

CHAPTER-ONE

INTRODUCTION

1.1 GENERAL BACKGROUND

Nepal, as being one of the south Asian countries, is tiny and landlocked country, surrounded by two giant nations India and China. Although a lots of political turmoil took place and changed the scenario of geo-political situation of the nation. Two neighboring countries India and China are very fast developing countries among world economic sector. Despite this fact, Nepal is in the slow phase of development. Its economic condition is characterized by the declining interest rate, high inflation and slow growth in per capita income, low income, low savings and low investment, along with very low growth rate. Political unrest and capital inadequacy are the major barriers in the economic development process of a country. Because of unequal distribution of income, the gulf between haves and have not has increased. More than 80% of the people are engaged on agriculture while the contribution of this sector to Gross Domestic Production (GDP) is only 40% and that of Non-agriculture is 60%. About 30% of people are still under absolute poverty. (*A Glimpse of Macro Economic Indicators; NRB:11.*)

The basic function of the economy is to allocate scarce resources to produce goods and services demanded by the society. (*Rose; 2003:3.*) The production of goods and services require the transformation of resources: land, labor, capital, technology, managerial skill and information. Among these capitals is considered as the most important and called as life-blood of the business for the production of goods and services.

In financial sector, capital formation and its proper utilization are essential for economic development of any country. In such a context, the players in the financial system (borrowers, depositors and intermediaries) play a vital role. Financial institutions are the business organizations that they mobilize the money and depositories i.e. intermediaries of savings and as suppliers of credit and finance. As a financial intermediary finance companies give a good contribution for the development as they collect surplus fund from the nook and corner of the country and simultaneously make the loan available to other customers who have cash shortage for investment and other usage by providing interest to the depositors and charging interest to the borrowers. These financial institution are, in fact, the collector of not productive money and invest those money into productive where it is financially viable.

The slow growth and traditional attitude of commercial banks in mobilizing financial resources, lack of financial innovations and growing interest of public on Upahar or installment programme are the major reasons among other for the establishment of finance companies. (*Neupane;1977: 23*) After the government adopted the open and liberal policy in the financial sector, among other institutions, finance companies have been incorporated under Nepal Company Act, 2053. Finance companies are perhaps

the fastest growing financial institution in Nepal. The first of it was established in 1992 named Nepal Awash Development Finance Co. Ltd. (NADF) but today there are 78 such finance companies of which 53 are in Kathmandu. (*Banking and Financial Statistics;2065*)

Nepal Merchant Bank & Finance Ltd. Upgraded to 25th commercial bank and recently Kist Merchant Banking & Fin. Ltd. Upgraded to 26th commercial bank. Nepal Bangladesh and Fin. & Leasing co. Ltd. merged with Nepal Bangladesh Bank. Ace Finance Company Ltd. Upgraded to Development Bank.

They are authorized to accept deposits under several schemes and to mobilize the funds in wide range of productive sectors like agricultural, industrial, trade and commerce. Finance companies are popular between low income and middle class people for financing which also perform the varying roles of providing specialized services to their clients offering higher rate of interest and revenue generation. The finance company is defined by the dictionary of modern economy as “ A finance intermediary not a bank which may obtain fund from its own capital resource by accepting deposit (usually for fixed periods) or even by borrowing from other institution which it then lends for variety of purposes , especially to finance hire purchase contracts but leasing”. (*“Money and Banking in Malaysia”*; 1998:19.)

Despite being rich in natural resources Nepal could not utilize its resources due to lack of capital. The problem of brain drain is increasing. The obstacle of the capital can be wiped out by the collection of more deposit from the savers (household /business and government). A key factor in the development of an economy is the mobilization process of domestic resources. Finance companies produce loans and innovations to facilitate trade and transactions. Most of the rural parts of Nepal still operate in barter system. Economic development is only possible if it is monetized. So finance companies as an important part of financial market play major role to monetize the economy in the country.

One factor that significantly influences and ties all of them together is the rate of interest. The rate of interest is the price a borrower must pay to secure scarce loan able funds from a lender for an agreed upon period. (*Rose; 2003:109*) An appropriate interest rate structure greatly affects the collection of deposit, mobilization of savings (in productive sectors and profit position of any financial institutions, which in turn affects the economic enrichment of the whole country. “Higher interest rate generally brings a greater volume of savings and stimulates the lending of funds. Lower rate of interest rate on the other hand tends to damp on the flow of savings and reduce lending activity”. (*Ibid:114.*) Interest rate sends price signals to borrowers, lenders, savers and investors. So it is important to know and be familiar with interest rate charged on lending and interest provided on deposit and the factors influencing it.

1.2 FINANCE COMPANIES IN NEPALESE FINANCIAL SYSTEM

Finance companies in Nepal are licensed under the Finance Company Act, 1985(2042) but recently they are incorporated under Nepal Company Act, 2053 and are the largest group of deposit taking financial institutions after commercial banks and development banks. These financial institutions are the creation of early 1990's. Finance companies are established as public limited mainly for providing loans to procure motor vehicles and other consumer durables on hire purchase terms, land

acquisition and building constructions and leasing plant and machinery. Finance companies lending operation have tended to complement the operation of commercial banks mainly on urban areas. These companies are not allowed to accept demand and saving deposit from the public and have thus, concentrated in mobilizing funds through fixed deposit. Thus, finance companies are the institutions to perform non-banking activities arrangement and operation of different schemes whereby they collect the funds under different arrangement they have made and disburse the funds to demanders of funds and meet their objectives.

Economic liberalization policy of the government has encouraged the establishment and growth of finance companies in the country. In Eight Plan (1992-97), it has been clearly stated that “the vacuum in the present national financial system needs to be filled by institutionally developed capital market institutions like investment companies, **finance companies**, leasing and housing companies in order to create a healthy, competitive financial sector”. In tenth plan (2002/07) it has been describe that, “Encouragement will be made to establish **finance companies** in development regions where they are not yet established. At the same time their scope of service delivery will be expanded, wherever possible.” In a situation when the existing financial institution, specially commercial banks to meet consumer need for credit, it is time to encourage the growth and operation of finance companies to meet individual credit needs, undertake fee/based merchant banking function and to gradually curtail the Upahar and Dhukuti programs which were run unofficially.

The Nepalese financial sector is composed of banking sector and non-banking sector. Banking sector comprises Nepal Rastra Bank (NRB) and commercial banks. The non-banking sector includes development banks, micro-credit development banks, finance companies, co-operative, financial institutions, non-government organizations (NGOs) performing limited banking activities. Other financial institution comprise of insurance companies, employee’s provident fund, citizen investment trust, postal saving offices and Nepal stock exchange.

In purpose to government’s economic liberalization policy, NRB took some policy majors for the healthy and complete development of commercial banks and finance companies dissuade them from contracting in Kathmandu. The approval and permission of NRB to encourage the establishment and growth to finance companies started in Nepal after the first amendment in Finance Company Act, 1985(2042). Within a period of four years 1991/95 as per available data, there had been 56 finance companies of various capital sizes registered in Office of the Company Registrar. But in the mid year 2008, the wave of establishing finance companies reached to the 78.

Fast growth in the number of financial institution in Nepal in the last two decades. At the beginning of the 1980s when financial sector was not liberalized, there were only two commercial banks, and two development banks performing banking activities in Nepal. There were no micro-credit development banks, finance companies, cooperatives and NGOs with limited banking transactions. After the liberalization of financial sector, financial sector has made a hall-mark progress both in terms of the number of financial institutions and beneficiaries of financial services. By mid July 2008, NRB licensed bank and non-bank financial institutions totaled 235. Out of

them, 26 are commercial banks, 58 development banks, 78 finance companies, 12 micro-credit development banks, 16 saving and credit co-operatives, and 46NGOs. Three more commercial banks are preparing to come in near future. The growth of financial institutions since Mid July 1980 to Mid July 2008 have been presented in table no. 1-1

Table 1-1
Growth of Financial Institutions
(Banking and Financial Statistics mid July 2008 i. e. FY 2065)

Growth of Financial Institutional:

| Type of Financial Institutions | No. of Institutions in Mid July till 2008 | | | | | | | | |
|----------------------------------|---|----------|----------|-----------|-----------|------------|------------|------------|------------|
| | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2006 | 2007 | 2008 |
| Commercial Bank | 2 | 3 | 5 | 10 | 13 | 17 | 18 | 20 | 25 |
| Development Bank | 2 | 2 | 2 | 3 | 7 | 26 | 29 | 38 | 58 |
| Finance Companies | - | - | - | 21 | 45 | 60 | 70 | 74 | 78 |
| Micro Credit Development Bank | - | - | - | 4 | 7 | 11 | 11 | 12 | 12 |
| Saving & Credit Cooperatives | - | - | - | 6 | 19 | 20 | 19 | 17 | 16 |
| NGOs(Performing limited banking) | - | - | - | - | 7 | 47 | 47 | 47 | 46 |
| Total | 4 | 5 | 7 | 44 | 98 | 181 | 194 | 208 | 235 |

Source: Banking and Financial Statistics 2065 of NRB

The above given record of financial institutions shows the development of financial sectors in Nepal with in 28 years. During early eighties there were just 2 commercial banks and 2 development banks. No. of financial institutions were growing steadily up to 1995, then after the rapid growth was started. In 1995, the number of commercial banks reached to 10, development bank to 3, finance companies to 21, micro credit development banks to 4 and saving and credit cooperatives to 6. The numbers of NGOs started limited banking activities during 2005 i. e. 47 NGOs.

The opening of finance companies started since 1995 with 21 finance companies and it turned to total of 45 in 2000, 60 in 2005, 70 in 2006 and in 2008 there are almost 78. In such a way, finance companies have been growing up. The total financial activities lie in second rank after commercial banks. Majority of finance companies rendering their services in Kathmandu valley. Of the total finance companies, 53 are being operated in Kathmandu valley and 25 are being operated outside the Kathmandu Valley.

In 2008 record, finance companies hold 11.4% of total assets/liabilities of the financial system in mid July 2008. The total assets/liabilities of the finance companies increased by higher rate of 50.34 percent and reached to 80383.95 million in mid-July 2008 from Rs. 53466.3 million in mid –July 2007. Of the total liabilities in mid-July 2008, deposits held the largest share of 65.04 percent followed by capital fund 9.26 percent and borrowings 5.43percent and other liabilities 20.27 percent. Similarly, loans and advances held 71.55 percent of total assets followed by liquid funds 22.07 percent, Investments 5.36 percent and other assets 2.51 percent in mid July 2008. Assets and Liabilities composition of fiancé companies in Nepal during mid-July 2008 is presented in pie-chart as given below:

Figure 1-1
Liability Composition of Finance Companies as on mid-July 2008
 (Source: Banking and Financial Statistics 2065/66, NRB).

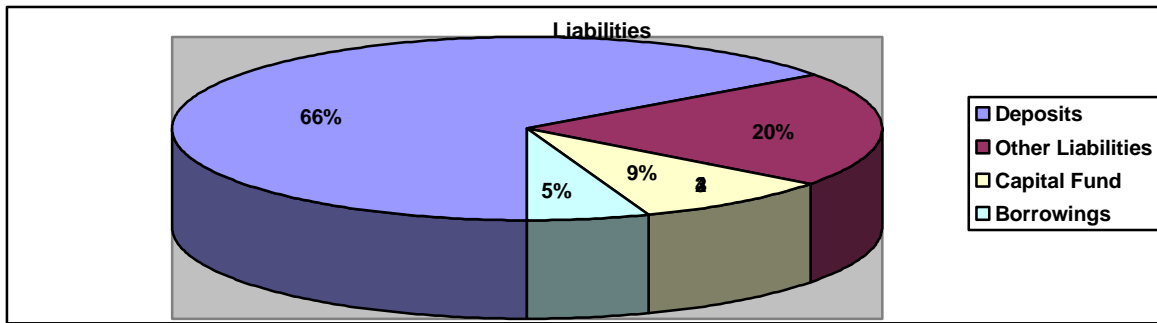
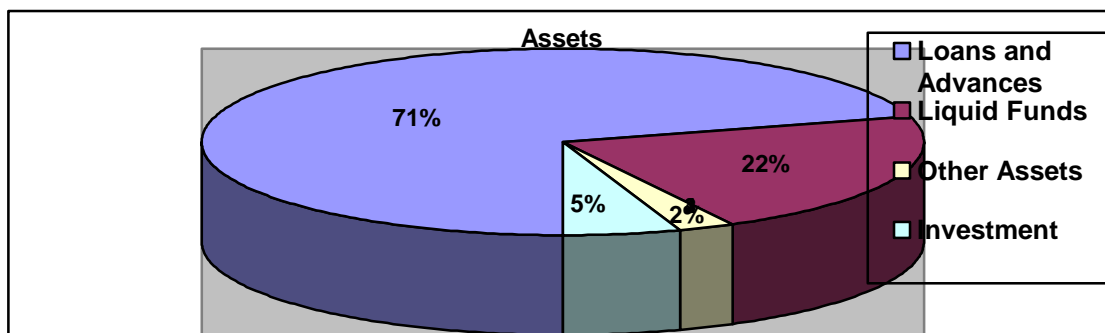


Figure 1-2
Assets Composition of Finance Companies as on mid-July 2008
 (Source: Banking and Financial Statistics 2065/66, NRB)

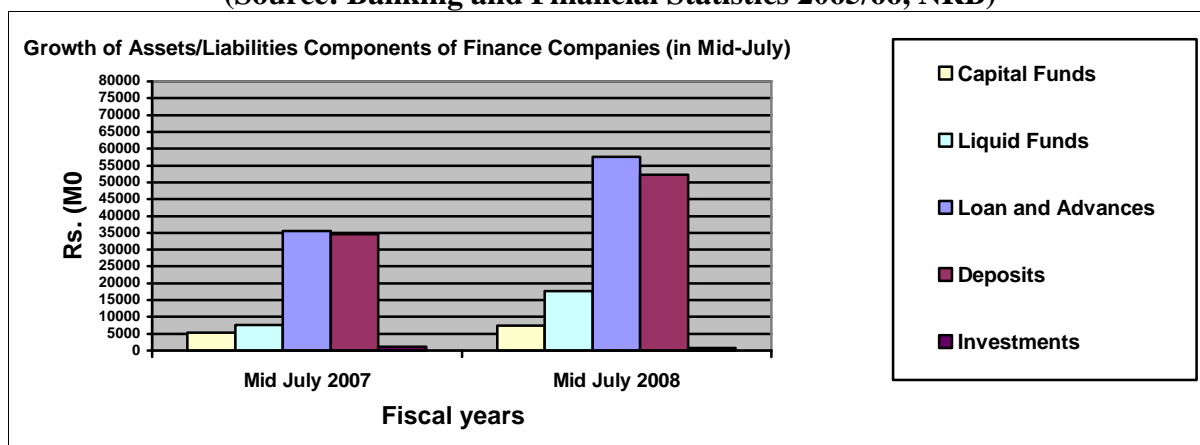


Hence, it shows from representation of data and chart that consists of total assets/liabilities has increased from mid July of 2007 is 37.6 percent to mid July of 2008 is 50.34 percent by 12.74 percent. The liabilities of 2007 deposit are 64.55 percent, capital fund is 10.05 and a borrowing is 6.49 percent. In mid July 2008 the liabilities of deposit are 65.04 percent, capital fund is 9.26 percent and borrowing is 5.43 percent. This scenario shows little bit low and high trend because deposit has increase by .049 percent but capital fund and borrowing has decreased by 0.79 and 1.06 percent.

The total mobilization of deposit by the finance companies in the current fiscal year increased by 25.81 percent in the mid July 2008 and reached to Rs.52282.17million from Rs.34514.17million in the mid July 2007. Similarly, capital fund capital fund increased by 38.39 percent over 24.68 in mid July 2007 and reached to Rs. 7445.42 million from 5379.86 million. Like wise, borrowing expanded by 25.81 percent amounted to Rs. 4364.95 million in mid July 2008.

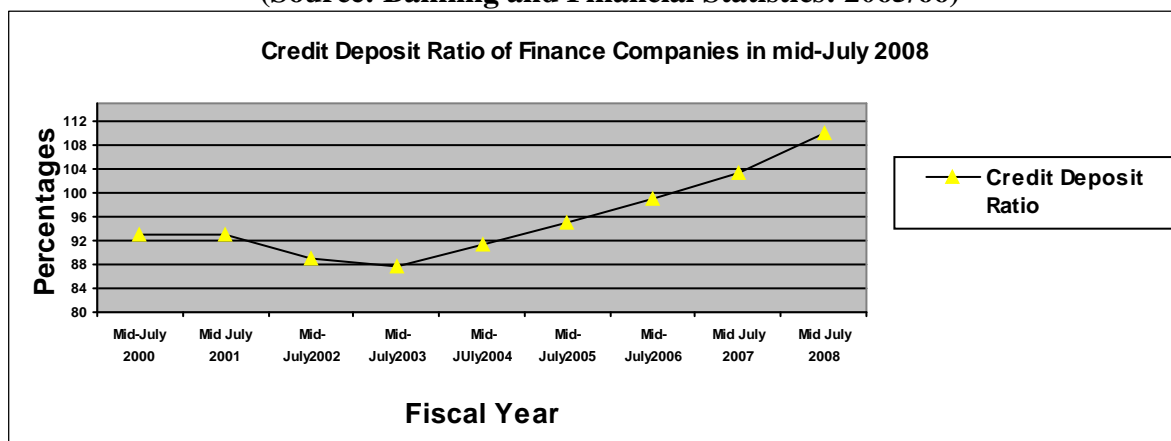
In mid July 2008 liquid fund and advances are 136.13 and 61.49 whereas in mid July of 2007 is 31.53 and 39.48 respectively. Liquid fund 2007 was Rs 7513.14 million and reached to 17741.74 million in 2008. Loan and advances reached to Rs.57516.94 million in mid July 2008 from Rs. 35616.5 million in mid July 2007. Investment declined by 7.08 percent remained to Rs. 4307.4 million in mid July 2008. Whereas growth has been recorded in 2007 of investment was 66.48 percent. Comparison between two years from 2007 to 2008 of asset/liabilities presented below.

Figure 1-3
Growth of Assets/Liabilities components of Finance Companies 2008
 (Source: Banking and Financial Statistics 2065/66, NRB)



Credit deposit of finance companies scaled up to 110.01 in mid July 2008 from 103.19 percent last year i.e. 2007. It was reached to 98.01 percent in 2006 from 92.97 percent of 2000. However, it did not have continuous growing during 2000-06. It had dropped to 88.82 percent in mid-July 2002 and increased to 87.66 percent in mid-July 2003. The trend line of credit deposit of finance companies from Mid-July 2000 to Mid-July 2008 has been presented in below given trend line.

Figure 1-4
Credit Deposit Ratio of Finance Companies as on mid-July 2008
 (Source: Banking and Financial Statistics: 2065/66)



The ratio of Non-Performing Liabilities (NPL) to total outstanding loans and advances improved in current year and dropped to 6.43 percent from 8.37 percent in last year. By the end of mid July 2008 the total amount of NPL remain to Rs.213.9 million from Rs 216.4 million in last year.

1.3 INTEREST RATE

The rate of interest is the price a borrower must pay to secure scarce loanable funds from a lender for an agreed-upon time period. It is the price of credit. The rate of interest is the ratio of two quantities: the money cost of borrowing divided by the amount of money actually borrowed, usually expressed on an annual percentage basis. The cost of borrowing money, measured in rupee per year per rupee borrowed, is the interest rate (*Samuelson and Nordhus; 1993:469*). Interest rate sends price signals to borrowers, lenders, savers and investors. For example, higher interest rates generally bring for a greater volume of saving and stimulate the lending of funds. Lower rate of

interest, on the other hand, tend to dampen the flow of saving and reduce lending activity. Higher interest rates tend to reduce the volume of borrowing and capital investment, and lower interest rates stimulate borrowing and investment spending (*Rose; 1997: p13*).

