the cooperatives have high degree of positive relationship, which implies that the increases in deposit, increases the investment. Coefficient of determination (r^2) shows the 99.76% of variation in investment is explained by deposit of JMCL whereas 97.92% of variation in investment is explained by deposit of SMCL. It has been also found that the value of 'r' is greater than 6 times of P. E. in both the cooperatives therefore the correlation coefficient is highly significant. Above table clears that there is positive relationship between deposit and investment of both the cooperatives, they move in the same positive direction. So, deposit affects the investment of the cooperatives.

4.7 Time Series Analysis

Time series analysis is one of the quantities methods, which is used to determine the pattern in data collected over the regular interval of time. It is very useful tool to analyze the financial performance as well as to forecast the future trend. The study of trend allows describing a historical pattern, to project past pattern and to project trend in the future. Here, the trend of deposit, profit, and net interest income are analyzed for the study purpose on the basis of past five years.

4.7.1 Trend Analysis of Deposit

Collection of deposit is very essential for the cooperatives. Economic activities start from the collection of saving amount. Scattered money should be changed to accumulated capital by the means of saving in the cooperatives. Deposit collection generates the profit by mobilizing the deposit. That is why; amount of deposit is the indication of sound performance, which can be evaluated with the help of trend analysis.

Table 4.17: Deposit Trend

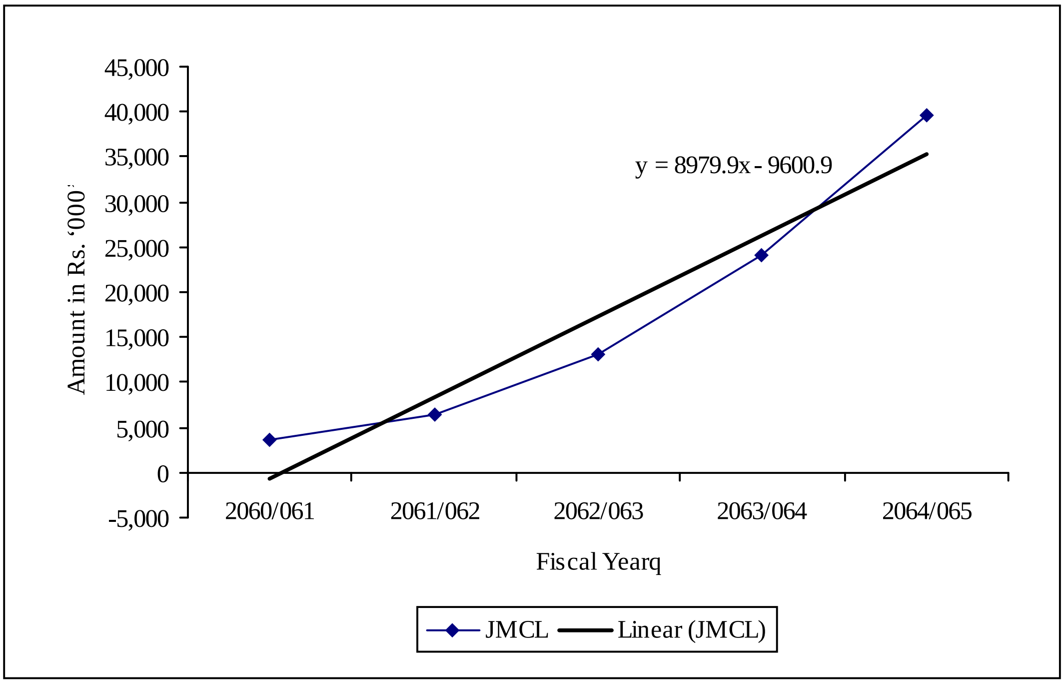
(in Rs '000)

Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	3,558	6,356	13,107	24,075	39,598	17,339	14,742	85.02
% Change	325.04	78.63	106.22	83.67	64.48			
SMCL	5,956	7,059	6,731	11,102	21,694	10,510	6,563	62.44
% Change	31.35	18.68	-4.78	64.95	95.40			

Source: Appendix 5 & 6.

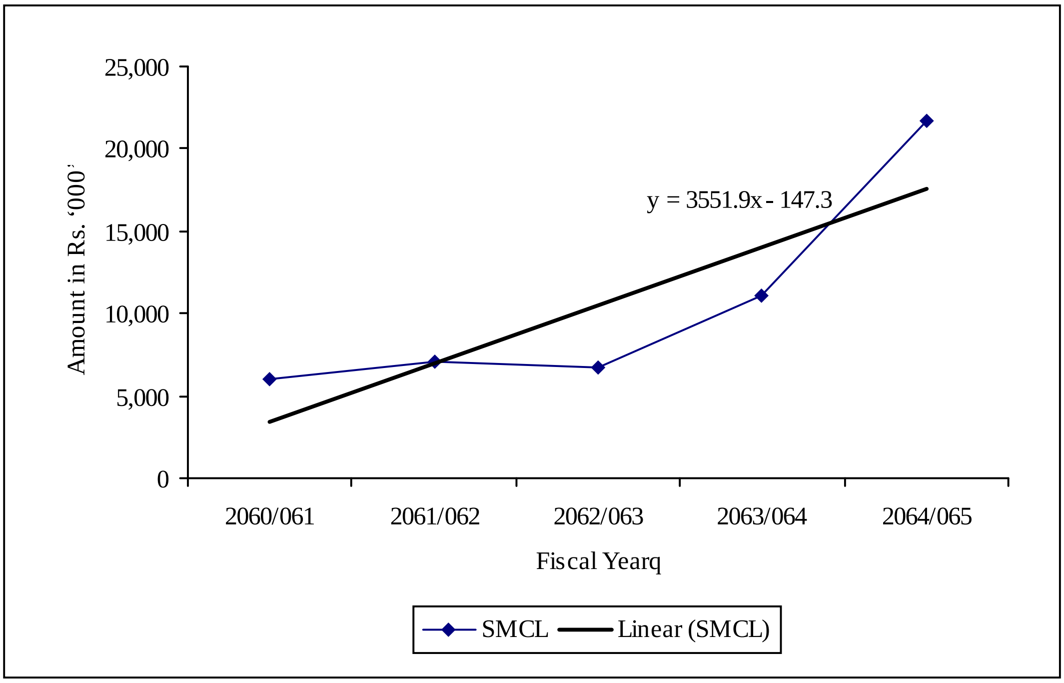
Table 4.17 presents the amount of deposit of JMCL and SMCL for the period from FY 2060/061 to 2064/065. The deposit amount of JMCL is increasing per year during the study period nearly by double amount as the membership trend is increasing. JMCL's respective increment rates in deposit are 325.04%, 78.63%, 106.22%, 83.67%, and 64.48% over the study period. This increment deposit rate indicates good condition for financial planning. Similarly, the deposit trend of SMCL is also in increasing but in the FY 2062/063, it is decreased by 4.78% than that of FY 2061/062. SMCL's respective increment rates in deposit are 31.35%, 18.68%, -4.78%, 64.95%, and 95.40% during this five-year period. The average deposit amount of JMCL and SMCL is Rs 17,339 thousands and Rs 10,510 thousands respectively. The variation in absolute and relative term of JMCL is Rs 14,742 thousands and 85.02%, and also of SMCL are Rs 6,563 thousands and 62.44% respectively. The higher value of CV of JMCL indicates the greater dispersion on deposit.