1.4 BRIEF HISTORY OF INTEREST RATE IN NEPAL

While observing the historical background of the interest rate structure of Nepal, frequent change can be noticed. In the beginning, the interest rate charged and offered by banks and financial institution was mentioned at a lower level, which view to stimulate real income and employment. However, dramatic change has been made time to time. A study of the annual report of Nepal Rastra Bank (NRB) avails the changes made, the objective behind such changed and their justification.

On April 13, 1965 the interest of deposits was increased by one percentage point which prevailed to August 30, 1966. Similarly, other two categories of fixed deposits 3 to 5 years and above five years were created and interest rates on those two types of deposits were 5 percent and 6 percent respectively. On August 31, 1966, the interest rate on all types of deposits was increased approximately by one percentage point. The interest structure was again raised on April 14, 1974 the rate of interest saving the deposits was raised to 5 percentage (increased by 0.5 percentage point) but the rate of interest on 3 month and 6 month deposits was reduced however, the rate of fixed deposits having the maturities of more than one year was raised varyingly by 1 to 1.75 percentage points. Another change in interest rate in structure was introduced on July 16, 1974. The interest rate in saving deposits was fixed at 6.5 percentages that on fixed deposits of three and six month maturities were kept constant and interest rate on all categories of fixed deposits were raised by two percentage points. The lending rates of commercial bank were also revised respectively. The lending rates were lowered in some cases. However, the loans for unproductive purpose were made costlier by two percentage points. Giving different justification, NRB issued directives to the bank and the financial institutions to apply new interest rates from April 18, 1975, which was a drastic change. The interest was increased from 6.5 % to 8% on saving deposits and that on fixed deposits of 3 months and 6 months were increased to 4 percent and 10 percent respectively. The interest rate on one-year deposits was increased from 9.5% to 16% and all two year and above fixed deposits rate was increased from 9.75% to 16%. Prior to the revision, there were nine different categories of landing caring the interest between 8 to 15 %. However, the revision categorized the loan only in two categories 15% interest rate was applicable to the entire loan to small sectors, agriculture sector, industry, export credit and credit against development bonds where as 18% minimum rate was fixed for other purposes. The interest rate on the loan against fixed deposits receipts was fixed 2% higher than on fixed deposits. On February 12, 1977, NRB revised interest rate again. The rate offered on saving 3 month fixed deposits was lowered to 9% (by one percent point). However, the interest rate on one year fixed deposits was lowered by 2% point to 12% and that on two years and above fixed deposits was also declined by 2% point. Next amendment in interest was made on 15 June. 1982, and the interest rate on all type old deposit were increased by 0.5% point. And the lending rates on all type of loans were raised by 1% point. NRB authorized the commercial bank and other financial institutions to charge an additional 2.55% interest above the specific rate on all over due loan and

minimum of 17% interest on miss-utilized loan to agriculture, industry and service sectors. A provision of 1% rebate for timely repayment was also made. NRB further revised the interest on August 17, 1982, which was a slight change on lending rate only, giving right in offering the interest rate on saving and time deposit to the extent of 1.5% and 1% respectively above prevailing rate. NRB issued direction to the commercial bank on May 29, 1986. Commercial banks and financial institutions were given freedom in fixing the interest on deposits and loans. However, the highest limit and lowest limit were fixed by NRB. The minimum of 8.5 % interest rate was fixed for saving deposit. The rate on fixed deposits of less than one-year's maturity needed to be at least not less than the rate on saving deposits. Minimum of 12% interest rate was fixed on one year fixed deposits. The interest rate on more than 1 year's fixed deposits could be fixed by the banks and financial institutions were given freedom to fix lending rate subject to a minimum of 15% for the priority sector.

On August 31, 1989, commercial banks and financial institutions were granted complete freedom in determining their own deposits and lending rates. However, on August 22, 1992, NRB issued some directives to banks and financial institutions to clearly spell out the interest on deposits of at least up to one year, not to create the range of percentage in interest rates on credits of some types and purpose and to stop fixing the interest rate of flat basic. In addition to this, NRB also instructed the bank and financial institutions to control their interest rate on deposits and credits at 6% within the mid-December 1993. Then after NRB has not regulated interest directly but has given instructions two times regarding the interest rate and term and condition of lending and keeping account. A last of instruction to the bank and financial institution was issued in 2002. Currently interest rate spread required to be maintained by bank and financial institutions has also been removed.

As previously stated, the interest rate structure in the beginning was purely central bank's matter of concern. However, considering the needs of the country, NRB took a flexible approach in making some adjustments in interest rates by putting control on it. However, the impact of economic liberalization in developing countries because of financial globalization began to influence Nepal. This ultimately brought a regulation in interest rate by leaving the interest rate to be determined by market forces.

1.5 FOCUS OF THE STUDY

The finance companies, perhaps the fastest growing financial institution, are currently viewed as catalyst in the process of economic growth of a country as they help in efficient transformation of idle savings into productive investments. These organizations survive who can make profit in the long run. The profit for these organizations is the interest spread between sources and uses of funds. The focus of this study is to examine the influencing factors of interest rate of Nepalese finance companies taking seven institutions as sample organizations. Interest rate is believed as one of the most important factors for the development of finance companies and financial system as a whole. This study also attempts to analyse the methods used by various finance companies to determine the interest. The study is also concentrate on whether the theories on interest rate propounded by various economists match in Nepalese context or not. Since interest rate is the main concern of every individual who saves (deposits) and borrows money, it is important to study about interest rate.

Therefore, this study focuses on the interest rate of different finance companies and the central bank's role regarding interest rate.

1.6 STATEMENT OF THE PROBLEM

Lack of financing has led the natural resources of Nepal being unutilized. Nepal is importing raw materials for producing goods and services from foreign countries. If finance is available, many factories could be established to take benefit from utilization of various resources, which would increase the employment, standard of living and status of country's economy. Financial companies in Nepal are committed to avail the capital for different sectors. Different finance companies have been established targeting different groups. Interest charged and offered by the institution was regulated by central bank until before few years, but now these institutions are free to fix their interest rate.

In various books of economics and financial institution, interest occupies a crucial part. While studying of the evolution of interest rate, many theories has been introduced as time spent and changes have taken place in market structure and expectations. Assumptions of these theories were different and different factors were considered as crucial in different time. As a developing country, Nepalese market has not reached its maturity but in recent year's institution is determining their interest rate themselves. Thus, it is important to know whether the interest rate is determined by market forces or by managerial discretion. Some of the previous researcher in their thesis had studied in the limited areas such as interest rate structure, impact of interest on portfolio of polices etc. these studies are also very old i.e. of 1980s. This type of study has not been found yet in current scenario.

It seems to be not only public but also university graduates in commerce or business administration cannot calculate the true or effective rate. Bankers and other financial institution intuitions use various method of interest calculation. Correspondingly, true effecting rate also differs. Therefore, this researcher has influenced to analyses that what factors affect interest rate and what are the methods used in interest calculation. More specifically this study is an attempt to answer the following questions:

- 1) What is the Impact of liquidity position of organization on interest rate charged and offered by finance companies?
- 2) Is the interest rate charged and offered by finance companies affected by inflation?
- 3) What are the other major qualitative factors that shape the interest rate of finance companies of Nepal?

1.7 OBJECTIVES OF THE STUDY

To identify the determining factors of interest rate charged and offered by Nepalese finance companies through examination of the relationship between determining factors and interest rate is the key purpose of our study. The following objectives have been formulated.

- 1) To show the relationship between the liquidity position and interest rate on deposit and lending.

- 2) To identify the effect of inflation on interest rate charged and offered by various Nepalese finance companies.
- 3) To find out the effect of maturity period and other economic factors on the interest rate offered by Nepalese finance companies.
- 4) To explore the problems and to suggest for further improvements on the basis of findings of the study.
- 5) To show the effect of foreign employment & remittance income to the interest rate.

1.8 SIGNIFICANCE OF THE STUDY

Finance companies in Nepalese Financial system perform a number of activities that are essential for a modern private- enterprise economy. Two most important functions that financial system performs consists of providing the means by which payments for transactions are accomplished and saving are accumulated and channeled it to investment users. The financial system determines both the cost of credit and how much credit will be able to pay for thousand of goods and services we purchase daily. Paying for a goods and services, saving, lending, borrowing and investing all activities are carried out within the framework of financial system. Which credit becomes more costly (that is, higher interest rate) and less available total spending for goods and services falls. As a result, unemployment rises and economic growth slows as business cut back their production. In contrast, when the cost declines (i.e. lower interest rate) and the loadable funds become more readily available, total spending economy increases, more jobs are created and economic growth accelerates. (*Cooper; 1982: 127.*) Hence, economic growth depends upon circulation of money and financial system facilitates it.

In modern world, the expenditure of both government and private sectors is increasing investment is needed at any stage of economy. However, the private sectors, in most of the developing countries including Nepal, are suffering from financial crises. People are less aware about banking system. Financial intermediaries are insufficient to mobilize the saving of the country .some established institutions based on small amount of saving also utilize their saving in productive investment rather than spending in construction of house , luxuries goods, ornaments etc. but the question is why the financial institutions of the country could not attract more saving? Are the monetary authorizes in this country wrong in determining the rate of interest? Alternatively, what the rate of interest can do lend more. On the other hand, inflation is troubling developing countries like Nepal. Can interest rate play any role in this connection? It is not only without reason that Keynes and modern economist paid special attention to the role of interest rate in the economic filed.

Interest rate fluctuates in Nepal time to time, region and sector to sector. It is because of internal and world wide impact. The function in interest rate is a regular phenomenon in developing countries. Therefore, it is quite necessary to develop some ideas about the impact of interest rate to the economy. Further more, it is important to know the policies of financial institutions regarding rate of interest and its impact on various financial institutions. This study is also considered useful to various parties such as further researchers, students, teachers, financial institutions, general individuals etc.

The study of interest rate seems worthwhile in the context of Nepal as it is the only factor that significantly influences and ties all finance companies; the components of the financial system.

1.9 LIMITATIONS OF THE STUDY

As we know that every activity has limitations due to time and resources, this thesis report also pass through some boundaries. The main limitation likely to be faced for this study could be as given below:

-) Reliability of study depends upon the reliability of published data and the fairness of the opinion given by respondents. The conclusions and recommendations will be based on top of the reliability of study.
-) As the samples have been drawn at random for convenience there may exist some sampling errors. Similarly, insufficient number of sample organization chosen for the study could bring sample error somehow.
-) This Study covers only 8 fiscal years and data have been collected for those 8 Fiscal years. So, this study do not analyze long-term trend of this particular topic.
-) Although there are many other finance companies, samples cover only few because of the unavailability of sufficient and accurate data along with other constraints.
-) Since this study is for the purpose of fulfillment of the ‘Masters Degree’, stipulated time and resources are also the limitation for the study.
-) Only determining factors of interest rates are considered. Impact of interest rate on other aspects has not been studied.
-) Other possible alternatives have not been searched and tried for this thesis study except financial and statistical tools.

1.10 ORGANIZATIONS OF THE STUDY

Whole research study has been segmented into five different chapters in topic-wise thoroughly.

Chapter one: Introduction

Chapter One simply disclose the general background of the research subject, some relevant data and statement of the problem. This chapter describes the main objectives of this study and significance as well.

Chapter two: Review of Literature.

Chapter Two thoroughly research for the different related researches and observes their point of view in depth and make a conclusion. It is also a way to avoid investigating problems which have already been definitely answered.

Chapter three: Research Methodology

Chapter Three requires allocating the data resources applying research methodology to interpret. Gathering materials and arranging them, participating in the field work which required, and also training in techniques for collecting of data appropriate to

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particular problems, in the use of statistics, questionnaires and controlled experimentation and in recording evidence, sorting it out and interpreting it.

Chapter Four: Data Presentation and Analysis.

Chapter Four Data Presentation and Analysis consist of core part of any research work. This chapter is the main body of the study which includes detailed presentation, analysis and interpretation of data relating to interest rate on deposit and lending, deposit collection and loan advance of each selected finance companies from Nepalese financial system. Relationship between variables i.e. between interest rate on deposit and deposit amount and lending interest rate and lending amount are presented, analyzed and interpreted. This chapter consist of various calculation made for the analysis of interest rate and its impact on deposit amount, lending amount and inflation rate of the sample finance companies.

Chapter Five: Summary, Conclusion and Recommendation

This is the last chapter of this study and important one to extract all the previously discussed chapters. The summary part includes revision of all four chapters. Conclusion part contains the summary of the result from the research and eventually in recommendations part, suggestions or recommendations are made based on the results and experience of thesis. Recommendations are made to the concerned authorities and further researchers to improve or solve the problem on the basis of findings.

CHAPTER-TWO

REVIEW OF LITERATURE

2.1 CONCEPTUAL REVIEW.

Literature review is to reveal on other research that what the others researcher has discovered through the research. This research portrait that the various points of views which has gone thoroughly in depth analysis.

The next step is to develop concepts and ideas about the selected topics by reviewing all the relevant materials regarding the study. In fact, it begins with the search of suitable topics and continues throughout the duration of the research work. It deals with a literature survey of the existing volume of similar related subjects. "Review of literature means reviewing research studies or other relevant propositions in the related area of the study so that all the past studies, their conclusions and deficiencies may be known and further research can be conducted".(*Joshi.; 2004: 107.*)

Review of literature is an essential part of all the studies. It is the way to discover what other research in the area of our problem has exposed. It is also a way to avoid investigating problems which have already been definitely answered. The review of literature accomplishes the following functions:

-) It analyzes the previous and current study or any particular topics for the general knowledge and establishes a point of departure for future research work.
-) It avoids needless duplication of precious study and addition of extra material that are essential for the study.
-) It reveals area of needed research.

The literature survey provides the students with the knowledge of the status of their field of research. The primary purpose of literature review is to learn, not to accumulate.

2.1.1 Meaning of Interest Rate

Generally, interest is the additional amount that lender will gain from borrower as part of loan. The rate of interest is the price a borrower must pay to secure scarce loanable funds from a lender for an agreed-upon time period. It is the price of credit. The rate of interest is the ratio of two quantities: the money cost of borrowing divided by the amount of money actually borrowed, usually expressed on an annual percentage basis. Interest rate send price signals to borrrowers. Lenders, savers and investors. For example, higher interest rates generally bring forth a greater volume of saving and stimulate the lending of funds. Lower rate of interest, on the other hand, tends to dampen the flow of saving and reduce lending activity. Higher interest rates tend to reduce the volume of borrowing and capital investment, and lower interest rates stimulate borrowing and investment spending.

The neo-classical economists, however, define it as a price for the user's loanable funds but the modern economist in their effort, to avoid these divergent and controversial views about the nature of interest, have explained it in terms of productivity, saving, liquidity preference and money. In other words, interest is simultaneously the pure yield of capital for saving, for the far going of liquidity and supply of money.

Gross and Pure Interest

The payment, which the borrower makes to the lender excluding the principal, is gross interest. Net interest is the payment for the use of capital or money only. It is normally the same during a period even in different markets.

Reward for Risk Taking

The lender exposes to risk when he or she lends money. Gross interest includes the reward for risk taking. If there exists greater risk element, obviously there exists higher rate of gross interest. Therefore, taking risk is compensation by interest along with principal.

Reward for Inconvenience

When a lender lends money, he or she forgoes its use for the duration of the loan on other possible alternatives. He/she will have to face the inconvenience of the arranging it from some other source. As such the rate of interest also includes the reward for such inconvenience. Clearly, it is the price of non able to utilize own source of money.

Reward for Management

The lender has to incur expenditure in keeping proper account of the borrowers. Therefore, the payment that the lender receives from the borrowers includes the expenses for management. Pure interest is what remains with the lenders after deducting the reward for risk taking, management and inconvenience from gross interest.

2.1.2 Interest Rates as the Allocation Mechanism

In Market based economy, price is the allocating mechanism. When it is the market for allocating savings, interest rate becomes the price mechanism. (*Johnson & Hazel; 1993:.67*) Borrowers with unusually productive investment opportunities, as measured in terms of risk and return, can pay a saver a higher income in the form of an interest rate on the savings they borrow than borrowers with less productive investors.

2.1.3 Functions of the Rate of Interest in the Economy

The rate of interest performs several important functions in the economy. The main functions are as described below:

-) It helps to guarantee that current savings will flow into investment to promote economic growth.
-) It rations the available supply of credit, generally providing loanable funds to those investment projects with the highest expected returns.
-) It brings the supply of money into balance with the public demand for money.

) It is an important tool of government policy through its influence on the volume of saving and investment. If the economy is growing too slowly and unemployment is rising the government can use its policy tools to lower interest rates in order to stimulate borrowing and investment. On the other hand, an economy experiencing rapid inflation has traditionally called for a government policy of higher interest rates to slow borrowing and spending and encourage more saving.

2.1.4 Theories of Interest

Different economists have given various opinions about the theories of interest rate, which describe how interest rate is determined in various situations. Some well known theories of interest rates are as follows:

Classical Theory of Interest Rates

One of the oldest theories concerning the determinants of the pure or risk-free interest rate is the classical theory of interest rates, developed during the eighteenth and nineteenth centuries by a number of British Economists and elaborated by Irving Fisher (1930) and others more recently. The classical theory argues that the rate of interest is determined by two forces: (1) the supply of saving, derived mainly from households, and (2) the demand for investment capital, coming mainly from the business sector .

Supply of Saving

Saving by Households

Saving means surplus excluding expenditure. Most saving in modern industrialized economies is carried out by individuals and families. For these households, saving is simply abstinence from consumption spending. Current savings, therefore, are equal to the difference between current income and current consumption expenditures.

In making the decision on the timing and amount of saving to be done, households typically consider several factors: the size of current and long-term income, the desired savings target, and the desired proportion of income to be set aside in the form of savings. Generally, the volume of household saving rises with income. Higher income families and individuals tend to save more and consume less relative to their total income than families with lower incomes.

Although income levels probably dominate saving decisions, interest rates also play an important role. Interest rates affect an individual's choice between current consumption and saving for future consumption. The classical theory of interest assumes that individuals have a definite time preference for current over future consumption. A rational individual, it is assumed, will always prefer current enjoyment of goods and services over future enjoyment. Therefore, the only way to encourage an individual or family to consume less now and save more is to offer a higher rate of interest on current savings. If more were saved in the current period at a high rate of return., future consumption would be increased. For example, if the current rate of interest is 5% and a household save \$100 instead of spending it on

current consumption, it will be able to consume \$105 in goods and services a year from now.

The classical theory considers the payment of interest a reward for waiting- the postponement of current consumption in favor of greater future consumption. Higher interest rates increase the attractiveness of saving relative to consumption spending, encouraging more individuals to substitute current saving for some quantity of current consumption. This is Substitution Effect calls for a positive relationship between interest rates and the volume of savings. Higher interest rates bring forth a greater volume of current savings.

Saving by Business Firms

Not only households but also businesses save money. Most businesses hold savings balances in the form of retained earnings (as reflected in their equity or net worth accounts). In fact, the increase in retained earnings reported by businesses each year is a key measure of the volume of current business saving, which supplies most of the money for annual investment spending by business firms.

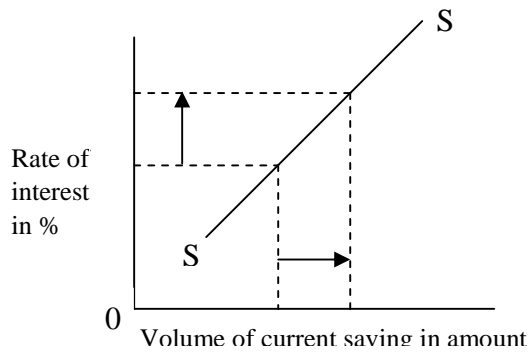
The critical element in determining the amount of business savings is the level of business profits. If profits are expected to rise, businesses will be able to draw more heavily on earnings retained in the firm and less heavily on the money and capitalmarkets for funds. The result is a reduction in the demand for credit and a tendency toward lower interest rates. On the other hand, when profits fall but firms do not cut back on their investment plans, they are forced to make heavier use of money and capital markets for investment funds. The demand for credit rises, and interest rates may rise as well.

Although the principal determinant of business saving is profits, interest rates also play a role in the decision of what proportion of current operating costs and long-term investment expenditures should be financed internally and what proportion externally. Higher interest rates in the money and capital markets typically encourage firms to use internally generated funds more heavily in financing projects. On the hand, lower interest rates encourage greater use of external funds from the money and capital markets.

Saving by Government

Government also saves money, though less frequently than households and businesses. In fact, most government saving (i.e. a budget surplus) appears to be unintended saving that arises when government receipts unexpectedly exceed the actual amount of expenditures. Income flows in the economy (out of which government tax revenues arise) and the pacing of government spending programs are the dominant factors affecting government savings. The total supply of funds is sum of above three elements as shown on figure no. 2-1

Figure No. 2-1
The Substitution effect relating to saving & interest rates

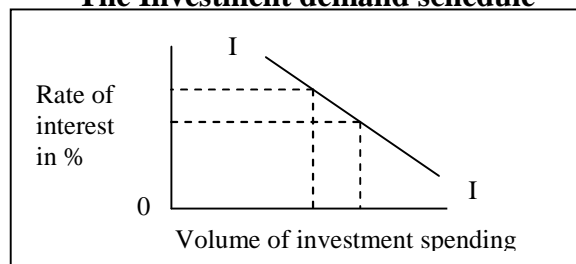


Source: Economics

The Demand for Investment Funds

The savings made by business, government and households are important determinants of interest rate but they are only one side of determinants. The factor is investment spending, made by business firms government and in some case households. Business requires huge amounts of funds each year to purchase equipment, machinery and inventories and to support to construction of new buildings and other physical facilities. The majority of business expenditures for these purposes consist of what economists call replacement investment. But according to the classical economists, interest rate and investable fund have inverse relationship. At low rate of interest more investment project becomes economically viable. On the other hand, if the rate of interest rises to high level fewer investment project will be pursued and fewer funds will be required from the financial market as shown on figure no. 2-2.

Figure No. 2-2
The Investment demand schedule



Source: Economics

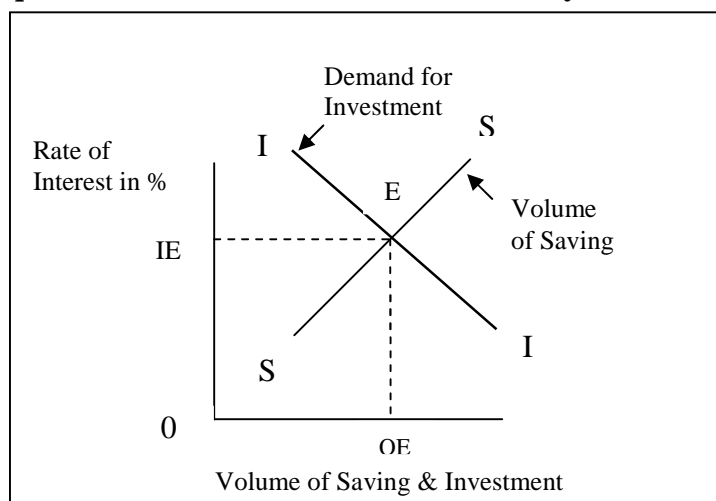
The Equilibrium Rate of Interest in the Classical Theory of Interest

According to the classical economists, the interest rates in the financial markets were determined by the interplay of the supply of saving and the demand for investment. Specifically, the equilibrium rate of interest is determined at the point where the quantity of savings supplied to the market is exactly equal to the quantity of funds demanded for investment. To support this in figure No. 2-3 this occurs at point E where the equilibrium rate of interest is IE and the equilibrium quantity of capital fund traded in the financial market is QE. The market rate of interest moves towards its equilibrium level. However, supply and demand forces change so fast that the interest rate rarely has an opportunity to settle in at a specific equilibrium level. At any given time, the rate is probably above or below its true equilibrium level but moving toward that equilibrium. If the market rate is temporarily above equilibrium, the volume of savings exceeds the demand for investment capital creating an excess

supply of savings. Savers will offer their fund at lower and lower rates until the market interest rate approaches equilibrium. Similarly, if the market rate is temporarily below equilibrium, investment demand exceeds the quantity of saving available. Business firm will bid up interest rate until it approaches the level at which the quantity saved equals to quantity of funds demanded for investment purpose.

Figure No. 2-3.

The equilibrium interest rate in classical theory of interest rate



Source: Economics

Liquidity Preference or Cash Balance Theory of Interest Rates (Rose; 1997:200.)

During the 1930s, British economist **John Maynard Keynes(1936)** developed a short-term theory of the rate of interest for that he, argued, was more relevant for policymakers and for explaining near-term changes in interest rates. This theory is known as the liquidity preference (or cash balances) theory of interest rates.

The Demand for Liquidity

The rate of interest is really a payment for the use of a scarce resource, money. Businesses and individuals prefer to hold money for carrying out daily transactions and also as a precaution against future cash needs even though money's yield is usually low or even nonexistent. Investors in fixed-income securities, such as government bonds, frequently desire to hold money or cash balances as a safety against declining asset prices. Interest rates, therefore, are the price that must be paid to induce money holders to surrender a perfectly liquid asset and hold other assets that carry more risk. At that times the preference for liquidity grows very strong. Unless the government explains the money supply, interest rate will rise.

In the theory of liquidity preference, only two outlets for investor funds are considered bonds and money or cash balances. Money provides perfect liquidity. Bonds pay interest but can not be spent until converted into cash. If interest rates rise, the market value of bonds paying a fixed rate of interest falls, the investor would suffer a capital loss if those bonds were converted into cash. On the other hand, a fall in interest rate results higher bond prices: the bondholder will experience a capital gain if the bonds are sold for cash.

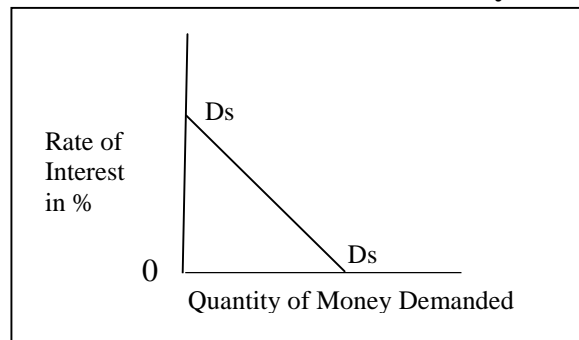
Motives for Holding Money

Public demands money for three different purposes. The transactions motive represents the demand for money to purchase goods and services. Some money also must be held as a motive for precautionary because the future is uncertain and we cannot predict exactly what expenses or investment opportunities will arise in the future. The third motive is the speculative motive that stems from uncertainty about the future prices of bonds.

Total Demand for Money

The total demand for money or cash balances in the economy is simply the sum of transactions, precautionary, and speculative demands. Because the principal determination of transactions and precautionary demand is income, not interest rates, these money demands are fixed at a certain level of national income. In the figure 2-4, D_s is the aggregate demand for the economy.

Figure No. 2-4
The total demand for money

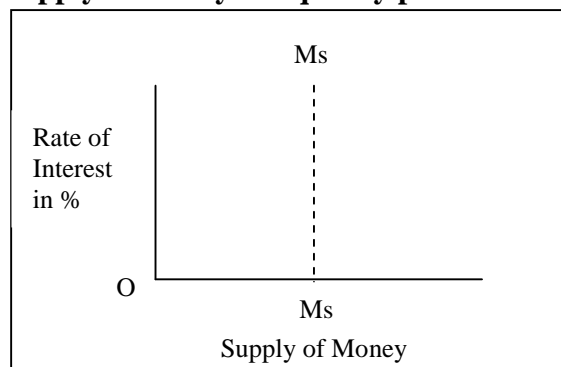


Source: Economics

The Supply of Money

The other major element determining interest rates in liquidity preference theory is the supply of money. In modern economies, the money supply is controlled, or at least closely regulated by government. Because government decisions concerning the size of the money supply presumably are guided by the public welfare, not by the level of interest rates, the supply of cash balances is inelastic to the rate of interest. Supply of money M_s is shown in the figure 2-5 below.

Figure No. 2-5
The supply of money in liquidity preference theory

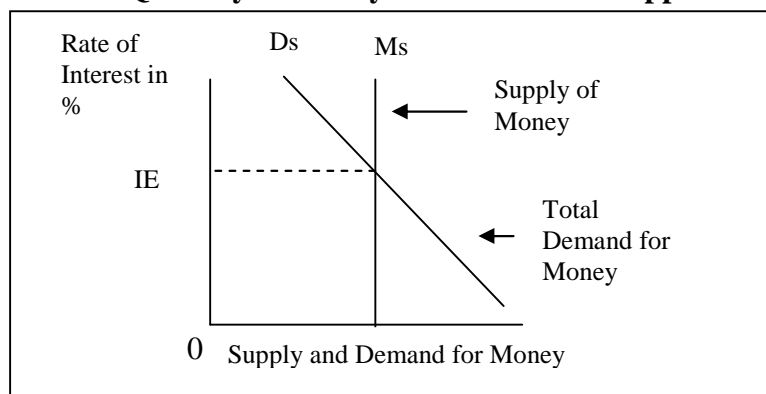


Source: Economics

The Equilibrium Rate of Interest in Liquidity Preference Theory

The interplay of the total demand for the supply of money or cash balances determines the equilibrium rate of interest in the short run. In the figure below IE is the point where the quantity of money demanded by the public equals the quantity of money supplied. The equilibrium rate of interest is shown in the following figure 2-6.

Figure No. 2-6
The equilibrium rate of interest in the liquidity preference theory
Quantity of Money Demanded and Supplied



Source: Economics

The Loanable Funds Theory of Interest

The loanable funds theory is the most popular interest rate theory among practitioners. It argues that the risk free interest rate is determined by the interplay of two forces: the demand for and supply of credit (loanable funds). The demand for loanable funds consists of credit demands from domestic businesses, consumers, and government, and also borrowing in the domestic market by foreigners. The supply of loanable funds stems from two sources domestic saving and new money.

The Demand for Loanable Funds

Consumer (Household) Demand for Loanable Funds

Domestic consumers demand loanable funds to purchase a wide variety of goods and services on credit. Recent research indicates that consumers are not particularly responsive to the rate of interest when they seek credit but focus instead principally on the non-price terms of loan, such as the down payment, maturity, and size of installment payments.

Domestic Business Demand for Loanable Funds

The credit demands of domestic businesses generally are more responsive to changes in the rate of interest than in consumers' borrowing. Most business credit is for such investment purposes as the purchase of inventories and new plant and equipment. The quantity of loanable funds demanded by the business sector increases as the rate of interest falls.

Government Demand for Loanable Funds

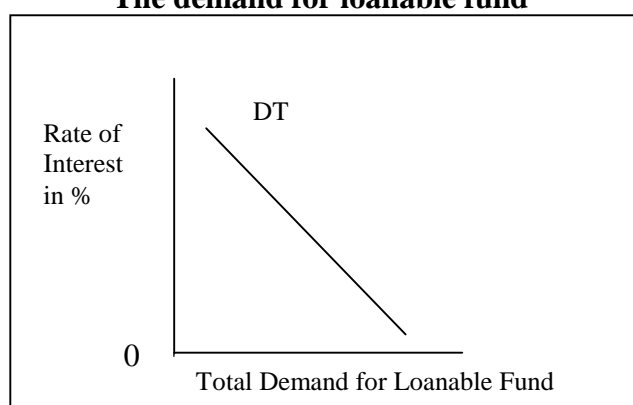
Government demand for loanable funds is a growing factor in the financial markets but doesn't depend significantly on the level of interest rates. Government decision on spending and borrowing depends in response to social needs and the public welfare, not the rate of interest. Moreover, in case of central government, it has the power both to tax and to create money to pay its debts. State and local government demand on the

other hand, is slightly inelastic because many local governments are limited in their borrowing activities by legal interest rate ceilings. When open market rate rises above the ceiling, some state and local governments are prevented from offering their securities to the public.

Total Demand for Loanable Funds

The total demand for the loanable fund is the sum of domestic consumer, business and government credit demands. These demand curves slope downward and to the right with respect to the rate of interest. Higher rate of interest lead some businesses, consumers and governments to curtail their borrowing plans, lower rates bring forth more credit demand. The total demand for loanable fund is shown in the following figure 2-7 where DT is total demand.

Figure No. 2-7
The demand for loanable fund



Source: Economics

Supply of Loanable funds

The major sources of supply of loanable fund are from following two sources:

- 1) The amount of saving by households, business, governments.
- 2) The amount of new money created by the commercial banking system.

Domestic Saving

Saving refers to the postponement of current consumption. The decision to save is the decision to cut out current consumption in order to have a larger quantity of consumption in the future. Individual or household save for a variety of reasons but there is little evidence to suggest that the quantity of loanable funds supplied through saving is clearly influenced by the level of the interest rate. A higher interest rate represents a greater reward to saver for postponing current consumption and thus might be expected to produce a higher quantity of saving for some individuals. In general case, the quantity of savings supplied by individuals is principally determined by the level of income and it is influenced to lesser degree by the level of interest rates. Business saving refers to the net income after taxes of the firm, less any cash dividends i.e. retained earnings. There is little reason to believe that the volume of saving at business firm is strongly influenced by the level of interest rates. For governments, the volume of saving is defined as the difference between revenues and expenditures such that saving exists when revenues exceed expenditures (a budget surplus).

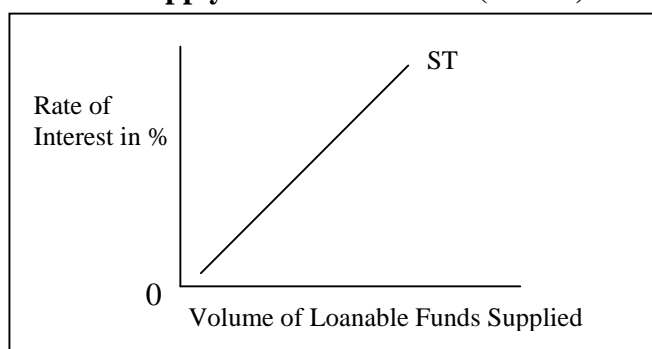
Creation of New Money

Although the volume of saving is the principal source of loanable fund in the financial markets, the supply of the loanable funds may be increased through the creation of new money beyond the amount made possible by current saving. The amount of new money created is determined jointly by the actions of the commercial banking system and the central bank. Commercial banks use any excess reserves to make loans and purchase securities and create money through the credit creation process. However, the ability of commercial bank to create money is limited by the central banks through the use of its monetary policy tools like open-marked operations, resereve requirement changes, and discount rate changes.

Total Supply of Loanable Funds

The total supply of loanable funds, including domestic saving, foreign lending, dishoarding of money, and new credit created by the domestic banking system. In the following figure 2-8, the total Supply of Loanable fund is given where ST is total supply.

Figure No. 2-8
The supply of loanable funds (Credit)

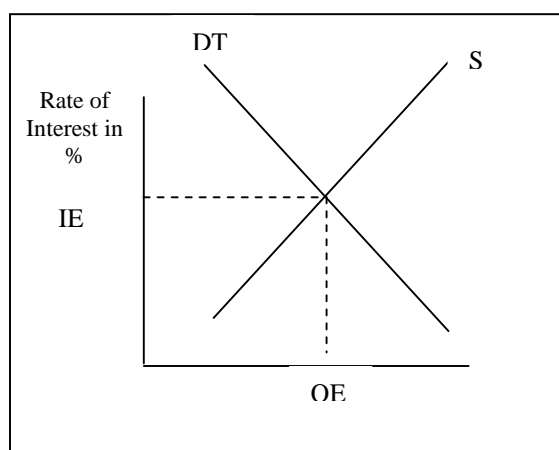


Source: Economics

The Equilibrium Rate of Interest in the Loanable Funds Theory

The two forces of supply and demand for loanable funds determine not only the volume of lending and borrowing going on in the economy but also the rate of interest. The interest rate tends toward the equilibrium point at which the supply of loanable funds equals the demand for loanable funds. This point of equilibrium is shown in the following figure, 2-9 where IE is equilibrium rate of interest rate and QE is volume of loanable funds(Credit).

Figure No. 2-9
The equilibrium rate of interest in loanable funds theory



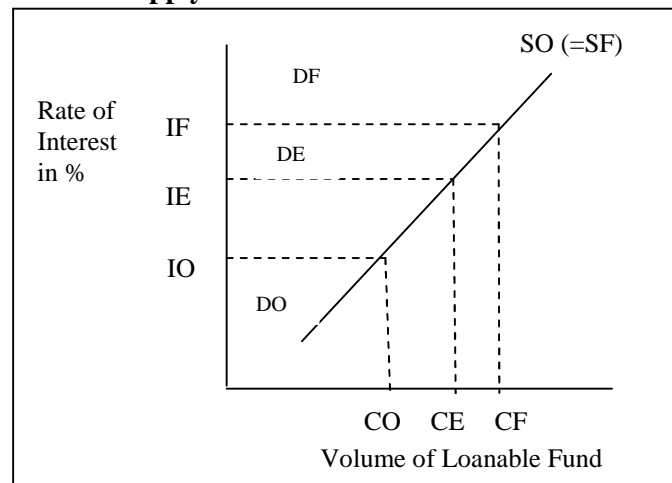
The Rational Expectations Theory

The Rational Expectations Theory is new for the financial markets and institutions. This theory builds on a growing body of research evidence that the money and capital markets are highly efficient institutions in digesting new information affecting interest rates and security prices. This expectations theory assumes that businesses and individuals are rational agents who form expectations about the distributions of future asset prices and interest rates that do not differ significantly from optimal forecasts made from using all the available information that the marketplace provides. (Rose; 2003:133-136.)

Rational agents attempt to make optimal use of the resources at their disposal to maximize their return. Moreover, a rational agent will tend to make unbiased forecasts of future asset prices, interest rates, and other variables.

Figure No.2-10

The expected demand for and supply of loanable funds under the rational expectations theory



Source: Economics

Suppose in the above figure 2-10, S_0 and S_F represents the actual supply and demand for loanable funds in the current period, while DF reflects the actual demand for loanable fund that will prevail in the next time. The supply of loanable funds is assumed to be the same in both time periods ($S_0=S_F$)

Now imagine that during the current periods, the government makes an unexpected announcement of its increased need to borrow more money in future period F due to an unusually large budget deficit. The result is new expected demand for loanable fund curve DE , projected to prevail in the next periods F but as viewed by borrowers and lenders today in time periods 0 . In this case, the equilibrium interest rate in the current period will not be I_0 , but rather I_E , where the expected demand curve (DE) intersects the actual supply curve S_0 . The equilibrium quantity of loanable funds traded in the current period then will be CE not CO . This is because, according to the rational expectations theory, borrowers and lenders will act as rational agents, using all the information they possess to assets today. When the future period arrives, the equilibrium interest rate will rise to rate I_F and the quantity of loanable funds traded will be CF . The equilibrium rate moves upward because the demand for loanable

funds in periods F is more than the expected future loanable funds demand as seen by market participants, in period 0.