Figure 4.14: Trend Analysis of Deposit of JMCL



The amount of deposit of JMCL is mentioned in the figure 4.14 which reflects Rs 3558, Rs 6356, Rs 13107, Rs 24075, and Rs 39598 thousands amount of deposit in FY 2060/061 to 2064/065 respectively. Further more, it shows the trend line of deposit over the study period with actual values. As shown in the figure 4.17, the actual line shows the deposit amount of JMCL is increasing trend over the study period. Here increasing trend of deposit of JMCL indicates the high risk.

Figure 4.15: Trend Analysis of Deposit of SMCL



Similarly, the amount of deposit of SMCL is depicted in figure 4.15, which shows the amount of deposit over the study period in actual values. The actual trend line shows the deposit amount of SMCL is increasing trend in FY 2060/061 to 2064/065.

4.7.2 Trend Analysis of Investment

Investment or lending is the primary function of every cooperative society. Collected funds should be invested in such manner that it should support to uplift the economic status of its member. For the sound operation of the co-operative, proper utilization of fund is required.

Table 4.18: Investment Trend

(in Rs '000)

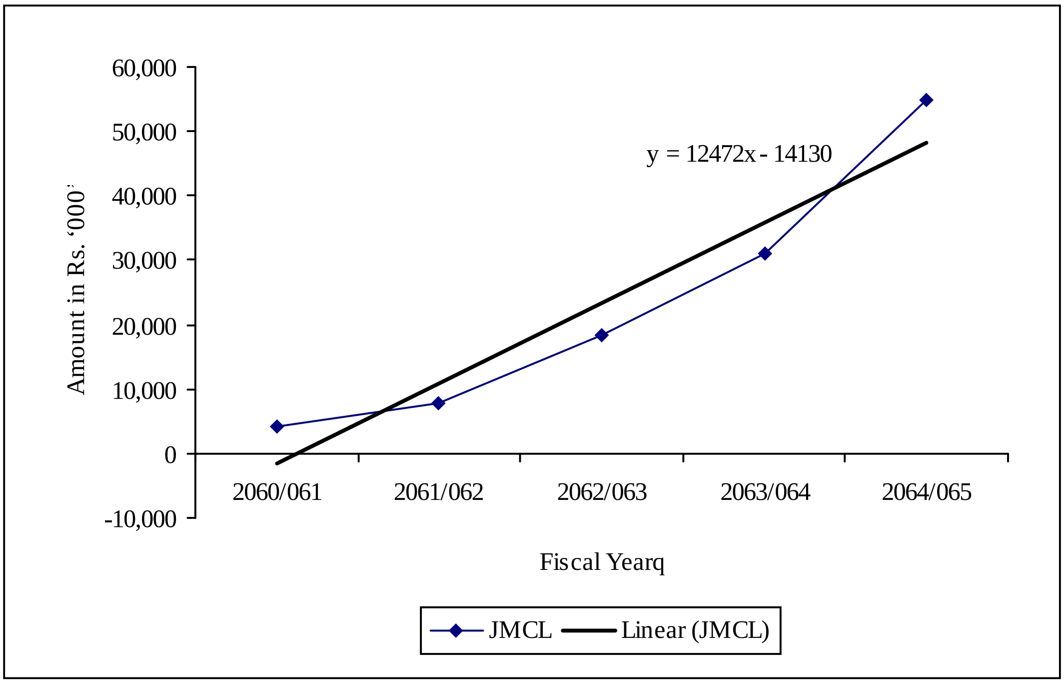
Co-op	2060/061	2061/062	2062/063	2063/064	2064/065	Avg.	SD	CV
JMCL	4,179	7,859	18,392	31,069	54,936	23,287	20,551	88.25
% Change	381.62	88.04	134.03	68.93	76.82			
SMCL	7,593	10,768	10,908	13,559	28,735	14,313	8,335	58.23
% Change	18.84	41.81	1.30	24.30	111.92			

Source: Appendix 5 & 6.

The data given in the table 4.18, exhibits that investment trend of JMCL and SMCL for the period of 2060/061 to 2064/065. JMCL has invested Rs 4,179 thousands in FY 2060/061 and the investment has continuously increased and finally reached to Rs 7,859 thousands, Rs 18,392 thousands, Rs 31,069 thousands, and Rs 54,936 thousands in the FY 2061/062 to 2064/065 respectively. The investment of JMCL is highly increased in FY 2060/061 and FY 2062/063. The respective increment rates of JMCL in investment are 381.62%, 88.04%, 134.03%, 68.93%, and 76.82% over the study period. An average investment amount of JMCL is Rs 23,287 thousands and the highest investment of the cooperative is Rs 54,936 thousands in FY 2064/065. An absolute measure in standard deviation is Rs 20,551 thousands, and relative measure in CV is 88.25%.