2.1.5 Interest Rate Movements and Its Relevance

Interest rate movements affect the values of securities, and therefore affect the performance of all types of financial institutions. It is critical for managers of financial institutions (including portfolio managers) to understand why interest rates change, how their movements affect performance, and how to manage according to anticipated movements. (*Madura, Jeff ;2001:19.*)

Interest rate movements can affect the values of virtually all securities. They have a direct influence on the market values of debt securities such as money market securities, bond and mortgages. This is confirmed in the chapters on financial markets, when the main determinants of the markets value of each security are identified. Interest rate has an indirect effect on values of stocks and exchange rates. Since the price movements in derivatives are partially influenced by the price of the underlying instruments, interest rate movements affect the prices of derivatives representing debt securities or stock or currencies. Thus, all participants in financial markets closely monitor interest rate movements. So they can restructure their positions in securities to benefit from any expected movements in interest rate .interest rate movement also effect the value of most financial institutions. Interest rate movements affect both the cost of funds to depository institutions and the interest received on same loans. In addition, the market value of securities (such as bonds) held by depository institutions or not-depository institutions are affected as well. Thus, managers of financial institutions closely monitor interest rate movements so they can capitalize on favorable movements or reduce their institutions exposure to unfavorable movements.

2.1.6 Economic Factors That Affect Interest Rates

Although it is useful to identify those who supply or demand loan able funds, it is also necessary to recognize the underlying economic forces that cause a change in the supply of or the demand for loan able funds and therefore influence interest rates.

2.1.6.1 Impact of Economic Growth on Interest Rates

Assume that because of more optimistic economic projections, most business increase their planed expenditures for expansion, which translates into additional borrowing. The aggregate demand schedule would shift outward (to the right). The supply-of-loanable funds schedule may also shift, but it is more difficult to know how it should shift. It is possible that the increased expansion by business could lead to more income for construction crew and others, who service the expansion. Thus the quantity of savings, and therefore of loanable funds supplied at any possible interest rate could increase causing on outward shift in the supply schedule. Yet, there is no assurance that the volume of savings will truly increase. Even if a shift were to occur, it would likely to be of a smaller magnitude than the shift in the demand schedule.

As an example, we can consider how a slowdown in economy would affect the demand and supply schedule of loanable funds and equilibrium interest rate. The demand schedule would shift inward (to the left), reflecting less demand for loanable funds at any possible interest rate. The supply schedule could be possibly shifted a

little, but it is questionable which way it would shift. One could argue that a slowdown should cause increased saving at any possible interest rate as households prepared for the possibility of being laid off. Yet, the gradual reduction in labour income that occurs during an economic slowdown could reduce household's ability to save historical data support this later expectation. Any shift that occurs would likely to be minor relative to the shift in the demand schedule. Therefore, the equilibrium interest rate is expected to decrease.

2.1.6.2 Impact of Inflation on Interest Rates

One of the most serious problems confronting economics around the globe in recent years is inflation. Inflation is defined as a rise in the average level of prices for all goods and services. Some prices of individual goods and services are always rising while others are declining. However, inflation occurs when an increase in some general index of price, such as the consumer price index or the broad-based Impact Gross Product Deflector, takes place.

There is positive correlation between inflation and interest rate in the market. Since the inflation reduces purchasing power of consumer (investors), they must be compensated for the decreased purchasing power. Therefore, an increase in inflation leads to increase in quoted market interest rate is known as inflation premium. The implicit Gross National Product Deflector is sometimes referred to as the overall price index since it incorporated the prices on all subcomponents of the gross national product: consumption, investment, government spending and export.

The Fisher Effect

A well-known economist Irving Fisher in 1996 has developed a relationship between nominal and real rate of interest. According to Fisher, if expected real interest rate is held fixed, changes in nominal rate will reflect shifting inflation premiums (i.e., changes in the public's view on expected inflation). He argued that the expected real rate of return tends to stable over time because it depends upon the long-term factors like productivity of capital, volume of saving in economy etc. in the short term, the nominal interest rate is only influenced by the change in the inflation premium. Therefore, rise in the expected inflation rate causes the same rise in the nominal interest rate.

The Harrod-Keynes Effect of Inflation

British economist Sir Roy Harrod's view is based on Keynesian liquidity preference theory of interest. According to him, real rate is affected by the inflation but nominal rate need not to be affected. Under liquidity preference theory, the nominal rate is determined by the demand for and supply of money, the nominal rate must remain unchanged whatever may be the expectation will lower the real rate of interest.

There is less than one-to-one relationship between changes in expected inflation and nominal interest rates with the inflation caused wealth, income and depreciation effect. That is, a rise in expected inflation reduces the real rate of return to lender and derives the nominal interest rates higher but rise in nominal rate is less than the increase in expected inflation. Nevertheless, according to the inflation caused income tax effect, if investors desire to protect (i.e. hold constant) his or her expected real

after tax rate of return, then nominal rate has to increase by a greater amount than any rise in the expected inflation rate because otherwise real after tax returns will decline when inflation increases.

2.1.6.3 Impact of Price Deflation

Deflation tends to force real interest rates higher even as nominal interest rates drop downward zero. These elevated real interest rates tend to slow investment spending and decrease the development of new jobs. Real economic output will decline as factors come to produce less and business profit fall. At the same time lenders gain at an expense of borrowers because the formers purchasing power rises, and business trying to borrow money have to struggle to raise the capital they require to grow and put people back to work.

The price deflation can result lower output of goods and services, but forces real interest rates upward. However, business and the financial system are much better positioned today deal with moderate deflation, in part because of the development of so many risk management tools (such as financial future contracts, swaps, and options).

2.1.6.4 Impact of Money Supply on Interest Rates

The central bank can affect the supply of loanable funds by increasing or reducing the total amount of deposit held by commercial banks or their depository institutions. When the central bank increases the money supply, it places downward pressure in interest rate. However, if the central bank's action affects inflationary expectations, this would also increase the demand for loanable funds, which could offset the effect of the increase in the supply of funds. If central bank reduces the money supply, it reduces the supply of loanable funds. Assuming no change in demand, this action places upward pressure on interest rates.

2.1.6.5 Impact of Budget Deficit on Interest Rates

When the government enacts fiscal policies that result in more expenditure than tax revenue, the budget deficit is increased. How an increase in the government deficit would affect the interest rates, assuming no other changes in habits by consumers and firms occur a higher government deficit increases the quantity of loanable funds demanded at any prevailing interest rate, causing an outward shift in the demand schedule. Assuming no offsetting increase in the supply schedule, interest rate will rise. Given a certain amount of loanable funds supplied to market (though savings), excessive government demand for these funds tend to "crowd out" the private demand for funds. The government may be willing to pay whatever is necessary to borrow these funds, while the private sector may not. This impact is known as the "crowding-out effect".

The supply schedule might shift a counter argument outward, if the government creates more jobs by spending more funds than collects from the public (this is what causes the deficit in the first place). If this were to occur, the deficit might not necessarily place upward pressure on interest rates. Much research has investigated this issue (in U.S.A.) and, in general has shown that higher deficits place upward pressure on interest rates.

The increase in public debt refers an increase in the government's demand for loanable funds. However, because other factors can offset this increased demand the increased demand for loanable funds by the government do not always result in higher interest rates.

2.1.7 Term Structure of Interest Rates

The relationship between the rates of return on financial instruments and their maturity is called the term structure of interest rates. This term structure may be presented visually by drawing a yield curve for all securities having the same credit quality. The yield curve considers only the relationship between the maturity or term of a loan or security and its yield at one movement in time. For example, we cannot draw a yield curve for securities bearing different degree of credit risk or subject to different tax laws because both risks and tax laws affect relative yields along with maturity.

2.1.7.1 Pure Expectation Theory

According to the pure expectation theory, the term structure of interest rates is determined solely by expectations of future interest rate to understand how interest rate expectations may influence the yield curve, assuming that the annualized yields of short –term and long-term securities are similar, that is the yield curve is flat. Then investors begin to believe that interest rates will rise. They will respond by investing their funds mostly in the short-term so that they can soon reinvest their funds at higher yields after interest rates increase. When investors flood the short-term market and avoid the long-term market, they may cause the yield curve to adjust. The large supply of funds in short-term markets will force annualized yields down. Meanwhile, the reduced supply of long-term yields up.

Even though the annualized short-term yields become lower than annualized long-term yields, investors in short-term funds are satisfied because they expect interest rates to rise. They will make up for the lower short-term yield when the short-term securities mature, and they invest at a higher rate at maturity.

Assuming that the borrowers who plan to issue securities also expect interest rates to increase, they would prefer to lock in the present interest rate over a long period of time. Thus, borrowers would generally prefer to issue long-term securities rather than short-term securities. This results in a relatively small demand for short-term funds. Consequently, there is downward pressure on the yield of short-term funds. There is also an increase in the demand of long-term funds. Overall, the expectations of higher interest rates change the demand for funds and the supply of funds in different maturity markets, which forces the original flat yield curve to pivot upward and become upward sloping.

2.1.7.2 The Liquidity Premium View of the Yield Curve

Security dealers who trade actively in the financial markets frequently argue that other factors besides interest rate expectations also exert a significant impact on the character and shape of the yield curve. Liquidity premium is one of them. Long-term securities tend to have more volatile market prices than short-term securities.

Therefore, the investors face greater a risk of capital loss when buying long-term financial instruments. This greater risk of loss will be important to an investor who is risk averse. To overcome the risk of capital loss, investors must be paid an extra return in the form of an interest rate (term) premium to encourage them to purchase long-term financial instruments. This additional rate premium for giving up liquidity would tend to give yield curves a bias toward a positive slope. The liquidity premium view does not preclude the important role of interest rate expectations in influencing the shape of the yield curve. Rather, it argues that other factors, such as liquidity, play an important role as well.

Liquidity argument may help explain why yield curves tend to flatten out at the longest maturities. There are obvious differences in liquidity between a 1-year and 10-year bond, but it is not clear that major differences in liquidity exists between a 19-year bond and a 20-year bond, example. Therefore, size of the required liquidity premium may decrease for securities bearing longer maturities.

2.1.7.3 The Segmented-Markets or Hedging- Pressure Argument

A strong challenge to the expectations theory appeared in the 1950's and 1960's in the form of the market segmentation argument or hedging-pressure theory of the term structure of interest rates. The underlying assumptions are that all securities are not perfect substitutes in the mind of investors. Maturity preference exist among some investor groups, and these investors will not stay from their desired maturity range unless induced to do so by higher yields or their favorable terms on longer or shorter – term securities.

Why would some investors prefer one maturity of security to other? Market segmentation theorists find the answer in a fundamental assumptions concerning investor behavior, especially the investment behavior of financial intermediaries, such as investment companies, pension funds, & banks. Some investor groups often act as risk minimizes rather than profit maximizes as assume under the expectations hypothesis. They prefer to hedge against the risk of fluctuations in the prices and yields of securities by balancing the maturity structure of their assets with the maturity structure of their liabilities. The portfolio strategy reduces the risks of fluctuating income and less of principal. The existence of maturity preferences among investors groups implies that the financial markets are not one large pool of loanable funds but rather are segmented into a series of submarket. Thus, the market for securities of medium maturity attracts different investors groups than the market for longer-term securities. The segmented-markets or hedging pressure theory does not rule out the possible influence of expectations in shaping the term structure of interest rates, but it argues that other factors related to maturity-specific demand and supply forces are also important.

2.1.7.4 Preferred Habitat Theory

The preferred habitat theory of term structure accepts the expectation theory premise of substitution and the segmentation theory premises that substitution is risky for borrowers and savers. However, this theory is not rigid as either of them. Simply but preferred habitat accepts the notion of maturity substitution, but only if the borrowers and savers are compensated with a more favorable interested rate. The additional

return to the investor is known as liquidity premium. The preferred habitat theory accepts the expectation theory but claims that the yield curve is not an accurate representation of market expectations. This is because the preferred habitat theory recognizes the existence of a liquidity premium built into the yields for bonds of certain maturities (*Thygeson, Kenneth; 1992:36.*). This theory argues that investors seek at their preferred habitat along the scale of verifying maturities of securities that matches their risk preferences, tax exposure, liquidity need regulatory requirements and planned holding period. Thus, according to the preferred habitat theory, factors other than expectations alone play a role in shaping the character of the yield curve. Proponents of preferred habitat argue that investors derive their expectations about future interest rates on the basis of historical experience the recent trend of interest rates an what history suggests is a “normal” range for rates. In the short-term, the majority of investors expect current interest rate tends to persist into the future; thus, rising interest rates in recent weeks often lead to the expectation that rates will continue to rise in the nears term. However, investors generally expect that given sufficient time interest rate will return to their historical average.

2.1.8 Risk and Cost Factors Affecting the Interest Rate

Though it is assumed deposit increases as interest rate increases but interest rate is affected by numerous factors. In real world, different financial institution quotes different interest rate. It means that the same types of instrument carries different interest rate so there is presence of interest spread. For this difference, there are numbers of factors influencing the difference in interest rates.

Marketability

One of the most important considerations for an investor is whether a market exists for those assets he or she would like to acquire. Can an asset be sold quickly, or must the investor wait some time before suitable buyers can be found? This is the question of marketability and financial instruments traded around the world vary widely in terms of the ease and speed with which they can be converted into cash. Marketability is positively related to the size (total sales or total assets) and reputation of the institution issuing the securities and to the number of similar securities outstanding. Not surprisingly, stocks and bonds issued in large blocks by the largest corporations and governmental units tend to find acceptance more readily in the global financial markets, and a consistent market price can be established. In fact, there is a negative relationship between marketability and yield. More marketable assets generally carry lower expected returns than less marketable assets, other things being equal. Purchasers of assets that can be sold in the secondary market only with difficulty must be compensated for this inconvenience by a higher promised rate of return.

Liquidity

A desirable quality of assets that are to be part of a precautionary reserve is liquidity. An asset is liquid if it can be turned into cash quickly without loss (*Kohn, Meir; 1993: 152-153.*). Liquidity has two aspects. One is marketability. An asset is marketable if it can be sold quickly and low transaction cost. The second aspect might be called a well behaved price. Even if an asset is marketable, it is not liquid if selling it immediately, rather than waiting to sell, involves an expected loss. Marketability is closely related to another feature of financial assets that influences their interest rate or yield: their

degree of liquidity. A liquid financial asset is readily marketable. In addition, its price tends to be stable over time and it is reversible, meaning the holder of the asset can usually recover his/her funds upon resale with little risk of loss. Because the liquidity feature of financial assets tends to lower their risk, liquid assets carry lower interest rates than less liquidity assets.

Default Risk

Another important factor causing interest rate to differ one from another is the degree of default risk carried by individual securities. Investor's securities face many different kinds of risk, but one of the most important is default risk that a borrower will not make all promised payments at the agreed upon times. All securities except government securities are subject to varying degree of default risk. The yield on a risky security is positively related to the risk of borrower default as perceived by investor's yield on risky security.

The higher the default risk associated with a risky security, the higher the default risk premium on that security and greater the required rate of return (yield) that must be attached to the security as demanded by investors in the market place. And if risk-free rate remains unchanged, the security's risky yield must rise and the price must decline.

Taxability

The returns earned by investors on financial assets are greatly affected by the taxes imposed by government. The income from most securities, interest or dividends and capital gains, is subject to taxation at the stipulated rate. This tax treatment reduces the investors' real income.

Prepayment Risk

A newer form of risk affecting the relative interest rates confronting modern investors arises when they acquire so-called loan backed securities. These loan backed securities are usually created when a lending institution, such as a bank or mortgage company, removes a group of similar loans from its balance sheet and places them with a trustee (such as a security dealer) who, using the loans as collateral sells securities to raise new capital for the lending institution. Each of these securities derives its value from the income-earning potential of the pool of loans that backs the securities. As the loans in the pool generate interest and principal payments, these payments flow through to holders of the loan-backed securities. In loan backed securities investors demand higher yields to compensate them for prepayment risk associated with it.

Servicing Cost

Some financial claims are difficult to service. This means that the process of collecting interest and principal payments providing accurate records or monitoring the ongoing credit position of the borrowing involves considerable operating costs. Lenders must be compensated for the servicing costs. This cost is included in the interest rate charged and is referred to as the servicing cost.

Exchange Rate Risk

As today's financial markets have become more global, there has been a significant growth in the borrowing and investing in foreign denominated financial claims. A U.S. company establishing manufacturing facility in Nepal might be inclined to issue shares and or bonds denominated in Nepalese rupees rather than U.S. dollars. Investors also have available to them many investments involve exchange rate risk. This risk relates to the potentiality that the rate of exchange between the domestic currency and foreign denominated currency will change as a result of any numbers of factors. The primary risk for the borrower is that the value of the currency borrowed rises in relation to the domestic currency. This results in an unexpected cost on the international loans, since the loan would have to be repaid in the foreign currency that has risen in value relative to the domestic. This potential change in currency values must be reflected in computing the cost of borrowing.

2.1.9 How Open market Operations Affect Interest Rates?

Even though most-interest rates are market determined the central bank has considerable authority and powerful mechanisms to affect the level of interest rates by controlling the supply of loanable funds. The primary tool is open market operation. Through open market operation, the central bank purchases or sells securities. These are primarily treasury securities. When central bank purchases the securities it adds to the supply of loanable funds, the sellers of the securities the central bank purchased can reinvest in other loans and investments. When the central bank sells securities, the opposite occurs.

When the central bank uses open market operation to increase bank funds, banks have a larger supply of excess funds to lend out. Second, banks with excess funds may offer new loans at lower interest rates to make use of these funds. Third, these banks may also lower interest rates offered on deposits because they have more than adequate funds to conduct existing operations.

As bank deposit rates decline household with available fund may search for alternatives investment such as treasury securities or other debt securities, the yield will decline. Thus, open market operation used to increase bank funds influence not only bank deposits and loan rates but the yields on other debt securities as well. The reduction in yields on debt securities lowers the cost of borrowing for the issuers of new debt securities. This can encourage potential borrowers to borrow and make expenditures that they might not have made if interest rates were higher.

If open market operation is used to reduce banks funds by, selling the treasury securities by increasing the level of discount rate and by increasing the reserve requirements the opposite effect occurs. More banks have different funds and fewer banks have any excess funds. Thus, there is upward pressure on the interest rate offered to bank deposits. As bank deposit rate rises, some investors may be encouraged to create bank depositors rather than invest in other debt securities thereby increasing the yield offered on the instruments.

The actions of the central bank also affect the level of aggregate employment and inflation. The central bank tends to faster stimulative open-market policies when the

economy has slack resources and unemployment and restrictive policies during period of low employment and rising inflation.

2.2 REVIEW OF RELATED STUDIES

2.2.1 Review of Journal and Articles

Widespread inflation plagued the major countries in 1970, in a continuation of the inflation boom which occurred first in the United States in the late 1960's. The battle against inflation in the United States in 1969 – through restrictive monetary policy-pushed domestic interest rates to historic highs in early 1970. Since the interconnections between the major financial markets of the world transmit such pressures to foreign money centers, both short-term and long-term interest rates rose rather steadily throughout 1968 and 1969 in the major European countries and Japan; in almost every case, money rates reached peak in January or February 1970. However, except for some brief upward pressures in early summer, they fall rather steadily through the end of the year on a worldwide scale. For example, official central bank lending rates were lowered at least once in a last half of 1970 in United States, West Germany, France, Great Britain and Canada.

Despite the tightening of most rates, it seems clear that level of interest much lower than pre-war may be expected to prevail the next few years disregarding the temporary high rate which may be caused by anti-inflation credit restriction measures. Continuation of basically lower rate patterns will lessen the burden of the nation debt and make refund and other debt management measure much easier. Business expansion will be facilitated. Low cost capital will make it economical for the industry to secure the latest and most efficient machinery. Lower capital cost will be then reflected in keener competition and lower prices. Lower interest rate will thus enable us to make even more rapid progress towards the goal of the American dream of 'more things for more people'. (*Microsoft @Encarta@2008.©1993-2007 Microsoft Corporation. All right reserved.*)

Nepali Interest Rate –Where is it heading?