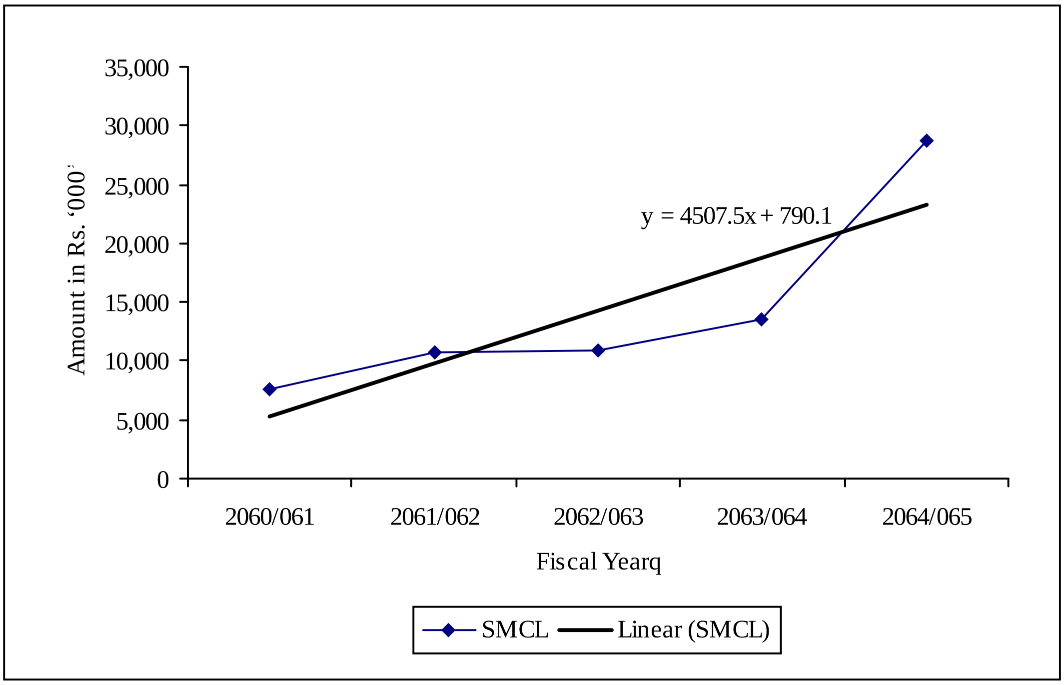
Similarly, SMCL has invested Rs 7,593 thousands in FY 2060/061 and thereafter it has been continuously increased and finally reached to Rs 10,768 thousands, Rs 10,908 thousands, Rs 13,559 thousands and Rs 28,735 thousands over the study period respectively. The investment of SMCL is highly increased in FY 2064/065. The respective increment rates of SMCL in investment are 18.84%, 41.81%, 1.30%, 24.30%, and 111.92% over the study period. An average investment amount of SMCL is Rs 14,313 thousands and the highest investment of the cooperative is Rs 28,735 thousands in FY 2064/065. An absolute measure in standard deviation is Rs 8,335 thousands, and relative measure in CV is 58.23%. The smaller ratio in CV of SMCL is said to be more consistent and less variable in comparison to JMCL.

Figure 4.16: Trend Analysis of Investment of JMCL



The amount of investment of JMCL is mentioned in the figure 4.16 which is mentioned in the figure 4.19 which shows Rs 4,179, Rs 7,859, Rs 18,392, Rs 31,069 and Rs 54,936 thousands amount in investment for FY2060/061 to FY 2064/065 respectively. The increasing trend line of investment clearly shows the proper utilization of collected fund.

Figure 4.17: Trend Analysis of Investment of SMCL



The figure 4.17 shows the trend line of investment amount over the study period with actual values. The investment amount for the study period of 2060/061 to 2064/065 of SMCL in figure 4.20 shows Rs7,593, Rs10,768, Rs10,908, Rs13,559 and Rs28,735 thousands respectively. Such increment in investment may reflect of expecting high return by taking high risk.

4.8 Major Findings of the Study

The major findings of the study on capital structure, profitability and liquidity management of Nepalese cooperative societies as comparative case study between JMCL and SMCL are as follows-

4.8.1 Debt assets ratio of JMCL is increasing from base year up to the FY 2062/063 thereafter decline during the study period. But in the case of SMCL, D/A ratio is decreasing from the base year up to the FY 2062/063, thereafter increase over the study period. D/A ratio of both the cooperatives are in reverse relation so that its trend goes in opposite direction. Average D/A ratio of JMCL is quite higher than that of SMCL and variability. So, the JMCL is more risky than SMCL because the cooperative using more debt proportion pays the large amount of interest on debt from its income. The D/A ratios of JMCL have always higher (except in the last year of the study period) than that of SMCL. So, it can be said that JMCL is highly leveraged in comparison to SMCL. It means JMCL has resorted more debt financing.

4.8.2 The debt to equity ratio of both the cooperatives is fluctuating over the study period. The D/E ratios of these cooperatives have gone in opposite direction. D/E ratio of JMCL is quite higher than SMCL in terms of average by 92.41% (i.e. 294.97%>202.56%) due to large amount in debt financing. A high D/E means the higher contribution of creditors (deposit holder) in total financing than the owners. Thus, the creditors are investing more in total financing of JMCL than SMCL over the study period. SMCL is more consistency in comparison to JMCL because of lower CV of SMCL (i.e. 18.63 %< 29.24%). JMCL seems relatively more leveraged and more risky cooperative than SMCL.

4.8.3 Capital adequacy ratio of both the cooperatives has remained unstable and fluctuating over the study period. Average CAR of SMCL is higher than of JMCL, so the SMCL is financially sound and has higher security to the depositors. More CV of JMCL indicates less uniform or less consistency for the smooth operation of the cooperative in terms of management of CAR in comparison to SMCL. In this sense, capital adequacy position of SMCL is better than that of JMCL.

4.8.4 An average LTD to CE ratio of SMCL is lower than that of JMCL (i.e. 18.94%<45.56%). A lower ratio of SMCL indicates safe side to the creditors as well as to the member to the member shareholders. Higher level of relative measure on CV of SMCL shows the less consistent in its ratio.

4.8.5 NIM of both the cooperatives has been fluctuated over the review period. The average NIM ratio of JMCL has been found higher than that of SMCL (i.e. 5.62%>3.22%). That is why; JMCL seems to be more efficient in utilizing its assets and liabilities management in interest generating purpose. JMCL also seems more consistency (homogeneous) in terms of lower level of standard deviation and lower level CV as compared to SMCL.

4.8.6 Interest coverage ratio of JMCL is more fluctuated than that of SMCL because ICR of JMCL and SMCL is ranged from 1.76 times to 2.69 times and from 1.05 times to 1.29 times for the respective cooperative. The mean ratio of JMCL is higher and variability of the ratios of JMCL is more consistent than that of SMCL (i.e. 2.21 times>1.21 times). That is why;

JMCL is better because greater ICR indicates greater ability of the firm to handle the fixed charges and gives more assurance for payment of interest to the creditors. Higher ICR of JMCL indicates the greater debt servicing capacity.

4.8.7 Total expenses to total income ratio of JMCL is maximum in FY 2061/062 with 69.02% and minimum in FY 2063/064 with 48.87%. Similarly, the ratio of SMCL is maximum in FY 2061/062 with 96.23% and minimum in FY 2063/064 with 83.03%. A low ratio of JMCL in total expenses to total income indicates efficient profitability of the cooperative. The lower level of relative measure on CV of SMCL (i.e. 6.33%<15.48%), indicates more consistent and uniformity.

4.8.8 ROA ratio of JMCL is in increasing trend but in the last year of the study period little decreases with mean ratio of 4.14%. Moreover, the ratio of SMCL is fluctuated over the study period with mean ratio of 1.53%. Throughout the study period, the ROA ratio of JMCL is most preferable and more efficient in utilizing its overall resources due to higher level of mean ratio. But, the higher level of absolute measure (i.e. 0.80%>0.60%) of JMCL indicates high risk and the lower level of relative measure (i.e. 19.23 % < 39.52%) indicates more consistency on the ratio with comparing to SMCL.

4.8.9 ROCE ratio of JMCL is in decreasing trend although in the FY 2061/062 it is maximum by 19.36% and minimum of 9.13% in the last year. But, the ratio of SMCL in FY 2061/062 is low then after it is in the increasing trend with maximum ratio of 27.21% in beginning year and minimum ratio 16.38% in the second year of the study period. An average ratio of SMCL is higher than that of JMCL i.e. 21.24%>14.26%, which indicates SMCL is more efficient to utilize the funds to generate profit. Higher ratio of SMCL shows the better productivity of permanent capital in terms of return. The higher level of relative measure on CV of JMCL (i.e. 6.33%<15.48%) indicates more consistent.

4.8.10 ROD ratio of JMCL is moving upward in comparison to SMCL. The highest ROD ratio is 7.92% in FY 2063/064 and the lowest ratio is 4.59% in FY 2061/062 with average ratio of 6.19% of JMCL. Similarly in the case of SMCL, the highest ratio is 3.45% in FY 2062/063 and the lowest ratio is 0.76% in FY 2061/062 with an average ratio of 2.52%. The ROD of SMCL is not favorable and less consistent with comparing to JMCL due to lower level of average return and higher level of relative measure. Comparatively, higher ROD ratio of JMCL indicates better utilization of deposits.

4.8.11 ROE of JMCL is also moving upward in comparison to SMCL. The ratio of JMCL and SMCL is ranged from 12.19% to 22.19% and from 1.34% to 5.93% for respective cooperative societies. Lower level of relative measure on CV of JMCL indicates more consistent in the ratio than SMCL. The JMCL has found more efficient to utilize shareholder's fund to generate more profit due to higher ROE ratio.

4.8.12 Current ratio of SMCL has found always below than the theoretical norms (i.e. 2:1), which means the society has invested its assets in current assets less than the necessary. The ratio of JMCL has found close the standard of 2:1. The average current ratio o JMCL is higher than that of SMCL (i.e. 134.70%>26.98%). The higher current ratio of JMCL (than standard norm) indicates the under utilization of resources and causes to lower profitability position. Similarly, lower level of current ratio of SMCL represents the high risk of losing the image of goodwill due to not meeting its short-term obligation.

4.8.13 Quick ratio or, cash and bank balance to deposit ratio of both the societies has found less than standard norms of 1:1 over the study period with fluctuating trend. The average quick ratio of JMCL and SMCL is respectively 14.75% and 23.04% over the study period. SMCL has higher ability to pay its quick financial obligation with comparison to JMCL. Comparatively, a high ratio of SMCL would be advantageous as it provides cushion for no fixed deposit.

4.8.14 The correlation between the debt and return of JMCL and SMCL has been found 0.9627 and 0.9668, which shows positive relationship between variables respectively. Considering the probable error, the value of 'r' in JMCL and SMCL is greater than 6 times of P.E. that depicts the debt of both the cooperatives is significant in generating more return.

4.8.15 The correlation coefficient between the interest charges and EBIT of JMCL and SMCL has been found 0.9940 and 0.9917 respectively. There is positive and significant relationship between the tested variables due to value of 'r' is positive and it is greater than 6 times of P.E. Comparatively, the higher value of coefficient of determinant (r^2) of JMCL shows the line of best fit really than SMCL.

4.8.16 The correlation between the deposit and investment of JMCL and SMCL has been found 0.9988 and 0.9895 respectively with positive and significant relationship between the tested variables. The positive and significant relationship of both the cooperatives indicate the increasing level of deposit also increases the investment of the cooperative.

4.8.17 The deposit trend of both the cooperatives has been increased but of the SMCL in FY 2062/063 it is little decreased i.e. by 4.78% than that of FY 2061/062 of SMCL. The average deposit amount of JMCL is higher (i.e. 17,339 thousands>10,510 thousands) than that of SMCL over the study period. Unexpectedly, the deposit amount of JMCL is increased by 325.04% in FY 2060/061 because of heavy increase in membership. Higher value of CV in JMCL indicated the less consistent in deposit.

4.8.18 The investment trend of both the cooperatives has also been increased because of increment in deposit and to facilitate its members. The investment of Rs 54,936 thousands in FY 2064/065 is greatly utilized by the JMCL, which is extremely high. The average investment of JMCL is higher than that of SMCL. Comparatively, SMCL has less CV, which indicates the more homogeneous in investment.

4.8.19 Correlation coefficient between debt and return of JMCL and SMCL has been found positive and significant. The positive correlation of cooperatives indicates if the level of debt is increased the returns also increases of the cooperatives.

4.8.20 Both the cooperatives have high degree of positive relationship, which implies that the increases in deposit increase the investment. Correlation coefficient of both the cooperatives has been highly significant.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

After analysis and interpretation of the tabled data, this chapter proceeds toward the final component of the study. This chapter includes three aspects of the study: summary, conclusion, and recommendations. The first aspect summarizes the whole study, the second draws the conclusion, and the last one forwards the recommendations for the benefit of cooperative with special reference to JMCL and SMCL as well as concerned persons and organizations.

5.1 Summary

The concept of cooperative is not a new for Nepal as we have already practiced the traditional form of cooperative i.e. Parma, Manka-Jya, Dhikuri etc. Since 2010 BS Nepal has started the cooperative practices in the modern line after establishing the cooperative department. Then several policy, program, rules and other sort of afford have been made for the cooperative development in Nepal.

The enactment of Cooperative Act 2048 have helped to create a friendly and appropriate environment for making legislative reforms and policy measures for overall development process of cooperative. The preamble of cooperatives act 2048 announced the objectives as: (i) to eliminate poverty, (ii) to obtain socio-economic development of rural masses, (iii) to develop cooperatives and coordination among cooperatives, (iv) to provide sufficient opportunity of employment and (v) to establish social and economic justice with in the country. Likewise, the constitution of the kingdom of Nepal 2047 have announced under the heading of directive principles and policies of the state that "the state follow a policy of making continuous efforts to institutionalize peace of Nepal through international recognition, by promoting cooperative and good relations in the economic, social and other spheres on the basis of equality with neighboring and all other countries of the world." In this sense, cooperative should be great hopes for the socio-economic uplift of the country.