(*Author: Resta Jha; Courtesy: Boss magazine 2007*)

There are number of factors playing roles for this illogical movement of interest rates. Firstly, the behavior of market players- a classic examples in this regard would be accepting a five – year deposit at the rate of 13% by financial institution and lending the same fund at the rate of 16% first year, 14% second year 12% third year, 9% fourth year and 7.5% in fifth year. This is clearly loss making deal for the financial institution due to miss match of the maturities in the assets and liabilities. A typical example of interest re-investment risk rising due to maturity mismatch through creation of assets for one year with five year liabilities. The poor asset and liabilities management (ALM) within the financial institution has prompted may failures and also the closer of some business by some finance companies. It must be clear to the market players a longer period doesn't mean higher interest rate; one must have an opportunity to invest a fund at higher rate for the similar period of their deposits.

Similarly, interest rates of government securities, which are regarded as benchmark rates, are not allowed to move freely as per market demands. If we are to move

towards market determination of interest rates, all the players including savers, financial institution and regulators have to demonstrate a professional behavior while taking their financing and investment decisions.

Shrestha, 2051:21*(courtesy thesis: Arjun Giri,2006)*

“There is wider interest rate spread between deposits and loan/advance rates. This difference has been made due to the less competitive financial market, deposits and loan portfolio, large portfolio of non-performing assets etc. The main cause of this spread is also by the deregulation of interest rate structure”

K.C., 2054:45*(courtesy thesis:Arjun Giri,2006)*

“Interest rate is one of the main weapons of monetary policy. The best level of interest should be mentioned for the identification of the opportunities within economic investment. Interest rate changed according to the change in economic situation or according to the demand and supply of capital. He mentioned the following facts regarding interest rate:

- A) Low rate of interest affects negatively in saving mobilization, flexibility of capital, effective utilization of capital resources. And high interest rate affects investment.
- B) The desire of saving money of general people closely related with the rate of interest on deposits. And the rate of interest on deposits of financial institutions depends upon the liquidity position and loans demanded.
- C) The level of interest depends upon the internal liquidity, situation of external interest rates change in exchange rate etc. The change in interest rate is by the deregulation of demand and supply of resources. Interest rate also depends upon the change in real national income, return on alternative income, number of financial institutions, financial tools and the capacity of financial institutions.
- D) Less spread shows the ability of financial institution. But it is necessary to keep appropriate spread level for financial institution to maintain them qualified in this sector.

Inflation and Interest Rates

(Courtesy: www.investopedia.com)

Whenever it is hear the latest inflation update on the news, chances are interest rates are mentioned in the same breath. In the United States, interest rates are decided by the Federal Reserve .The Fed meets eight times a year to set short-term interest rate targets. During these meeting, the CPI is one significant factor in the Fed’s decision. Interest rates directly affect the credit market (loans) because higher interest rates make borrowing more costly. By changing interest rates, the Fed tries to achieve maximum employment, stable prices, and a good level growth. As interest rates drop, consumer spending increase and this in turn stimulates economic growth. Contrary to popular belief, excessive economic growth can in fact be very detrimental one extreme, an economy that is growing too fast can experience hyperinflation, resulting in the problems already mentioned earlier. At the other extreme, an economy with no inflation has essentially stagnated. The right level of economic growth, and thus inflation is some where in the middle. It’s the Fed’s job to maintain that delicate

balance .A tightening, or rate increase, attempts to head off future inflation. An easing, or rate decrease, aims to spur on economic growth.

While inflation is a major issue, it is not the only factor informing the Fed's decisions on interest rates. For example, the Fed might ease interest rates during a financial crisis to provide liquidity (flexibility to get out of investments) to U.S. financial markets, thus preventing a market meltdown.

2.2.2 Review of Thesis

In this topic few some of thesis and research has been submitted. But in related to this subject some have been found to be match in some portion though making these in arrangement with review some of them by objective, analysis and findings are presented in this segment.

A research conducted by **Renuka Ranjit**, (2003) in her thesis, "*Deposit Interest rate and return on common stocks of banks and finance companies*".

The objectives of the study are i) To find out relation between deposit interest rate and dividend rate .ii) To know how the dividend offered by banks and finance companies affected the market price of their common stocks in reality. iii) To know the ration of deposit interest rate to return on common stock whole of banks and finance companies and specific to an individual sample company. iv) To know the difference in collection of deposits by banks and finance companies.

The major finding has been extracted are:

-) Majority of people do not want to deposit their money with a newly established co-operative firm though it offers them the highest interest rates but don't consider the financial back ground.
-) Most of the investors use to go through financial records of the company before depositing their money with them.
-) Rule of maintaining minimum balance in deposit account also affects to some extent in person's choice of financial institution.
-) Longer the period of operation greater a company has trust of investors.

A study conducted by **Dangol**, (2003) in his thesis "*Impact of Interest Rate of Financial Performance of Commercial Banks*" concludes:

-) Most of the commercial banks contradict the general financial theories.
-) The relation between amount of deposits and interest rate on deposit, general concept, must be positive. But deposits are increasing despite the decrease in the general level of interest. The result of such phenomenon is that there are fewer investment opportunities for the banking sector as well as general investors.
-) The relation between total amount of loan and the lending rate is negative and significant. However, the change in the total amount of loan flow is not proportionate with the change in the lending rate.
-) Correlation between interest rate and inflation is not significant.
-) Not only interest rate is responsible to shape the profitability of banks but also the operating efficiency also has major influence on it.

Sabita Shah,(2004) in her thesis “*Impact of Interest rate structure on investment portfolio of commercial banks in Nepal*” has the objectives of the study are i) To present the concrete picture of the interest rates structure before and after liberalization. ii) To study the relationship between interest rates and other economic variables like deposit, loan and advances, total investment and credit flow of commercial banks. iii) To evaluate the trends of deposit, loan and advances, total investment and credit position of commercial banks. iv)To analyze loans and advances in different sectors of investment portfolio of commercial banks. To study the current impact of deregulation on interest rate and its effects on related fields. v) To study the current impact of deregulation on interest rate and its effects on related fields.

The following finding has been made:

-) The lower rates of interest rates decrease deposit.
-) Increasing in lending rates resulted in the decrease in credit flow, which consequently decreased the profit of commercial banks.
-) Credit/Loan and advances also influenced by the lending rates. Increment in lending rates decrease the growth percent of credit flow.
-) Commercial banks investment decrease in government and other securities due to the higher rate and enough promising investment opportunities available in private sectors.

The study conducted by **Bhatta**, (2004) in his thesis “*Interest rate and its effect on Deposit and Lending*”. The objective mainly is the disseminator tries to portrait the relation of interest rate with deposit and lending amount.

The conclusion drawn by Mrs.Bhatta is:

-) Deposit rates of all sample banks under study are in decreasing trend: meaning that every year deposit rates of sample banks under study have decreased.
-) Lending rates of all sample banks under study are also in decreasing trend: means that every year lending rates of sample banks under study have decreased.
-) Analysis shows that interest rates on lending are far higher than deposit rates of sample banks. The correlation coefficient between these two variables (deposit rate and lending rate) of sample banks comes highly positive.
-) The simple correlation coefficient between deposit rate and deposit amount of sample banks were highly negative. But out them, correlation coefficient analysis of one sample bank found to be negative. It means that in that case the theory doesn't match the analysis. So writer conclude that the result appears in that study was different than the theory.
-) The correlation analysis between lending rate and lending amount of all sample banks under study comes highly negative. This relation between two variables (lending rate and lending amount) of sample banks matches with the theory which says with the increase in lending rate, lending amount decrease and vice – versa. So, she concluded that lending rate is most important determinant of loan and advances of all commercial banks.

The study made by **Pokharel**, (2004) in his thesis topic of “*Determinants of interest rates in Nepalese Financial Markets*”.

The main objectives of this research are i) To show the relationship between liquidity position and interest rate on deposit and lending. I) To identify the effect of inflation on interest rate charged and offered by various Nepalese financial institution.iii) To identify the methods used by Nepalese financial institutions to calculate interest on lending.

The major findings are:

-) Deposit amount of all sample banks are found to increase even if the interest rate of deposit, the attracting factors for deposit, is decreasing.
-) The relation between interest rate on deposit and inflation rate is little positive. Due to little positive correlation, it is concluded that the interest rate in Nepalese Financial market is affected by inflation rate to some extent.
-) Lending rate and Inflation rate should be perfect but the degree of positive correlation is somewhat less. Though it is concluded that “interest rate on lending in Nepalese Financial Market is affected by inflation only to some extent”.

The study conducted by **Pitaber Subedi**, (2005) in his thesis “*Impact of interest rate structure on investment portfolio*” .The main objectives of the research is i) To identify determinants of interest rate and investment ii) to analyze the interest rate structure in the organized sector of Nepal iii) To analyze the relationship between interest rate and investment portfolios of listed finance companies of Nepal. iii) To assess the impact of interest rate structure on investment portfolio of listed finance companies of Nepal. iv) To recommend and suggestion for the improvement of investment portfolio of listed finance companies on the basis of findings.

The research has obtained following findings:

-) Most of the sample finance companies determine the rate of interest on deposit and lending of the basis of market competition and liquidity position.
-) Change in interest rate affects investment portfolio of listed finance companies of Nepal.
-) Investment portfolio of most of the finance companies was not organized systematically.
-) The most important factor for determining investment was liquidity position of the selected finance companies.
-) When interest rate structure changes comparatively hire purchase loan is affected more.
-) Most of the sample finance companies prefer to invest in housing loan.

The study conducted by **Arjun Giri**, (2006) in his thesis “*The Impact of interest rate structure in investment portfolio of listed Finance companies*”. The study followed some objectives such as: i) To identify the determinants of interest rate and the investment. ii) To cast a glance at the historical background of interest rate structure of commercial bank’s policies, decision and strategies and their impact. iii) To access the impact of interest rate structure of commercial bank on the investment portfolio by analyzing their deposits, loan/advances, interest spread, investment and bills purchased and discounted.

The researcher has obtained following findings:

-) The rate of interest in every sector of the economy was decreasing trends during the study period.
-) The relationship between investment and the rate of interest was negative. When interest rate increase the amount of investment decrease and vice versa.
-) There was negative relationship between rate of interest and hire purchase. When interest rate raise, the demand for hire purchase falls.
-) Most of the sample finance companies determine the rate of interest on deposit and lending on the basis of market competition and liquidity position.
-) Change in interest rate affects investment portfolio of listed finance companies of Nepal.

The studies conducted by **Rajiv Chaudhary**, (2006) in his thesis “*Impact of interest rate in structure on investment portfolio of commercial bank*” The objectives of the study are: i) To analyze the status of liquidity. ii) To analyze in the management of interest rate of credit risk. iii) To explore the relationship between interest rates and economic variables.

The following findings are obtained:

-) There are a significant relationship between purpose wise loan (industrial, commercial) sector and lending rates.
-) The correlation between agriculture sector loan and lending rates is found to be positive correlation.
-) The correlation between the deposit and credit found to be strongly correlated.

Hence, he has concluded that effort should be made to lessen the gap between deposit rates and lending rates. Strategic credit plan and policy must be formulated. Changing conservative investment system to portfolio investment system where the maximum return with minimum risk. The pragmatic applicable interest strategy should be introduced both in deposit and lending rates.

Gopal Pokhrel, (2007) in his thesis “*Interest rate structure and it relation with deposit lending and inflation in Nepal*” has the objective of the study are: i) To find out whether the deposit amount (saving) increase with increase interest rate. ii) To locate whether the opposite relationship of interest rate with invested that we have known or understand is true or not iii) To find out the relationship interest rate with inflation Nepalese market. iv) To suggest for the improvement on the basis of findings of the study.

He concluded the finding that the substitutions effect does not work for all sample banks or the theory holds wrong for most of the samples banks. This means that people are oriented to deposit more amounts even if the interest rate on deposit are falling every year. The increase deposit clarifies this fact.

A study conducted by **Dhruba Shiwakoti**, (2008) in his thesis “*Interest rate structure and its relation with deposit lending and inflation in the context of Nepal*”

The research focused on three objectives: i) To determine the actual situation of substitution effect in the context of Nepalese financial markets. ii) To determine the relationship between lending rate and corresponding lending amount iii) To explore the actual relationship of inflation rate and interest rate.

The major findings have obtained:

-) The analysis of substitution effect for both fixed and saving deposit shows that substitution effect do not exist for all sample banks. This means that people are oriented to deposit more amounts even if the interest rates on deposit are falling every year.
-) It has found that all sample banks except NBL have inverse relationship.
-) Fixed and saving deposit, it is found that all sample banks except ADB/N have moderate correlation with inflation rate.

2.3 RESEARCH GAP

As being a researcher I have tried my level best to excavate as much as information to portrait while conducting my research. As far as consulting many references accompanying other researcher's conclusion accrediting for proceeding this task. Even though, my much effort there may some lack of improvement.

This thesis compiles concern Journals and other articles related to this topic. Thesis available at SDC library along with concerned book and self collected articles have been reviewed. This could not be the sufficient study even I have made my possible effort to bring the best study as far as my capability.

This study has been able to analyze the effect of political instability, latest NRB directives and its impact and income from foreign employment to the interest rate which were not sufficient in previous studies while not at all in reference to foreign employment i.e. remittance income that I have reviewed through out this thesis study. The outcome of this thesis has been accepted the general principle of determinants of interest rate somehow which also could be quite different than other studies.

CHAPTER –THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research Methodology is the process of locating, obtaining, reading, evaluating the research in the area of selected topic what other researcher has uncovered. In sight of previous research work that related to the present research and it helps to avoid duplication. It is a job of stock taking of available information or literature on relevant topic. Research methodology is a way to solve the research problem systematically. It points out the works already done and remains to be done. Research also portrait agreement and disagreement approach develop and taken by the previous research. It may be understood as a science of studying how research is done scientifically. It is necessary for the researcher to know not only the research methods but also the methodology. When we talk about the research methodology we not only talk of research methods but also consider the logic behind the methods we use in the context of our research study and explain why we are using a particular method or technique and why we are not using others so that research results are capable of being evaluated either by the researcher himself or by others. The study of research methodology gives the student the necessary training in gathering materials and arranging them, participating in the field work which required, and also training in techniques for collection of data appropriate to particular problems, in the use of statistics, questionnaires and controlled experimentation and in recording evidence, sorting it out and interpreting it.

3.2 RESEARCH DESIGN

The Research Design is a plan or a road map to prepare for research. The researcher selects the topic and defines the project/investigation to be undertaken. Though, Research Design is the conceptual structure within which research is conducted. It constitutes the blue print for the collection, measurement and analysis of data. As such the design includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data. Research design is needed because it facilitates the smooth sailing of the various research operations, there by making research as efficient as possible yielding maximal information with minimal expenditure of effort, time and money (*Cooper & Fraser; 1982:39-41*). Research design is the plan and structure of investigation so conceived as to obtain answers to research question. The plan is overall scheme or program of the research. A research design expresses both the structure of the research problem and the plan of investigation used to obtain empirical evidence or relations of the problem (*Ibid:145*).The research design refers to the entire process of planning and carrying out a research study. (*Wolf & Pant; 2000: 53*) Therefore, Research Design is structure and strategy of investigation. It is simply the framework for study and helps the analysis of data related to study topic. It is descriptive and prescriptive in nature.

3.3 POPULATION AND SAMPLES

Among the large number of population selecting a small portion from the population for studying its properties is called a sample and the number of units in the sample is known as the sample size. The method of selecting for study a small portion of the population to draw conclusion about characteristics of the population is known as sampling. Such sample will help to diagnosis appropriate statement of the problem or a situation. Sampling may be defined as the selection of part of the population on the basis of which a judgment or inference about the universe is made. (*Sharma & Chaudhary: 2058:171-173*) Among the similar categories population choosing some ideal sampling to extract the overall conclusion. Three financial companies are taken out of 78 financial companies. For selecting the samples, non-random sampling method is used here among different methods. Organizations under study are as follows, whose general introduction and major objectives are presented in chapter one. The selected organizations are as follows:

-) Union Finance Company Limited (UFCL)
-) United Finance Company Limited (UFC)
-) Nepal Merchant Banking & Finance Limited (NMBF)

3.4 SOURCE OF DATA AND COLLECTION PROCEDURE

Data collection is one of the most prominent works and it is very hard to get appropriate data. As far as research work is concern for this study, mainly secondary data are used. These secondary data are collected mainly from published sources like annual report, prospects, balance sheet, newspaper, website, and other sources. Besides this in some cases, if needed, primary data can also be used. They can be collected through direct interview, questionnaire and observation.

Secondary data are collected from various publications of financial companies, Nepal Rastra Bank, and even from websites of various financial companies. Thus, this study is based on secondary source of data to fulfill above-mentioned objectives as well as primary data.

3.5 DATA PROCESSING AND PRESENTATION

Data obtained from various sources can not be directly used in their original form as they are raw data. Though, obtained data from various sources and using that information into required form. When data will not be presented in understandable and easier way there would be no use of conducting research study or analysis of data. Analysis part would be difficult to understand to the readers without processing the data. So, to make the study understandable at the first sight data should be processed.

As presentations of data means to keep raw or process data into understandable form by editing, rechecking and using various tools such as tables, charts, figures and trend lines. In this study also data are presented using all the above mentioned tools so as to make understand the analysis part in proper and easier way.

3.6 TOOLS TO ANALYZE THE DATA

In order to get the concrete result from the research, data are analyzed by different types of tools. As per the topic requirement, in this study statistical tools are necessary. So for this study the following statistical tools are going to be used. Financial tools are also used to some extent.

Arithmetic Mean

Arithmetic mean of a given set of observations is their sum divided by the number of observations (*Gupta, 2002: p 238*). In such a case all the items are equally important. In this study simple arithmetic mean is used. It is computed by using following formula:

$$\text{Mean} = \frac{X}{n}$$

Where, $X = \text{Mean}$

$X = \text{Sum of all the Variable } X$

$n = \text{Variables involved}$

Standard Deviation

The standard deviation is the best tools to measure fluctuation in any data. It is usually denoted by the Greek Letter σ (small sigma). The Standard deviation is defined as the positive square root of the arithmetic mean of the square deviations from their arithmetic mean of a set of values. It is also known as 'Root Mean –Square Deviation' (*Pant & Chaudhary, 2053: p196*).

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

Greater the magnitude of standard deviation, higher will be the fluctuation in data and vice versa.

Correlation Coefficient

Correlation coefficient is the statistical tool which measures the degree of relationship of one variable with other variables. Two or more variables are said to be correlated if change in the value of one variable appears to be related or linked with the change in the other variables. It refers the closeness of the relationship between two or more variables. Correlation says just degree of relationship between two or more variables. It does not tell us anything about cause and effect relationship (*Sharma & Chaudhary, 2053: p405*).

Correlation may be positive or negative and ranges from -1 to +1. Simple correlation between interest rate on deposit and deposit amount, interest rate on lending and credit or lending amount and interest rate and inflation is computed in this thesis. The correlation between interest rate on deposit and deposit amount is positive interest rate on lending and lending amount is negative. When inflation increases, interest rate also increases in same direction and vice versa. For our study following reference is used. (*Pant & Chaudhary, 2053: p306*).

-) Correlation may be positive or negative and ranges from -1 to +1, there is positive perfect correlation; when $r = -1$, there is perfect negative correlation; when $r = 0$, there is no correlation and when $r < 0.5$ then there is low degree of correlation.
-) When 'r' lies between 0.7 to 0.999 (or -0.7 to -0.999), there is high degree of positive (or negative) correlation.
-) When 'r' lies between 0.5 to 0.699, there is a moderate degree of correlation.

The simple correlation coefficient (r) is calculated by using following formula:

$$\text{Simple correlation coefficient}(r) = \frac{n \sum X_1 X_2 - \sum X_1 \sum X_2}{\sqrt{n \sum X_1^2 - (\sum X_1)^2} \sqrt{n \sum X_2^2 - (\sum X_2)^2}}$$

Where,

N = Total number of observations.

X₁ and X₂ = Two variables, correlation between them are calculated.