Cooperative is a most significant means for mobilizing scattered saving and putting them in productive use for the benefit of the poorer sections of the society. Cooperatives are the catalyst of independent life of people as it makes free people from the exploitation of landlord and capitalists. In Nepal, cooperative can be regarded as a most significant device for socio-economic betterment of the poor people and socio-economic justice. Thus, cooperative is undoubtedly a key variable in terms of socio-economic development of the country.

The study has analyzed the capital structure, profitability, and liquidity management of cooperatives in Nepalese context; with a special reference to JMCL and SMCL over the five years study period from FY 2060/061 to FY 2064/065 by following a descriptive and analytical research design. JMCL and SMCL is taken as a study unit with applying convenience sampling method out of 9362 cooperative societies in Nepal. The study is based on the secondary data, such as annual report and financial statements of the respective cooperatives and related websites are also used as major sources of data. In this study, various financial and statistical tools have been used to get the meaningful result and to meet the research objectives. The main objectives of the study is to measure the effectiveness of capital structure, to analyze the level of deposit and investment, to determine the interest from investment and interest on deposit, to measure the profitability ratio, and to assess the liquidity position of the sampled two cooperatives to provide suggestion and recommendation for their improvement.

The study is completed based on the secondary data and various information or materials are received from journals, articles, dissertations, published books to conduct the study work. The conceptual review includes concept of cooperative, types of cooperative, benefits of cooperative, history of cooperative, concept of capital structure, profitability and liquidity. Besides these, reviews of Nepalese journals/articles, review of unpublished master's dissertations are carried out under research review. The research methodology is followed to achieve the objective of the study, which relates with research design, nature and sources of data, population and sample, data processing and methods of analysis. Financial tools (various ratios) and statistical tools (average, standard deviation, coefficient of variation, correlation coefficient, coefficient of determinant, probable error) have been used according to requirement to achieve the objectives.

The analysis has been made especially to compare the various ratios between the two cooperatives. JMCL is more risky than SMCL because average D/A ratio of JMCL is higher. D/E ratio and CAR of both the cooperatives are fluctuating during the study period. JMCL seems more efficient in utilizing its assets in interest generating purpose because of higher average NIM ratio. Higher ICR of JMCL indicates greater ability of the cooperative to handle the fixed charges. A low ratio of JMCL in total expenses to total income indicates efficient profitability of the cooperative. The ROA ratio of JMCL is most preferable due to higher level of mean ratio but riskier due to higher standard deviation.

5.2 Conclusions

Based on the major findings of the study, following conclusions have been drawn by analyzing the capital structure, profitability, and liquidity management of Nepalese cooperatives with special reference to JMCL and SMCL: -

5.2.1 D/A ratio of both the cooperatives are in reverse relation so that its trend goes in opposite direction. Average D/A ratio of JMCL is quite higher than that of SMCL and variability between the ratios of SMCL is more uniform than that of JMCL. The JMCL is more risky than SMCL because the cooperative using more debt financing pays the large amount of interest on debt from its income.

5.2.2 D/E ratio of both the cooperatives is fluctuating over the study period. A comparatively high D/E ratio of JMCL concludes that the higher contribution of creditors (deposit holders) in total financing than the owners. So, the JMCL seems to be more risky and more variable (not consistent).

5.2.3 An average CAR of SMCL is higher than that of JMCL, so the SMCL is financially sound and has higher security to the depositors. Having smaller CV of SMCL is said to be more uniform or, stable than the JMCL having larger CV with respect to CAR. In this viewpoint, capital adequacy position of SMCL is better than that of JMCL.

5.2.4 An average LTD to CE ratio of SMCL is lower, which indicates the safe side to the creditors and to the member shareholders.

5.2.5 The JMCL seems to be more efficient in utilizing its assets in interest generating purpose due to higher average NIM ratio. The JMCL has smaller NIM ratio of standard deviation and CV; concludes the more consistent or less variable as compared to SMCL.

5.2.6 ICR of JMCL is more fluctuated than SMCL. The higher ICR value of JMCL has concluded the greater ability to handle the fixed charges and gives more assurance for payment of interest to the creditors.

5.2.7 A low ratio of JMCL in total expenses to total income concludes the efficient profitability situation. The lower level of relative measure on CV of SMCL indicates more stable and consistent.

5.2.8 Throughout the study period, the ROA ratio of JMCL is most preferable and more efficient in utilizing its overall resources due to higher level of mean ratio. Moreover, the higher value of SD of JMCL concludes the more variable or, more risky in comparison to SMCL.

5.2.9 Comparatively, higher average ROCE ratio of SMCL concludes, the more efficient utilization of funds to generate the profit and better productivity of permanent capital in terms of return.

5.2.10 The higher ROD ratio of JMCL concludes the better utilization and better efficiency for deposit mobilization. Relative measure on CV of SMCL has found higher which concludes the more variable and less stable.

5.2.11 The JMCL has found more efficient to utilize shareholder's fund to generate more profit due to higher ROE ratio. Comparatively, lower level of relative measure on CV of JMCL indicates more consistent in the ratio than SMCL.

5.2.12 The higher current ratio of JMCL indicates the under utilization of resources and causes to lower profitability position. Similarly, lower level of current ratio of SMCL represents the high risk of losing the image of goodwill due to not meeting its short-term obligation.

5.2.13 Quick ratio of both the societies has found less than the standard norms of 1:1 over the study period with fluctuating trend. The SMCL has higher ability to pay its quick financial obligation with comparison to JMCL due to higher average quick ratio. Comparatively, a high ratio of SMCL would be advantageous as it provides cushion for no fixed deposits.

5.3 Recommendations

The following recommendations have been made on the basis of foregoing analysis and conclusions of the study for the improvement of the financial performance regarding the capital structure, profitability and liquidity position of the sampled cooperatives (i.e. JMCL and SMCL).

5.3.1 The prime function of cooperative is to utilize the deposits effectively. Here the investment trend of both the cooperative is fluctuated. So, the suggestion goes to both the cooperatives to maintain consistent increase in deposit utilization rate.

5.3.2 Presently, the cooperatives have to compete with banks and finance companies for attracting deposits. For this, it is recommended to -

i. Set a more convenient minimum balance requirement to open an account.
ii. Provide incentives for attracting new fixed deposits.
iii. Try to collect more institutional deposits.
iv. Collect more deposits from door to door system.
v. Attract the cooperative members for saving habit by providing various saving account.

5.3.3 Both the cooperatives should invest in long term as well as short term investment with liberal lending policy and also grant the loan to the members with reasonable interest rate for more deposits utilization.

5.3.4 The total expenses to total income ratio of SMCL is very high over the study period. So, it is recommended to the management of SMCL to reduce the cost, which positively affects the profitability of the cooperatives.

5.3.5 The proportion of debt and equity capital should be the effective so that to take the tax advantage and to maintain financial distress. Since the D/E ratio of JMCL has been found extremely high hence the capital structure position is aggressive due to greater public deposit. The JMCL is required to maintain improved debt equity proportion by increasing equity capital (i.e. either issuing more share or, expanding general reserve or retained more earnings) considering the conflict factors of cost and risk of the cooperative.

5.3.6 JMCL should increase the capital adequacy ratio to make the sound and strong financial position and to give the higher security to the depositors, otherwise the trust of the depositors will loss. It is recommended to increase the total capital fund of the JMCL.

5.3.7 By attracting the depositors both the cooperatives specially SMCL should increase the earning or, EBIT by reducing the controllable cost because of lower ICR.

5.3.8 ICR of SMCL is lower, which indicates the poor debt servicing capacity. So, the higher ratio is favorable, and it is recommended to SMCL to improve the ICR efficiently. It is necessary to sustain the business in long run.

5.3.9 ROA & ROE ratio of both the cooperatives is decreased so it is recommended to utilize its resources & fund in most profitable sectors.

5.3.10 A low current ratio of SMCL indicates inability to meet its short term obligation that leads to loss of goodwill and lower margin of safety. So, it is recommended to increase the portion of current assets. And, also recommendation goes to JMCL to increase the current ratio which leads sound utilization of firm's resources and causes of higher profitability position.

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Appendix 1

Sanchaya Multipurpose Co-operative Limited (SMCL)

Pokhara-8, Kaski

Balance Sheet

(In Rs.)

Particulars	FY2060/061	FY2061/062	FY2062/063	FY2063/064	FY2064/065
1. Capital and Liabilities:					
Share capital (10)	25,40,000	36,47,500	43,03,000	51,54,500	80,40,000
Reserve and other funds(20)	3,72,344	3,67,222	6,03,722	8,32,486	11,69,407
Fixed Deposit (30)	2,90,000	24,71,066	10,40,540	15,51,272	13,04,000
Provision for loan (50)	-	1,07,605	1,13,462	1,41,491	3,18,606
Provision for income tax(50)	-	-	99,862	2,45,729	2,97,406
Total	32,02,344	65,93,393	61,60,586	79,25,478	111,29,419
2. Assets:					
Share investment (100)	-	8,000	42,000	72,400	1,54,400
Loan investment (110)	75,93,354	107,60,452	108,66,227	134,86,695	285,80,340
Fixed assets (130)	13,290	86,785	68,932	54,702	46,511
Total	76,06,644	108,55,237	109,77,159	136,13,797	287,81,251
3. Current Assets:					
Cash balance (80)	22,281	40,746	1,36,467	12,018	2,03,448
Bank balance (90)	15,41,015	6,65,426	13,08,342	44,47,974	20,13,969
Receivable Interest (120)	-	1,28,850	1,27,365	1,83,125	3,23,054
Sundry debtors (120)	-	1,00,000	-	55,000	20,25,000
Stationary balance (140)	5,426	7,823	7,251	6,328	7,671
Total	15,68,722	9,42,845	15,79,425	47,04,445	45,73,142
4. Current Liabilities:					
Recurring Saving A/C	56,66,098	45,97,742	56,90,287	95,51,085	203,90,255
Doubtful interest (50)	-	1,28,850	1,27,365	1,83,125	3,23,054
Accounts payable (60)	2,96,691	4,70,663	5,35,416	6,12,114	13,33,300
Sundry creditors (70)	10,233	7,434	42,930	46,440	1,78,365
Total	56,76,331	52,04,689	63,95,998	103,92,764	222,24,974
5. Total Liabilities (1+4)	91,75,366	117,98,082	125,56,584	183,18,242	333,54,393
6. Total Assets (2+3)	9175,366	117,98,082	125,56,584	183,18,242	333,54,393

Source: Annual Reports of the Co-operative.

Appendix 2

Jaya Manakamana Saving and Credit Co-operative Limited (JMCL)

Pokhara-2, Kaski

Balance Sheet

(In Rs.)

Particulars	FY2060/061	FY2061/062	FY2062/063	FY2063/064	FY2064/065
A. Capital & Liabilities					
1. Share & Reserve Fund:					
Share capital	10,50,700	17,85,700	30,12,800	70,83,900	193,17,200
Reserve fund	54,102	2,19,099	6,74,410	21,08,189	31,50,323
General reserve fund	1,24,111	1,27,169	3,63,193	3,63,193	-
2. Current Liabilities:					
Loan	-	-	-	17,06,831	15,70,000
Deposit	35,58,294	63,55,860	131,07,468	240,74,837	395,98,278
Sundry creditors	23,534	62,577	41,28,046	2,22,501	3,39,827
Total Current Liabilities	35,81,828	64,18,437	172,35,514	260,04,169	415,08,105
Total Capital & Liabilities	48,10,741	85,50,405	212,85,918	355,59,452	639,75,628
B. Assets					
3. Current Assets:					
Cash & bank balance	5,31,120	5,57,114	23,96,688	40,78,578	85,65,508
Loan investment	41,79,091	78,58,538	183,41,686	309,68,708	543,60,991
Advance & prepaid	10,288	10,288	3,90,141	2,23,950	2,45,000
Total Current Assets	47,20,499	84,25,940	211,28,516	352,71,237	631,71,499
4. Share Investment	-	-	50,000	1,00,000	5,75,000
5. Fixed assets	90,242	1,24,465	1,07,402	1,88,216	2,29,129
Total Assets	48,10,741	85,50,405	212,85,918	355,59,452	639,75,628

Source: Annual Reports of the Co-operative.

Appendix 3

Sanchaya Multipurpose Co-operative Limited (SMCL)

Savagriha Chock, Pokhara-8, Kaski

Income and Expenditure

(In Rs.)