Coefficient of Determination

The square of the simple correlation coefficient is called coefficient of determination and it is very useful in interpreting the value of simple correlation coefficient. The main significance of the coefficient of determination is to represent the portion of total variations due to independent variable (*Sharma and Chaudhary, 2058: p 420*).

$$\text{Coefficient of determination } (r^2_{12}) = (r_{12})^2$$

t-test for significance of simple correlation coefficient:

If 'r' is the observed simple correlation coefficient of 'n' pairs of observations from bivariate normal population, the test statistics for significance of correlation under null hypothesis is given by

$$t = \frac{r \sqrt{n-2}}{\sqrt{1-r^2}}$$

Abbreviation: t follows t- distribution with n-2 degree of freedom (d.f.), 'n' being the sample.

Confidence limit for estimating population correlation coefficient (...)

1- α % confidence limit for estimating population correlation coefficient (ρ). In this research study we have assumed 95% confidence level that means 5 (100-95). Degree of Freedom (d.f.) is 3.

CHAPTER- FOUR

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

Data presentation and analysis measure the collected data and with the help of statistical tools to extract the result. Without this part the study remains incomplete in a sense that the above set objectives in chapter one cannot be achieved and conclusion and recommendation cannot be drawn. It is not possible to ignore this part to know what the real problems are and what factors are affecting those problems in the real world in conjunction to the research topic.

This chapter is the main body of the study which includes detailed presentation, analysis and interpretation of data relating to interest rate on deposit and lending, deposit collection and loan advance of each selected finance companies from Nepalese financial system. In this chapter, relationship between variables i.e. between interest rate on deposit and deposit amount and lending interest rate and lending amount are presented, analyzed and interpreted. This chapter consists of various calculation made for the analysis of interest rate and its impact on deposit amount, lending amount, and inflation rate of the sample finance companies. To make our study effective and precise as well as easily understandable, this chapter is categorized into three parts; presentation, analysis and interpretation. The analysis is based on secondary as well as primary data. Firstly data are presented in tabular and chart form according to the need. The presented data are then analyzed using various statistical tools as mentioned in chapter three according to the requirement of the study; lastly interpretation is made following the analysis part.

Data presentation, analysis and interpretation of the study are made finance company wise i.e. one by one. To show the response of interest rate toward inflation rate and real rate of interest, correlation between these variables has been analyzed and significance has been tested using t-statistics. The data and information gathered from different sources, as described in previous chapter, have been broadly grouped into the following two groups:

- a) For the quantitative analysis, various published data from NRB and concerned organizations has been analyzed for showing their relationship.
- b) For qualitative analysis, primary data collected by means of questionnaire and direct interview with various respondents has been presented and analyzed.

Besides above analysis, tables and diagrams have been used so as to make the result clearly understandable.

4.2 QUANTITATIVE (SECONDARY DATA) ANALYSIS

Two or more variables are set to be correlated if change in the value of one variable appears to be related or linked with the change in other variables. Thus, the correlation analysis is generally used to describe the degree to which one variable is related to another it helps to identify whether a positive or negative relationship exist, the relation is significant or not; and to established cause and effect relationship.

Correlation analysis, a statistical tool has been used here to show the relationship between various variables which are assumed to be the influencing factors of interest rate charged and offered by sample finance companies. Similarly the coefficient of correlation is also tested using t-statistics of hypothesis to show whether it is statistically significant or not. Detail analysis of individual finance companies is presented in following sub- sections.

4.2.1 Union Finance Company Limited (UFCL)

Table 4-1
Amount of Deposit and Lending, Interest rate on Deposit and Lending of UFCL and Inflation and Risk free rate

| Fiscal Year | Deposit Amount(Rs.in million) "a" | Interest Rate on Deposit "b" | Loan Amount (Rs. in million) "c" | Interest Rate on lending "d" | Inflation rate "e" | Risk-free Rate "f" |
|-------------|------------------------------------|------------------------------|----------------------------------|------------------------------|--------------------|--------------------|
| 2001 | 241.20 | 9 | 238.70 | 16.43 | 2.4 | 4.96 |
| 2002 | 303.50 | 7.5 | 288.10 | 15.25 | 2.9 | 4.71 |
| 2003 | 308.40 | 7.25 | 245.80 | 13.80 | 4.8 | 3.48 |
| 2004 | 518.78 | 6 | 213.48 | 13.70 | 4 | 2.93 |
| 2005 | 538.73 | 5.6 | 243.60 | 14.95 | 4.5 | 2.46 |
| 2006 | 594.69 | 4.92 | 407.09 | 14.65 | 8.0 | 2.84 |
| 2007 | 670.40 | 7.75 | 586.26 | 11.60 | 6.4 | 2.42 |
| 2008 | 720.90 | 7.77 | 722.23 | 13.50 | 7.7 | 4.22 |

Source: - Annual reports of UFCL and various financial statistics published by NRB.

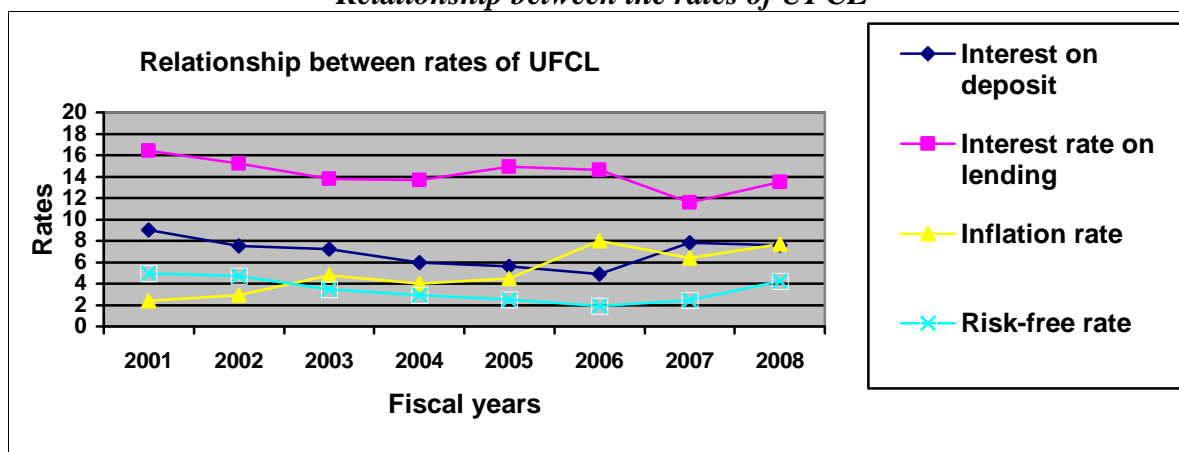
Table 4-1 shows the collected amount of deposit, interest rate on such deposits, amount loaned and interest on loan of UFCL for 8 fiscal years from 2001 to 2008. Inflation rate and risk-free rate for the same period has also been presented. Simple and multiple correlation coefficients, coefficients of determination and t-values are presented in table 4-2. Those values are calculated on the basis of above calculated data.

Table 4-2
Correlation analysis (UFCL)

| Variables | Coefficient of Correlation | Coefficient Determination | t-statistics | Table Value | Remarks |
|-----------|----------------------------|---------------------------|--------------|-------------|---------------|
| r_{ab} | -0.4476 | 0.2004 | 1.2261 | 3.182 | Insignificant |
| r_{bd} | 0.1131 | 0.0128 | 0.2788 | 3.182 | Insignificant |
| r_{cd} | 0.5951 | 0.3541 | 1.8137 | 3.182 | Insignificant |
| r_{be} | 0.4373 | 0.1912 | 1.1911 | 3.182 | Insignificant |
| r_{bf} | 0.7190 | 0.5170 | 2.5341 | 3.182 | Insignificant |
| r_{de} | -0.5695 | 0.3243 | 1.6971 | 3.182 | Insignificant |
| r_{df} | 0.5951 | 0.3541 | 1.8137 | 3.182 | Insignificant |

Note: Above tabulated calculations are on Appendix "B"

Relationship between the rates of UFCL



Deposit amount and interest rate on deposit of UFCL are negatively correlated ($r_{ab} = -0.4476$). The coefficient of correlation is statistically insignificant because calculated t-value is smaller than table value ($1.2261 < 3.182$). This means that interest rate on deposit is not significantly affected by the deposited amount. Insecurity saving pattern in Nepalese context might be the reason for such negative relation. In the other way amount loaned and interest rate on loan are positively correlated ($r_{cd} = 0.5951$) and it is statistically insignificant because calculated t-value is smaller than table value ($1.8137 < 3.182$). This means that there is no any significant relation between interest rate on lending and lending amount. Of the total variation in amount loaned, 35.41% is the effect of interest rate on lending shown by coefficient of determination.

Interest rate on deposit and lending are positively correlated ($r_{bd} = 0.1131$). The coefficient of correlation is statistically insignificant because calculated t-value is significantly smaller than table value at 5% level of significance for 3 degree of freedom ($0.2788 < 3.182$). This means that two rates are correlated and change in interest rate on deposit does affect interest rate on lending. 1.28% of total variation in interest rate on lending is the effect of interest rate on deposit as shown by the coefficient of determination, r^2_{bd} .

The relationship of inflation with interest rate on deposit ($r_{be} = 0.4373$) is positive and lending negative ($r_{de} = -0.5695$). The correlation coefficient between interest rate on deposit and inflation is insignificant because calculated t-value is significantly smaller ($1.1911 < 3.182$) which means that there does not exist any significant relation with these variables. The correlation coefficient between interest rate on lending and inflation is also statistically insignificant as the calculated t-value is smaller than table value ($1.6971 < 3.182$).

The another important factor affecting the interest rate charged and offered by the finance companies is risk free rate on 91 days Treasury Bills rate . The relationship of risk-free rate with interest rate on deposit and lending are positive ($r_{bf} = 0.7190$ and $r_{df} = 0.5951$). This shows that an increment in risk-free rate brings increments in the interest rate on deposit and lending and vice-versa. But correlation coefficient between risk free rate and interest on deposit is statistically insignificant because the calculated t-value is smaller than table value ($2.5341 < 3.182$). On the other hand, interest rate on lending and the risk-free rate are insignificantly correlated. This shows that there don't exist any significant relationship between these variables which has been explained by coefficient of determination, r^2_{df} .

4.2.2 United Finance Company Limited (UFC)

Table 4-3

Amounts of deposit and lending, interest rate on deposit and lending of UFC and inflation and risk free rate

| Fiscal Year | Deposit Amount(Rs.in million) “a” | Interest Rate on Deposit “b” | Loan Amount (Rs. in million) “c” | Interest Rate on lending“d” | Inflation rate “e” | Risk-free Rate “f” |
|--------------------|--|-------------------------------------|---|------------------------------------|---------------------------|---------------------------|
| 2001 | 207.09 | 8.50 | 182.88 | 16.50 | 2.4 | 4.96 |
| 2002 | 182.28 | 7.00 | 151.26 | 15.50 | 2.9 | 4.71 |
| 2003 | 164.6 | 6.75 | 192.51 | 14.50 | 4.8 | 3.48 |
| 2004 | 286.78 | 6.50 | 314.50 | 13.00 | 4 | 2.93 |
| 2005 | 332.64 | 6.25 | 529.43 | 12.50 | 4.5 | 2.46 |
| 2006 | 427.86 | 5.80 | 346.00 | 11.70 | 8.0 | 2.84 |
| 2007 | 494.26 | 7.26 | 925.64 | 12.75 | 6.4 | 2.42 |
| 2008 | 789.94 | 7.50 | 1369.64 | 13.17 | 7.7 | 4.22 |

Source: - Annual reports of UFC and various financial statistics published by NRB.

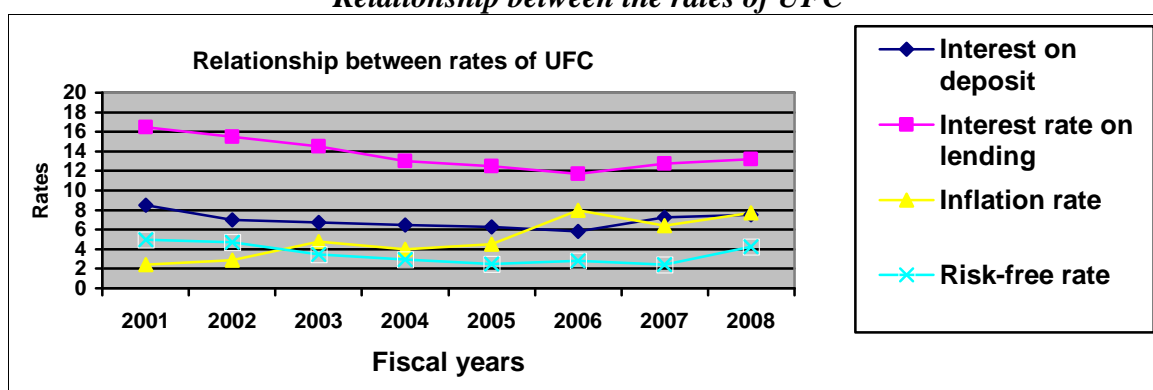
Table 4-3 shows the collected amount of deposit, interest rate on such deposits, amount loaned and interest on loan of UFC for 8 fiscal years from 2001 to 2008. Inflation rate and risk-free rate for the same period has also been presented. Simple and multiple correlation coefficients, coefficients of determination and t-values are presented in table 4-4. These values are calculated on the basis of above given data.

Table 4-4
Correlation analysis (UFC)

| Variables | Coefficient of Correlation | Coefficient Determination | t-statistics | Table Value | Remarks |
|------------------|-----------------------------------|----------------------------------|---------------------|--------------------|----------------|
| r_{ab} | 0.0372 | 0.001384 | 0.0912 | 3.182 | Insignificant |
| r_{bd} | 0.7463 | 0.5570 | 2.7465 | 3.182 | Insignificant |
| r_{cd} | -0.4473 | 0.2001 | 1.2250 | 3.182 | Insignificant |
| r_{be} | -0.3952 | 0.1562 | 1.0538 | 3.182 | Insignificant |
| r_{bf} | 0.7024 | 0.4934 | 2.4172 | 3.182 | Insignificant |
| r_{de} | -0.7776 | 0.6047 | 3.0296 | 3.182 | Insignificant |
| r_{df} | 0.8514 | 0.7249 | 3.9762 | 3.182 | Significant |

Note: Above tabulated calculations are on Appendix “B”

Figure No. 4-2
Relationship between the rates of UFC



Deposit amount and interest rate on deposit of UFC are positively correlated ($r_{ab}=0.0372$). The coefficient of correlation is statistically insignificant because calculated t-value is smaller than table value ($0.0912 < 3.182$). This means that interest rate on deposit is not significantly affected by the deposited amount. In the same way amount loaned and interest rate on loan are negatively correlated ($r_{cd} = -0.4473$) and it is statistically insignificant because calculated t-value is smaller than table value ($1.2250 < 3.182$). This means that there is no any significant relation between interest rate on lending and lending amount. Of the total variation in amount loaned, 20.01% is the effect of interest rate on lending shown by coefficient of determination.

Interest rate on deposit and lending are positively correlated ($r_{bd}= 0.7463$). The coefficient of correlation is statistically insignificant because calculated t-value is insignificantly smaller than table value at 5% level of significance for 3 degree of freedom ($2.7465 < 3.182$). This means that two rates are correlated and change in interest rate on deposit does affect interest rate on lending. 55.70% of total variation in interest rate on lending is the effect of interest rate on deposit as shown by the coefficient of determination, r^2_{bd} .

The relationship of inflation with interest rate on deposit and lending are both negative ($r_{be} = -0.3952$ and $r_{de} = -0.7776$). The correlation coefficient between interest rate on deposit and inflation is insignificant because calculated t-value is significantly smaller which means that there does not exist any significant relation with these variables. The correlation coefficient between interest rate on lending and inflation is also statistically insignificant as the calculated t-value is smaller than table value ($3.0296 < 3.182$).

The another important factor affecting the interest rate charged and offered by the finance companies is risk free rate on 91 days Treasury Bills rate . The relationship of risk-free rate with interest rate on deposit and lending are positive ($r_{bf} = 0.7024$ and $r_{df} = 0.8514$). This shows that an increment in risk-free rate brings increments in the interest rate on deposit and lending and vice-versa. But correlation coefficient between risk free rate and interest on deposit is statistically insignificant because the calculated t-value is smaller than table value ($2.4172 < 3.182$). But interest rate on lending and the risk-free rate are significantly correlated i.e. ($3.9762 > 3.182$). This shows that there exists significant relationship between these variables which has been explained by coefficient of determination, r^2_{df} .

4.2.3 Nepal Merchant Bank and Finance Company Limited (NMBF)

Table 4-5

Amounts of deposit and lending, interest rate on deposit and lending of NMBF and inflation and risk free rate

| Fiscal year | Deposit Amount(Rs.in million) (a) | Interest Rate on Deposit (b) | Loan Amount (Rs. in million) (c) | Interest Rate (d) on lending | Inflation rate (e) | Risk-free Rate (f) |
|-------------|-----------------------------------|------------------------------|----------------------------------|------------------------------|--------------------|--------------------|
| 2001 | 855.15 | 8 | 570.25 | 16 | 2.4 | 4.96 |
| 2002 | 945.91 | 7.75 | 531.96 | 15 | 2.9 | 4.71 |
| 2003 | 1183.72 | 7.5 | 633.44 | 14.5 | 4.8 | 3.48 |
| 2004 | 745.94 | 7.04 | 765.09 | 13 | 4 | 2.93 |
| 2005 | 747.26 | 5.375 | 717.20 | 10.8 | 4.5 | 2.46 |
| 2006 | 862.86 | 5.30 | 772.76 | 9.92 | 8.0 | 2.84 |
| 2007 | 1296.39 | 5 | 1395.88 | 9.94 | 6.4 | 2.42 |
| 2008 | 1661.61 | 5.30 | 1939.97 | 10.06 | 7.7 | 4.22 |

Source: - Annual reports of NMBF and various financial statistics published by NRB.

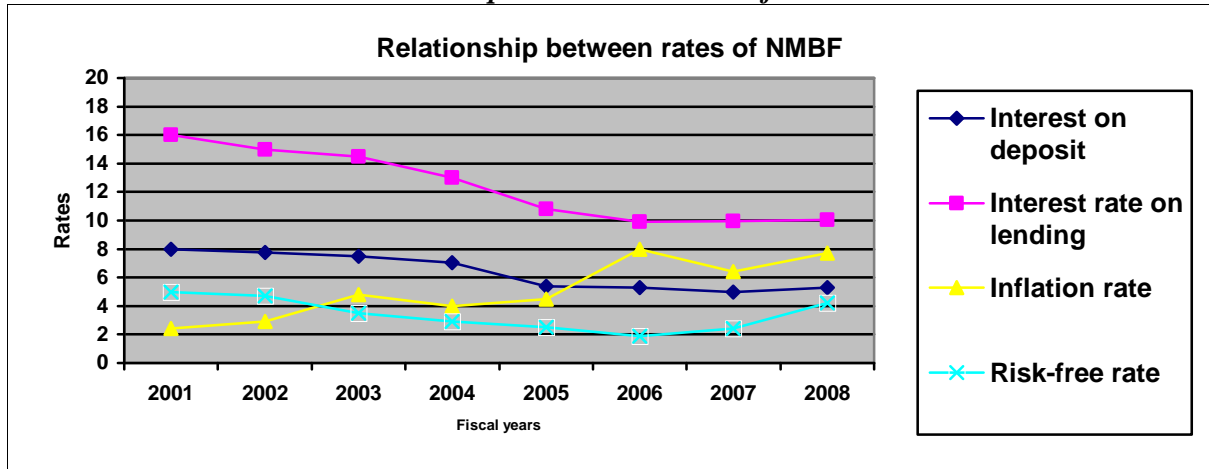
Table 4-5 shows the amount deposit collected, interest rate on such deposits, amount loaned and interest on loan of NMBF for 8 fiscal years from 2001 to 2008. Inflation rate and risk-free rate for the same period have also been presented. Simple and multiple correlation coefficients, coefficients of determination and t-values are presented in table 4-6. The above given data are used to calculate the value given below.