Particulars	FY2060/061	FY2061/062	FY2062/063	FY2063/064	FY2064/065
Income					
A) Interest income (160.1):	9,88,732	12,18,885	142,74,452	17,67,119	27,80,498
Interest on loan investment	9,66,068	11,29,974	14,01,535	16,66,155	26,33,937
Interest on bank account	22,664	88,911	25,917	1,00,964	1,46,561
B) Other income (160.2)	1,15,973	2,12,072	1,14,709	2,35,781	5,71,457
Total Income (A+B)	11,04,705	14,30,957	15,42,161	20,02,900	33,51,955
Expenses					
Interest Expenses (150.1):	7,49,287	10,17,258	9,29,158	11,75,700	21,72,380
Recurring saving account	7,22,162	9,26,342	7,84,556	9,82,379	15,45,965
Normal saving account	-	-	14,990	88,185	4,95,194
Fixed deposit account	27,125	90,916	1,29,612	1,05,136	1,31,221
Salary & Bonus (150.2)	1,17,000	1,44,400	1,45,900	1,83,300	2,25,400
Operating expenses (150.3)	68,522	1,00,113	1,07,631	112621	1,64,936
Provision for loan (150.4)	-	1,07,605	5,857	28,029	1,77,115
Depreciation expenses (150.5)	2,008	8,003	21,753	17,030	13,991
Provision for income tax (150.6)	-	-	99,862	1,45,866	51,677
Total Expenses	9,36,817	13,77,379	13,10,161	16,62,546	28,05,499
Net Profit	1,67,888	53,578	2,32,000	3,40,354	5,46,456

Source: Annual Reports of the Co-operative.

Appendix 4

Jaya Manakamana Saving and Credit Co-operative Limited (JMCL)

Lamachaur, Pokhara-2, Kaski

Income and Expenditure

(In Rs.)

Particulars	FY2060/061	FY2061/062	FY2062/063	FY2063/064	FY2064/065
Income:					
A) Interest Income :	3,64,779	7,85,121	18,51,302	33,40,190	48,49,144
Interest on Loan Investment	344310	759610	1810110	3245145	4688397
Interest on Bank A/C	20469	25511	41192	95045	160747
B) Other Income	1,07,412	1,57,805	2,04,150	3,87,251	6,26,038
Total Income (A+B)	4,72,191	9,42,926	20,55,452	37,27,441	54,75,182
Expenses:					
Administrative Exp.	1,32,724	2,57,258	3,31,041	5,24,649	7,14,332
Financial Exp.	-	-	-	1,37,016	1,64,860
Depreciation Exp.	4,212	10,677	17,063	35,106	44,482
Total Exp.	3,06,710	6,50,794	11,56,238	18,21,575	27,36,208
Net Profit	1,65,481	2,92,132	8,99,214	19,05,866	27,38,974

Source: Annual Reports of the Co-operative.

Appendix 5

Sanchaya Multipurpose Co-operative Limited (SMCL)

Pokhara-8, Kaski

Deposit and Investment Trend

(In Rs.)

FY / Particulars	2059/060	2060/061	2061/062	2062/063	2063/064	2064/065
Deposit						
Regular Saving	43,29,539	56,66,098	45,97,742	49,11,770	71,59,254	86,70,961
Sanchaya Saving	-	-	-	7,78,527	23,91,831	117,19,294
Fixed (Time) deposit	2,05,000	2,90,000	24,71,066	10,40,540	15,51,272	13,04,000
Total Deposit	45,34,539	59,56,098	70,68,808	67,30,837	111,02,357	216,94,255
Percentage Increase	-	31.35	18.68	-4.78	64.95	95.40
Investment						
Share Investment	-	-	8,000	42,000	72,400	1,54,400
Loan Investment	63,89,615	75,93,354	107,60,452	108,66,227	134,86,695	285,80,340
Total Investment	63,89,615	75,93,354	107,68,452	109,08,227	135,59,095	287,34,740
Percentage Change	-	18.84	41.81	1.30	24.30	111.92

Source: Annual Reports of the Co-operative.

Appendix 6

Jaya Manakamana Saving & Credit Co-operative Limited (JMCL)

Pokhara-2, Kaski

Deposit and Investment Trend

(In Rs.)

FY / Particulars	2059/060	2060/061	2061/062	2062/063	2063/064	2064/065
Deposit						
Normal Saving	6,32,708	26,06,214	52,94,075	81,66,618	1,03,10,306	165,82,024
Fixed Deposit	2,04,460	9,52,105	10,62,109	49,40,850	1,37,64,531	2,30,16,254
Total Deposit	8,37,168	35,58,319	63,56,184	1,31,07,468	2,40,74,837	3,95,98,278
Percentage Increase	-	325.04	78.63	106.22	83.67	64.48
Investment						
Share Investment	-	-	-	50,000	1,00,000	5,75,000
Loan Investment	8,67,719	41,79,091	78,58,538	1,83,41,686	3,09,68,708	5,43,60,991
Total Investment	8.67.719	41,79,091	78,58,538	1,83,91,686	3,10,68,708	5,49,35,991
Percentage Change	-	381.62	88.04	134.03	68.93	76.82

Source: Annual Reports of Cooperative.

Appendix 7

Sanchaya Multipurpose Co-operative Limited (SMCL)

Pokhara-8, Kaski

Calculation Sheet of Different Ratios

(In Rs. '000)

Fiscal Year / Particulars	2060/061	2061/062	2062/063	2063/064	2064/065
Share Capital	2,540.00	3,648.00	4,303.00	5,155.00	8,040.00
Reserve & Other Funds	372.00	367.00	604.00	832.00	1,169.00
Total Equity Capital	2,912.00	4,015.00	4,907.00	5,987.00	9,209.00
Total Savings	5,666.00	4,598.00	5,690.00	9,551.00	20,390.00
Fixed Deposit	290.00	2,471.00	1,041.00	1,551.00	1,304.00
Total Deposit	5,956.00	7,069.00	6,731.00	11,102.00	21,694.00
Total Current Liabilities	5,973.00	5,205.00	6,396.00	10,393.00	22,225.00
Total Debt	6,263.00	7,676.00	7,437.00	11,944.00	23,529.00
Debt to Equity Ratio %	215.08	191.18	151.56	199.50	255.50
Current Assets	1,569.00	943.00	1,579.00	4,704.00	4,573.00
Fixed & other Assets	7,607.00	10,855.00	10,977.00	13,614.00	28,781.00
Total Assets	9,176.00	11,798.00	12,556.00	18,318.00	33,354.00
Current Ratio %	26.27	18.12	24.69	45.26	20.58
Quick Assets	1,563.00	706.00	1,445.00	4,460.00	2,217.00
Quick Ratio %	26.17	13.56	22.59	42.91	9.98
Debt to Assets Ratio %	68.25	65.06	59.23	65.20	70.54
Total Expenses	937.00	1,377.00	1,310.00	1,663.00	2,805.00
Total Income	1,105.00	1,431.00	1,542.00	2,003.00	3,352.00
Total Expenses to Total Income Ratio (%)	84.80	96.23	84.95	83.03	83.68
Net Profit	168.00	54.00	232.00	340.00	546.00
Return on Total Deposit %	2.82	0.76	3.45	3.06	2.52
Return on Assets %	1.83	0.46	1.85	1.86	1.64
Return on Equity %	5.77	1.34	4.73	5.68	5.93
Capital Adequacy Ratio %	48.89	56.80	72.90	53.93	42.45
Interest Charges	749.00	1,017.00	929.00	1,176.00	2,172.00
EBIT	917.00	1,071.00	1,161.00	1,516.00	2,719.00

Interest Coverage Ratio (times)	1.22	1.05	1.25	1.29	1.25
Net worth	2,912	4,015	4,907	5,987	9,209
Long-term Debt	290	2,471	1,041	1,551	1,304
Capital Employed	3,370	6,540	6,180	7,878	11,059
LTD to Capital Employed Ratio %	8.61	37.78	16.84	19.69	11.79
Return on Capital Employed %	27.21	16.38	18.79	19.24	24.58
Net Interest Income	240	202	498	591	608
Net Earning Assets	7,593	10,768	10,908	13,559	28,735
Net Interest Margin %	3.15	1.88	4.57	4.36	2.12

Source: Appendix 1 and Appendix 5.