Table 4-6
Correlation analysis (NMBF)

| Variables | Coefficient of Correlation | Coefficient Determination | t-statistics | Table Value | Remarks |
|-----------|----------------------------|---------------------------|--------------|-------------|---------------|
| r_{ab} | -0.3247 | 0.1054 | 0.8410 | 3.182 | Insignificant |
| r_{bd} | 0.9884 | 0.9769 | 15.9282 | 3.182 | Significant |
| r_{cd} | -0.6670 | 0.4449 | 2.1929 | 3.182 | Insignificant |
| r_{be} | -0.8322 | 0.6926 | 3.6769 | 3.182 | Significant |
| r_{bf} | 0.6754 | 0.4561 | 2.2436 | 3.182 | Insignificant |
| r_{de} | 0.8709 | 0.7585 | 4.3413 | 3.182 | Significant |
| r_{df} | 0.6886 | 0.4742 | 2.3261 | 3.182 | Insignificant |

Note: Above tabulated calculations are on Appendix "B"

Figure No.4-3
Relationship between the rates of NMBF



Correlation coefficient between amount deposit and interest rate on deposit is negative ($r_{ab} = -0.3247$) which shows that when amount deposited increases, interest rate on deposit will decrease and vice-versa. The coefficient of correlation is statistically Insignificant because calculated t-value is smaller ($0.8410 < 3.182$) than tabulated value for 3 d.f. at 5% level of significance. Thus, interest rate on deposit of NMBF is not affected by the collected amount of deposit. The correlation coefficient between interest rate on lending and amount loaned is negative ($r_{cd} = -0.6670$) which shows that when interest rate on lending increases the amount loaned will decrease and vice-versa. The coefficient is statistically insignificant as the calculated t-value, 2.1929 is smaller than table value 3.182 i.e. ($2.1929 < 3.182$). This means that amount loaned has least significant relation with the interest rate on lending as expressed by the coefficient of determination, r_{cd} .

The correlation coefficient between interest rate on deposit and lending is positive ($r_{bd} = 0.9884$). The coefficient is statistically significant since calculated t-value is greater than table value ($15.9282 > 3.182$). This means that both the rates are significantly correlated since interest rate on deposit also brings change in interest rate on lending in the same direction. The coefficient of determination between both the rates is 0.9769 which means 97.69% of variation in interest rate on lending has been explained by interest rate on deposit.

The relationship of inflation with interest rate on deposit, r_{be} is -0.8322 , and with interest rate on lending, r_{de} is 0.8709 . The correlation coefficient, r_{be} , is statistically significant since calculated t-value is more than table value ($3.6769 > 3.182$). In the same way r_{de} is also statistically significant since calculated t-value is more than table value ($4.3413 > 3.182$). Hence, it can be said that interest rate on deposit of NMBF is influenced by inflation and there exists inverse relationship between these variables. At this point it can be said that general theories of interest rate contradict. There exists a significant influence of inflation on interest rate on lending which has been explained by coefficient of determination, r_{de}^2 .

On the other hand, the relationship of risk-free rate on deposit rate and lending rate is positive ($r_{bf}=0.6754$ and $r_{df}= 0.6886$). Both the correlation coefficients are statistically insignificant because their calculated t-values are smaller than table values ($2.2436 < 2.3261 < 3.182$). Hence, the interest rate on deposit and lending of NMBF are not affected by risk free rate.

Table 4-7
Deposit amounts of sample organizations

(Rs in million)

| Fiscal year | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| UFCL | 241.2 | 303.5 | 308.4 | 518.78 | 538.73 | 594.69 | 670.40 | 720.90 |
| NMBF | 855.15 | 945.99 | 1183.72 | 745.94 | 747.26 | 862.86 | 1296.39 | 1661.61 |
| UFC | 207.09 | 182.28 | 164.60 | 286.78 | 332.64 | 427.86 | 494.26 | 789.94 |

The above table denotes the deposited amount of 3 finance companies. The deposits of sample organizations are seen in increasing trend. UFCL trend of deposit amount is in rising trend .However, the deposited amount of Nepal Merchant Banking and Finance Company (NMBF) has decreased in the year 2003/2004 from 1183.72`Million to 745.94 million. Then after NMBF has upward the deposit amount0 .UFL also has fall deposit in two consecutive years 2001/02 and 2002/03 then after rise in deposit collection. This is really good scenario if they get feasible alternatives to invest the collect money or they can utilize it properly.

Analyzing above presented data, NMBF has the highest collection pattern in comparison to other sample finance companies. It has also been presented in figure as given below.

Figure No. 4-4
Deposit amount of sample organization

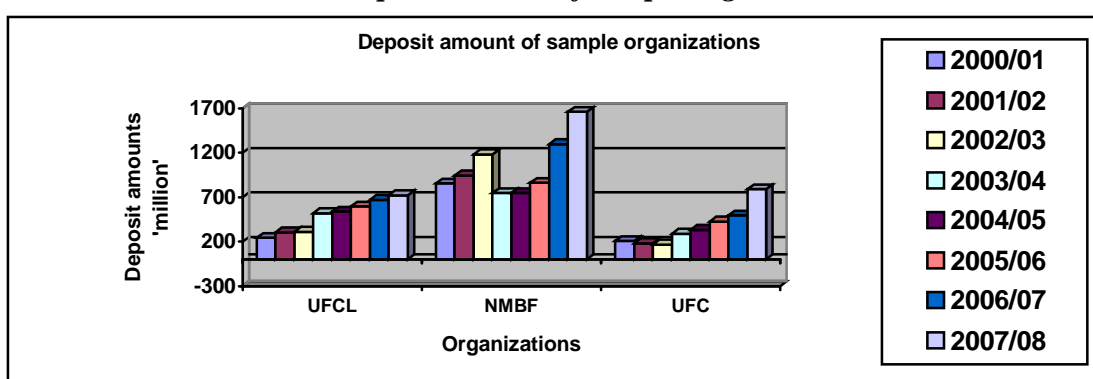


Table 4-8
Amount of loan disbursed by sample organizations

(Rs. in million)

| Fiscal year | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| UFCL | 238.7 | 288.1 | 245.8 | 213.48 | 243.60 | 407.09 | 586.26 | 722.23 |
| NMBF | 570.25 | 531.96 | 633.44 | 765.09 | 717.20 | 772.76 | 1395.88 | 1939.97 |
| UFC | 182.88 | 151.26 | 192.51 | 314.50 | 529.43 | 346.00 | 925.64 | 1369.64 |

The above table 4-8 shows the amount of loan disbursement by different sample finance companies. The amount loaned is found in increasing trend of almost all the sample organizations. However, the amount of loan of UFCL has decreased in the year 2002/03 from 288.1m to 245.8m and in the year 2003/04 it has been decreased to 213.48 million from 245.8 million. Similarly, the size of loan amount of NMBF has decreased from 570.25 million to 531.96 million in FY 2001/02 and decreased to 717.20 million from 765.09 million in FY 2004/05. And remarkable part of NMBF growth reach to 1395.88m. in FY 2006/07 and 1939.97m. in FY 2007/08. The amount of loan of UFC has decreased from 182.88m to 151.26 million in FY 2001/02 and decreased to 346 million from 529.43 million in the FY 2005/06. But UFC has also increased to 925.64m. in FY 2006/07 and 1369.64m. in FY 2007/08. If we compare the data of FY 2001/02 and 2007/08 in all of the sample organization has increase the volume of loan disbursement has been increased even it is not satisfactory in comparison to the deposit collection till to 2005/06. But from 2007 to 2008 there has been very big growth in comparison to deposit.

Figure No.4-5
Loan disbursed by sample organization

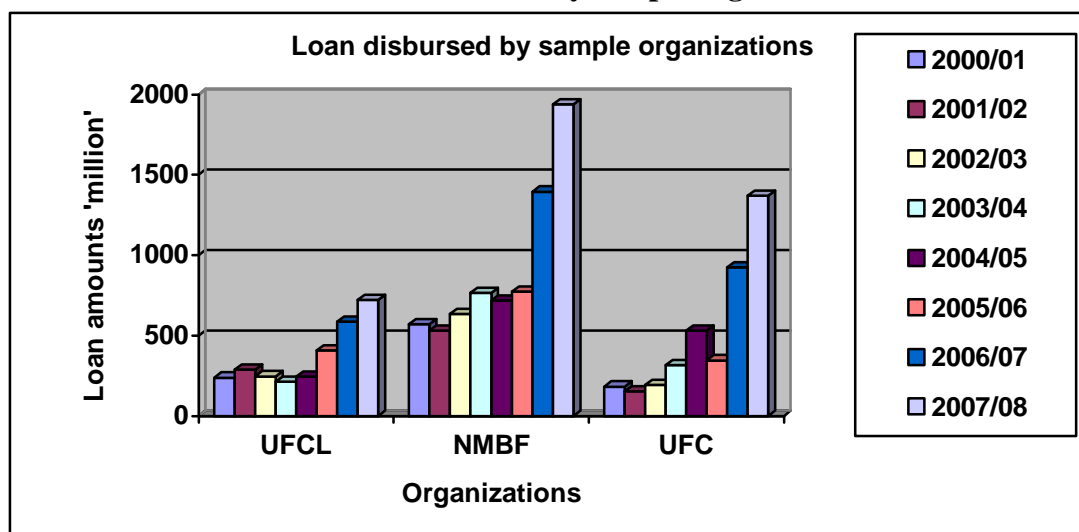


Table 4-9
Interest rates on deposit of sample organizations

(in percent)

| Fiscal year | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| UFCL | 9 | 7.5 | 7.25 | 6 | 5.6 | 4.92 | 7.75 | 7.77 |
| NMBF | 8 | 7.75 | 7.5 | 7.04 | 5.37 | 5.30 | 5 | 5.30 |
| UFC | 8.5 | 7 | 6.75 | 6.5 | 6.25 | 5.8 | 7.26 | 7.5 |

The table 4-9 shows the interest rate on deposit of all sample organizations i.e. finance companies. The interest rate on deposits of all Sample organization is found in descending trend in every next fiscal year from the very beginning as taken in this study. The decreasing of the interest rate on deposit is because of various qualitative factors till 2006 but from 2007 got new height due recent worldwide recession crisis cause lack of money to deposit. Many renowned bank of America, Europe has gone through bankruptcy phase. In that case, state government is helping banks to up rise. From the selected organizations UFCL had highest interest rate up by 9 % to FY 2000/01 then after UFC has highest by 8.5% and NMBF 8%. The interest rate provided on deposit by NMBF at the beginning and at the end i.e. in 2000/2001 and 2006/07 is lowest among other sample organizations and was fluctuating at the middle. The interest rate offered by NMBL is quite fluctuating than others. The interest rates offered by sample organizations as presented in diagram as given below:

Figure No. 4-6
Interest rate on deposit of sample organizations

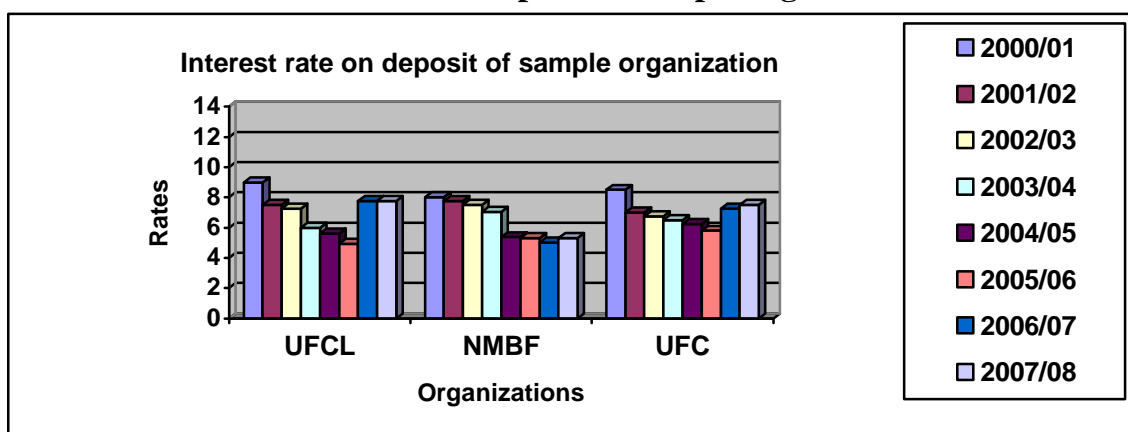
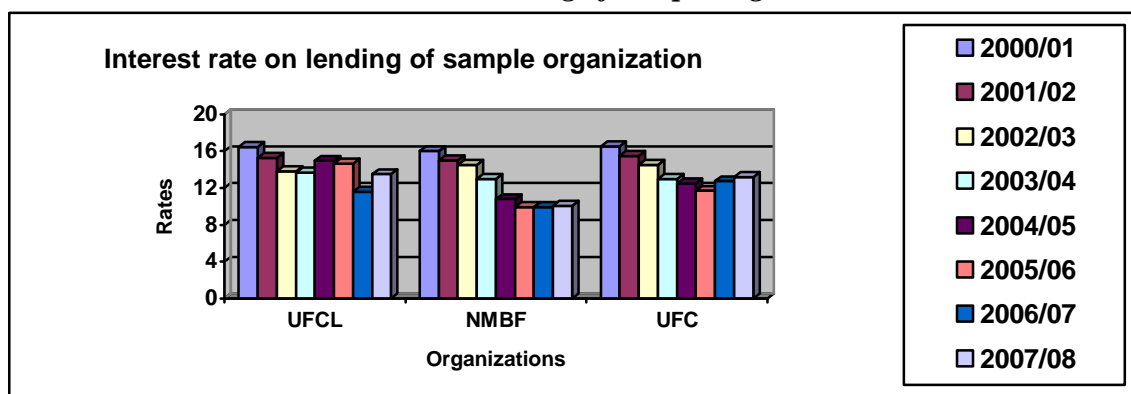


Table 4-10
Interest rates on lending of sample organizations

| Fiscal year | (in percent) | | | | | | | |
|-------------|--------------|---------|---------|---------|---------|---------|---------|---------|
| | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 |
| UFCL | 16.43 | 15.25 | 13.80 | 13.70 | 14.95 | 14.65 | 11.60 | 13.50 |
| NMBF | 16 | 15 | 14.50 | 13 | 10.80 | 9.92 | 9.94 | 10.06 |
| UFC | 16.50 | 15.50 | 14.50 | 13 | 12.50 | 11.70 | 12.75 | 13.17 |

The above table 4-10 denotes the interest rate on lending of different sample finance companies from FY 2001 to 2008. According to the table the interest rate on lending are seen to be in decreasing trend as the decrement in interest rate on deposit brings the change in interest rate on lending in the same direction since it is the reality. But recent trend of worldwide recession also made impact in Nepal also. Though interest rate has rise comparatively than previous year. In the FY 2000/2001 the interest rate on lending of UFC has the highest i.e. 16.5% that of NMBF is the least i.e. 16%. From 2000/01 interest rate is in decreasing trend till 2006/07 and slightly raised up by 2007/08. By analyzing the above given table we can conclude that interest rate of UFCL is more fluctuating in comparison to other sample organizations. The interest rate of above given sample organizations has been presented in diagram as given below:

Figure No. 4-7
Interest rate on lending of sample organization



4.3 QUALITATIVE (PRIMARY-DATA) ANALYSIS.

There are various other qualitative factors that affect interest rates of Nepalese finance companies rather than responding demand, supply, inflation and risk-free rate. A questionnaire (qualitative analysis tool) was made including the factors considered to be affecting the interest rate of Nepalese finance companies. Opinions and experiences of various related persons from various financial companies have been collected through questionnaire and direct interview which are presented as below.

4.3.1 Maturity Period and Interest Rate

Theoretically, interest rate is affected by the maturity period of loan. The longer the maturity period, higher the default risk (i.e. failure to repay to loan) and hence higher will be the risk-premium added to prime interest rate. This principle is not significant in Nepalese context. From the questionnaires and direct interviews with finance companies employees by ranking system, we found that most of the organizations do not consider maturity period of loan but few institutions are aware of this.

Table 4-11
Maturity and Interest rate

| S.N. | Responses | Rank |
|-------------|----------------------|-------------|
| 1 | Maturity risk | 4 |
| 2 | Competitors analysis | 1 |
| 3 | Inflation | 5 |
| 4 | Default risk | 6 |
| 5 | Liquidity position | 3 |
| 6 | NRB's instructions | 2 |

Above (Table 4-11) here rank 1 has top priority and rank 2 has less priority and so on. Generally, institutions do not prove long-term rather they renew frequently according to the borrowers' creditworthiness in terms of size of their business or project, cash flow capacity and pattern, nature of loan, goodwill and trustworthiness of borrower etc. therefore, rate for other category is the higher than prime. Institutions do not quote their interest rate on lending according to maturity period rather they quote separate rate for different sectors. But few organizations quote their rate according to maturity. They charge higher interest for longer-maturity-loan.

4.3.2 Competition and Interest Rate

Competition is the most important factor among the various factors affecting interest rate of finance companies of Nepal. Competition occupies a major place for the development of financial institutions within the financial system of Nepal. Interest rate charged and offered by Nepalese finance companies compete within their group. Generally, interest rate on agriculture-loan is smaller than industrial loan. But the interest rates of finance companies are highly competitive as they are targeted to specific customers group. From the Table 4-11 we have found that competition among them is highly ranked i.e. 1. Therefore, it is assumed that competition plays a vital role for determinant of Interest rate.

4.3.3 Sector Wise Difference/Risk Factor

Finance companies of Nepal also provide loan to different sectors and for different purposes. Quoted interest rate on loan differs according to risknesses of the sector. Following table shows quoted interest rate of Nepal Merchant Banking and Finance Company Limited (NMBF).

Table 4-12
Interest rate structure

| Sectors | %p.a. (Prime) | %p.a. (Others) |
|-----------------|----------------------|-----------------------|
| Hire purchase | 11 | 12 |
| Housing | 11 | 12 |
| Bridge finance | 12 | 13 |
| Term Loan: | | |
| Industry | 10 | 11.5 |
| Trading | 10 | 11.5 |
| Working capital | 8.50 | 10 |

| | | |
|--|-------|-----|
| Loan against own FDR | (+)2% | NA |
| Loan against Govt. Bonds | 6.5 | 7.5 |
| Loan against guarantee of other financial institutions | 7 | 8 |
| Loan Against FDR of other banks & financial institutions | 7 | 8 |
| Loan Against Acceptable Listed Shares | 10 | 11 |

From the table 4-12 interest rates are different in various category differs according to the loan for different Purposes and sectors. However, while interviewing respondents of various institutions, it has been found that quoted interest rate may not be applicable in practice it could be based on discussion and mutual understanding. Lending institutions may provide loans at slightly different rate from quoted rate. While charging the interest rate, lenders consider the trustworthiness of customer, cash flow power, volume of loan etc. Hence, lower quoted rate may be fixed through negotiation. In practice, finance companies can charge interest quite high to the client at quite high risk and vice-versa. NRB has also loosen up the boundary to fix interest rate on lending and borrowing and spread to be maintained has been removed for finance companies. For example, interest rate for hire purchase is 11% and that on working capital loan is 8.5% but in reality a borrower may get hire purchase loan at less than housing loan. Hence we can say that sector wise risky-ness in fixing interest rate on lending, of Nepalese finance companies is less significant.