Appendix 8

Jaya Manakamana Saving and Credit Co-operative Limited (JMCL)

Pokhara-2, Kaski

Calculation Sheet of Different Ratios

(In Rs. '000)

Particulars \ Fiscal Year	2060/061	2061/062	2062/063	2063/064	2064/065
Share Capital	1,051	1786	3013	7084	19317
Reserve & Other Funds	178	346	1038	2471	3150
Total Equity Capital	1,229	2132	4051	9555	22467
Total Savings	2,606	5294	8167	10310	16582
Fixed Deposit	952	1062	4941	13765	23016
Total Deposit	3,558	6356	13107	24075	39598
Total Current Liabilities	3,582	6418	17236	26004	41508
Total Debt	3,582	6418	17236	26004	41508
Debt to Equity Ratio %	291.46	301.03	425.48	272.15	184.75
Current Assets	4,720	8426	21129	35271	63171
Fixed & Other Assets	90	124	157	288	804
Total Assets	4,810	8550	21286	35559	63975
Current Ratio %	131.77	131.29	122.59	135.64	152.19
Quick Assets	531	557	2397	4079	8566
Quick Ratio %	14.82	8.68	13.91	15.69	20.64
Debt to Assets Ratio %	74.47	75.06	80.97	73.13	64.88
Total Expenses	306710	650794	1156238	1821575	2736208
Total Income	472191	942926	2055452	3727441	5475182
Total Exp. To Total Income Ratio (%)	64.95	69.02	56.25	48.87	49.97
Net Profit	165	292	899	1906	2739
Return on Total Deposit %	4.64	4.59	6.86	7.92	6.92
Return on Assets %	3.43	3.42	4.22	5.36	4.28
Return on Equity %	13.43	13.70	22.19	19.95	12.19
Capital Adequacy Ratio %	34.54	33.54	30.91	39.69	56.74
Interest Charges	170	383	808	1,125	1,813
EBIT	335	675	1,707	3,031	4,547
Interest Coverage Ratio (times)	1.97	1.76	2.11	2.69	2.51

Net Profit	165	292	899	1906	2739
Net worth	1229	2132	4051	9555	22467
Long-term Debt	952	1062	4941	15471	24586
Capital Employed	2346	3486	9891	26932	49792
LTD to Capital Employed Ratio %	40.58	30.46	49.95	57.44	49.38
Net Profit before Interest	335	675	1707	3031	4547
Return on Capital Employed %	14.28	19.36	17.26	11.25	9.13
Interest Income	365	785	1851	3340	4849
Interest Expenses	170	383	808	1125	1813
Net Interest Income	195	402	1043	2215	3036
Net Earning Assets	4179	7859	18392	31069	54936
Net Interest Margin %	4.67	5.12	5.67	7.13	5.53

Source: Appendix 2 and Appendix 6.

Appendix 9 (A)

Correlation Coefficient between Debt (X) and Return (Y) of JMCL (in Rs '000)

Particulars	2060/061	2061/062	2062/063	2063/064	2064/065
Debt	3,582	6,418	17,236	26,004	41,508
Return	472	943	2,055	3,727	5,475
Values:	r_{xy} / r=0.9960	r^2=0.9920	P.E.=0.0024	6 P.E.=0.0144	(∵ r>6 P.E. …Significant)

Appendix 9 (B)

Correlation Coefficient between Debt (X) and Return (Y) of SMCL (in Rs '000).

Particulars	2060/061	2061/062	2062/063	2063/064	2064/065
Debt	6,263	7,676	7,437	11,944	23,529
Return	1,105	1,431	1,542	2,003	3,352
Values:	r_{xy}=0.9926	r^2=0.9853	P.E.=0.004	6 P.E.=0.0270	(∵ r>6 P.E. …Significant)

Appendix 9 (C)

Correlation Coefficient between Interest Charges (X) and EBIT (Y) of JMCL (in Rs '000).

Particulars	2060/061	2061/062	2062/063	2063/064	2064/065
Int. Charges	170	383	808	1,125	1,813
EBIT	335	675	1,707	3,031	4,547
Values:	r_{xy}=0.9940	r^2=0.9880	P.E.=0.0036	6 P.E.=0.0216	(∵ r>6 P.E. …Significant)

Appendix 9 (D)

Correlation Coefficient between Interest Charges (X) and EBIT (Y) of SMCL (in Rs '000).

Particulars	2060/061	2061/062	2062/063	2063/064	2064/065
Int. Charges	749	1,017	929	1,176	2,172
EBIT	917	1,071	1,161	1,516	2,719
Values:	r_{xy}=0.9917	r^2=0.9835	P.E.=0.0050	6 P.E.=0.03	(∵ r>6 P.E. …Significant)

Appendix 9 (E)

Correlation Coefficient between Deposit (X) and Investment (Y) of JMCL (in Rs '000).

Particulars	2060/061	2061/062	2062/063	2063/064	2064/065
Deposit	3,558	6,356	13,107	24,075	39,598
Investment	4,179	7,859	18,392	31,069	54,936
Values:	r_{xy}=0.9988	r^2=0.9976	P.E.=0.0007	6 P.E.=0.0042	(∵ r>6 P.E.

…Significant)

Appendix 9 (F)

Correlation Coefficient between Deposit (X) and Investment (Y) of SMCL (in Rs '000).

Particulars	2060/061	2061/062	2062/063	2063/064	2064/065
Deposit	5,956	7,069	6,731	11,102	21,694
Investment	7,593	10,768	10,908	13,559	28,735
Values:	r_{xy}=0.9895	r^2=0.9791	P.E.=0.0063	6 P.E.=0.0378	(∵ r>6 P.E. …Significant)

Note: The values are calculated by using the models available in Ms-excel programme.