4.3.4 Political Instability and Violence

The revolutionary changes in Nepalese political scenario and new political parties and alliance has formed. Such a situation is taking new direction in the country but still turmoil, ups and down causing instability. People have hope for underconstruction new constituency give stability and development. Our main concern here is whether the violence and instability directly affect interest rate of Nepalese finance companies or not. From questionnaire and interview with respondent, we found that the instability and violence is directly affecting the interest rate charged and offered by the institutions. Most respondents said that interest is directly affected. According to them, instability and violence is affecting their operations. Frequently organized strikes, Bandas reduce the working hours of the institutions and the added operating cost burden (especially for a fixed price). According to respondent, the interest rate is affected by the actives of political parties and violence. Such activities dampen the overall economy that is why business growth rate decreases and lending opportunities are curtailed. This results is decreased demand of loadable markets are in decreasing trend. This may be because of slackness in economic growth. Similarly, frequently changing governments are also affecting overall operation of financial institutions including interest rate, through the decision of different government and governor of NRB regarding financial system of the country.

Violence also is reducing the investments opportunities of individuals. People are afraid to invest due to the lack of safety and security. With a fear that their return from investment may be uncertain, people deposit money at bank. Analysis of deposit trend

in recent years in Nepalese financial market shows so. Hence, supply of loanable fund in financial institutions is increasing and return on such fund to depositor interest rate on deposit is decreasing. Therefore, political instability and violence, in the experience of finance companies, have been directly influencing interest. For this, a question was asked to finance companies employees, “Does political instability and violence in our country influence interest rate charged and offered by your institution?” Following responses was found for this question:

Table 4-13
Impact of political instability and violence

| S.N | Responses | No of respondents | Percentage |
|--------------|--------------------------|-------------------|-------------|
| 1 | Directly influencing | 12 | 60 |
| 2 | Normally influencing | 4 | 20 |
| 3 | Influencing somewhat | 3 | 15 |
| 4 | Not directly influencing | 1 | 5 |
| 5 | Not influencing at all | 0 | 0 |
| TOTAL | | 20 | 100% |

Does political instability and violence affect the interest rate?

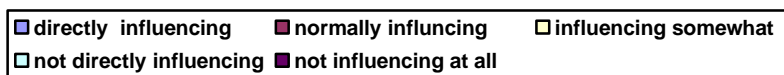


Figure No. 4-8 Impact of political instability and violence

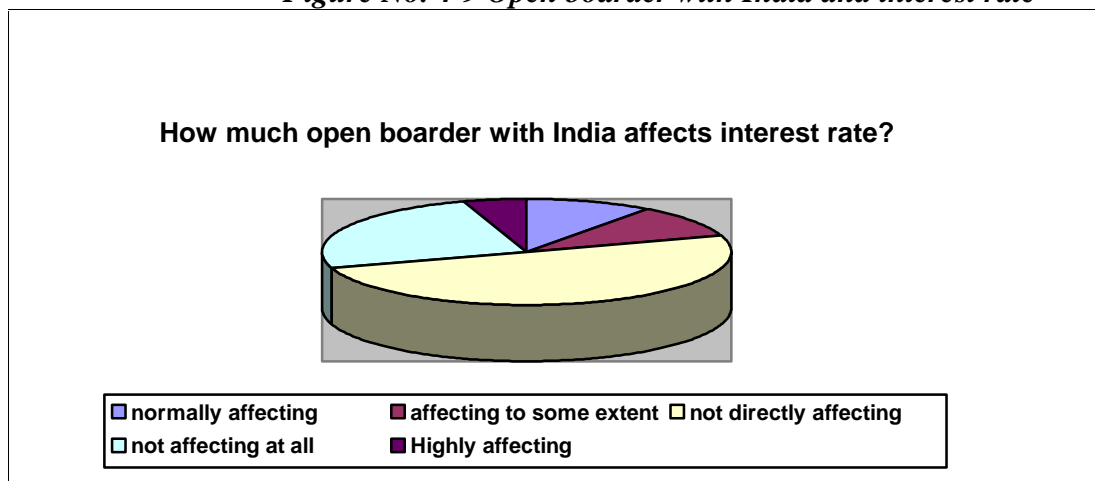
4.3.5 Nepal-India Open Border and Interest Rate

Nepal has long range of open border with India and surrounded by east, west and south, known as DashGaja (International border).In whole world, there are only two countries, Nepal and India, who do not have to take any permission or visa to enter each others’ country. Being very rapidly growing economy country India directly affects Nepalese economy. More than 60% of total foreign trade (export and import) of Nepal is with India. As we know that India is economically boosting world map. So, the needs of high investments are likely and in this case borrower has to pay high interest rate and depositor will also gain by high deposit rate. People of border side of Nepal are depositing their money in terms of high deposit rates .This can cause some shortage of liquidation and can affect the interest rate in Nepal too. Therefore, question was asked finance companies employees, “Does open boarder with India affects interest rate on borrowing and lending?” Following response was found for this question:

Table 4-14
Impact of open border with India

| S.N | Responses | No of respondents | Percentage |
|--------------|--------------------------|-------------------|-------------|
| 1 | Highly affecting | 1 | 5 |
| 2 | Normally affecting | 2 | 10 |
| 3 | Affecting to some extent | 2 | 10 |
| 4 | Not directly affecting | 10 | 50 |
| 5 | Not at all affecting | 5 | 25 |
| TOTAL | | 20 | 100% |

Figure No. 4-9 Open boarder with India and interest rate



From the analysis of above data open boarder with India does not directly affect the interest rate charged and offered by Nepalese finance companies. Near the border area, some agents from Indian financial institutions collect deposit from Nepalese customers are very minorly affected but it is not significant to reduce the loadable fund in Nepalese finance companies. In long-run open boarder with India influences the whole economy of Nepal, which also includes financial sector (i.e. indirect impact in finance companies).

4.3.6 NRB and Interest Rate

Central bank has a sole authority in affecting the level of interest rates by controlling the money supply and credit creation of finance companies through monetary and fiscal policy as per requirement. Central bank of Nepal, Nepal Rastra Bank (NRB) has the authority to set the rate of interest of bank and other financial institutions. But now due to liberal economic policy finance companies are free to fix their rate charged and offered. However various other activities, policy measures and directives issued by NRB influence the interest rate directly or indirectly in Nepalese financial market. Among these various measures, some are:

- a) Cash reserve ratio to be maintained by banks and finance companies (i.e. financial institutions).
- b) Refinance facility
- c) Bank rate i.e. minimum rate to be maintained by financial institutions.
- d) Buying and selling of foreign exchange to maintain liquidity in financial market.
- e) Open market operation

The finance company must maintain certain percentage of their deposit in Nepal Rastra Bank and certain percentage in their own vault as per NRB's directives. This statutory reserve is called cash reserve ratio (CRR). NRB gives instructions from time to time for finance companies specifying the CRR to be maintained by them similarly

NRB provides refinance facilities to the lending institutions in necessity at certain rate to increase the liquid fund. Another monetary instruments used by central bank to influence money supply is Bank Rate. Buying and selling of foreign exchange is another monetary measure that NRB uses to adjust the liquidity. NRB reduces the market liquidity by selling foreign currency and increase liquidity from buying foreign currency from market. A primary tool to influence money supply (liquidity) is the open market operation of NRB.

Table 4-15
NRB Interest rate

| Monetary Instruments | 2005/06 | 2006/07 | 2007/08 |
|-----------------------------|----------------|----------------|----------------|
| Cash Reserve Ratio(CRR) | 5% | 5% | 5% |
| Refinance Facility | Rs.461 m*. | Rs. 242 m. | - |
| Bank Rate | 6.25% | 6.25% | 6.25% |
| Standing Liquidity Facility | Rs.9.88 b*. | Rs.46.98 b | Rs.76.35 b. |
| Open Market | Rs.21290 m. | Rs.34740 m. | Rs.30420 m. |

* m=million b=billion

Source: Economic report and Monetary policy of NRB

The above tabulated data shows that CRR has been same 5% in from 2005 to 2008. Refinance Facility to the illed Industries in 2005/06 and 2006/07 are Rs. 461 millions and Rs. 242 millions shows decreased in amount to uplift for down falling industries. Minimum bank rate from 2005 to 2008 is same 6.25% with no change. Standing Liquidity Facility increased Rs.9.88 billion in 2005/06to Rs.76.35 billion in 2007/08. And for the Open Market the flow of cash is in increasing trend. These are the factors where eventually in financial market can influence the interest rate.

4.3.6.1 NRB Directives and Interest Rate

Along with maintaining various measures, NRB also issues directives to commercial bank and other financial institutions regarding their transactional activities and subsequent policies. Among various directives issued by NRB some of them which affect interest rate charged and offered by Nepalese financial institutions are described as below:

Single borrower limit is one of the directives issued by NRB that affect interest rate indirectly. As per the directives, commercial banks, development banks, and finance companies can provide loan to single borrower (i.e. an individual or an organization or a firm or a company or members of single family) up to 25% of their core capital for fund based loan. But this limit for non-fund based loan 50% of core capital. However, loan on security of government bond / NRB bond / fixed deposit receipt is not restricted by this vision. Slight difference is made in the directives issued to saving and credit co-operatives. They can provide loan to single borrower up to 10% if borrower is in second time up to 20% of their core capital, if borrower is borrowing for the third time or more. Similarly, co-operatives can provide loan to their member up to 80% of the project cost 20% must be the borrower's equity. Similar restrictions reduce the amount loaned (demand of loan) which may influence the interest rate on lending. Similarly reduced loan-advanced also reduces the deposit requirement and

reduction in the interest on deposit also occurs. Limitation relating to fund collection i.e. deposit collection has also been made in directives issued by NRB. According to the directive, commercial banks can collect deposits from public not more than 15 times of their core capital. Development bank and finance companies are forbidden to accept the fixed deposit of less than 3 months. Development banks can collect saving deposit up to 20% of total financial resources whereas finance companies can collect saving deposit up to 2.5 times of their core capital. Finance companies and co-operatives can collect financial resources (deposit, borrowing, and debenture) up to 10 times of their core capital. Such type of limitations reduces the source of fund (fund collection) for the institutions which reduces the liquidity in institution and impact may be the higher interest rate on lending because of low supply of loanable fund.

Recently, NRB has issued a directive related to minimum level of paid up capital with the motive of controlling drastic increase in bank and financial institutes and to promote merger and acquisition. According to the NRB directive the Bank and financial institutions of class A, B, C and D should have at least paid up capital as given below as per Bank and Financial Institution Act, 2063 (Section 47) for the purpose of Section 31 of same Act.

Classification of Bank and Financial institutions and provisions relating to minimum paid up capital to be maintained by Bank and Financial Institutions:

Minimum Paid up capital required:

| Class of Bank & Financial Institution | National Level | Regional Level | 4 – 10 Districts* | 1- 3 Districts* |
|--|--|-------------------------|--|--|
| Class “A” | 2000 million | - | - | - |
| Class “B” | 640 million | - | 300 million ^{a/} 200 million | 300 million ^{a/} 100 million |
| Class “C” | 300 million ^{a/} 200 million | - - | - - | 300 million ^{a/} 100 million |
| Class “D” ^{b/} | 100 million | 60 million [#] | 20 million ^{c/} | 10 million |

* Operating areas and projects beyond Kathmandu Valley to be limited within mentioned districts.

a/ Implement –able for financial institutions operating leasing transactions only.

b/ finance companies operating micro finance business only.

c/ including extra 5 districts of hilly region.

operating with in development region.

Class A Banks and finance company for national level should have 2000 million paid up capital. Class B Banks and financial companies should have 640 million paid up capital for national level, 300 to operate with in 4-10 districts having leasing transactions only & 200 million for not having leasing transactions, 300 million with leasing transaction for 1-3 districts & 100 million with out leasing transactions. Class C Banks and financial institutions should have 300 million paid up capital to be operated throughout national level with leasing transaction and 200 million with out leasing transactions and 300 million to be operated within 1-3 districts with leasing transactions & 100 million without leasing transactions. Class D banks and financial institutions with micro finance business only should have 100 million paid up capital to be operated throughout national level, 60 million to be operated with in particular development region with micro finance business only, 20 million paid up capital to be

operated within 4 to 10 districts including 5 districts of hilly regions and 10 million to be operated within 1-3 districts with micro finance business only.

In this way NRB has recently issued directive for banks and financial institution which are in existence to maintain the level of declared paid up capital by the end of FY 2064/065 and should be at the beginning for newly opening financial institutions. These directives will force to the Banks and financial institution for merger and acquisition which are not capable enough to maintain the level of paid up capital.

This new directive is supposed to be increase the level of demand of invest-able fund and supply of fund for investing alternatives accordingly. This is likely to maintain a new level of interaction between demand and supply of fund and new level of interest but this may not change the existing level significantly. The reason behind this is that NRB can formulate and issue new directives to maintain and control the situations favorable.

However these directives are issued by NRB to promote merger and acquisition and to control the unsound growth of Banks and financial institutions, this situation is not likely to be stopped. Since, 14 more financial institutions have been established after FY 2062/063 after issue of these directives. Whatever be the expectations this situation is not likely to be maintained since secured alternatives of investment are not available. So keeping main objectives apart the exact prediction about impact on interest rate and others can not be made until the overall situation of country is not improved.

NRB also issued directives directly to influence interest rates in financial market. A directive issued in 2000 had specified that the commercial banks could offer interest rates more than published rate by 50 basis point on the basis of negotiation with customer for the deposit upto Rs.200 million and 100 basis point for the deposit of more than Rs.200million over the published lending rate for all type of lone banks could make adjustment upto 50 basis point on the basis of negotiation with the customers. Weighted average interest rate spread must not exceed was 5%.but this restriction is already removed .now banks and other financial institution are free to fix their interest rate they are not allowed to charge interest on flat basis. Hence, instructions and directives issued by NRB in different time periods affect the interest rate level in Nepalese financial markets.

Nepal is one of the least developed countries of the world with the average per capita income of US \$260. Nepal has followed the course of economic liberalization since the decade of 80s. To align Nepalese economy with the multilateral trading system, Nepal has become the member of the World Trade organization (WTO) in September 14, 2003. The financial system in Nepal is composed of 25 commercial banks (Commercial banks), 58 development banks, 78 finance companies, 12 micro-finance development banks and 46 financial co-operatives, financial non-government organization (NGOs). All these institutions are under the regulatory framework of Nepal Rastra Bank (NRB). Besides these institutions, the financial system is composed of 117 postal banks, 21 insurance companies, Employee Provident Fund, Citizen Investment Trust, Deposit Insurance and Credit Guarantee Corporation, Security Board of Nepal (SEBON) and Nepal Stock Exchange (NEPSE). The financial sector is primarily the means for transforming and transferring the savings of

an economy into its investment. The author means to say that the financial institutions that hold financial assets (such as loans, mortgage, share of stock, etc.) and obtain the funds for these investments by issuing liabilities (such as deposits, mutual fund shares, insurance obligations, etc.). Bank and Financial Institutions are most dynamic industries in Nepal. As analyzing above article the interest rate on deposit and lending of all type of financial institutions are directed and regulated by NRB directives. So, it is true that the interest rate on both deposit collected and lending of those institutions are obviously affected by the directives and regulations. In general there should be high supply of invest-able fund from those institutions since NRB has issued directives to maintain low CRR liberalization in fixing interest rate for finance companies etc. but today's flow of deposits from general people or investors has maintained the situation somehow to be changed. Similarly monetary policy issued by NRB can affect the demand, supply and liquidity position of invest-able fund which obviously affects the interest in short run. (*Management Dynamics, 2007, Dr. Manandhar and Dhakal:2 & 3*).

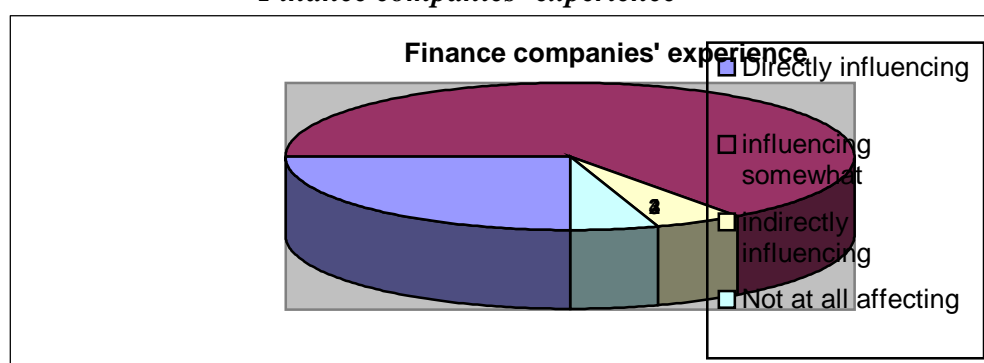
4.3.6.2 Finance Companies' Experience

Various respondents replied as given below in the table when a question was asked to them, "Does NRB directives influence the interest rate charged and offered by your institution?" 20 persons were asked the same question and replied in different way with different view.

Table: 4-16
Finance companies' experience

| SN | Responses | No. respondents | Percentage % |
|----|------------------------|-----------------|--------------|
| 1. | Directly influencing | 5 | 25 |
| 2. | Influencing somewhat | 13 | 65 |
| 3. | Indirectly influencing | 1 | 5 |
| 4. | Not at all affecting | 1 | 5 |
| | Total | 20 | 100 |

Figure No.4-10
Finance companies' experience



4.3.7 Foreign Employment, Remittance Income and Interest Rate.

Nepal economical growth in FY 2005/06 was 2.8% and 2.5% in FY 2006/07. And inflation rate 6.4% in 2007 and 7.7% in 2008 has also reduced consumer buying power. The impact of world recession phase has dampen the in every sector. Many of the foreign companies are being bankrupt or minimizing employment. Hence, its effect has been seen globally. In the same way foreign employment and remittance of Nepal has been slowly declining. Even though the remittance still growing but

specialist has forecast it head affect in Nepal soon. The alternatives of investment has been narrowed which consecutively has minimized the employment opportunity. Similarly, government has not been capable enough to search and manage employment alternatives. The existence political situation of country since a decade has sum up such problem further more. In other hand the qualified and trained manpower are growing up day by day. In such situation the ditch of unemployment has been broad and broad. As a result the foreign employment has been developed as a charming alternative those all unemployed manpower. The foreign employment in developed countries of Europe, Asia, US etc. begun to grow up since mid 90s when the political instability, violence and security problem begun to be worse.

A huge number of people from Nepal are employed in foreign countries and it is said that the Nepalese economy has been maintained somehow from foreign employment. Obviously it is bitter truth that capable manpower are going abroad in search of job which will bring negative impact for the long run development of the nation in one side and in other side it is a opportunity to earn money for national and individual interest. The flow of remittance income is increasing according to increase in number of foreign employment. Since a huge amount from foreign employment is received from foreign countries every year and investment alternatives are being narrow day by day due to security problem and political instability. Ultimately, the deposit of fund has been encouraged and growing numbers of financial institutions which in fact not necessary for Nepal, a small country. So, the NRB directives with the motive of discouraging increase in number of financial institution have not been able enough to control the situation as targeted. The increasing number of financial institutions and deposits in those institution and decrease in investment alternatives obviously minimize the interest rate in deposits. This situation surely effect the interest rate in lending from financial institution since those institutions also do not have investment alternatively sufficiently and low demand of invest-able fund accordingly. This will decrease interest rate in lending also.

4.4 MAJOR FINDINGS

-) Excessive deposit has played descending interest rate trend due to lack of investing sector which we called inverse relation between interest rate and deposit. But it also gives beneficiary rate of interest in lending. This will cause investor to accelerate business with further expansion. Enough adequacy of money will provide investor in comparatively low interest rate. Over liquidity might have caused the decrease in interest rate in lending over the years with increase in lending amount.
-) Among the three samples, the correlation coefficient between interest rate on deposit and interest rate on lending are found positive indicating that whatever may be deposit accepted or amount loaned, they are positively related with the interest rate.

-) The range of interest rates on deposit and lending are almost found to be in decreasing trend from the very beginning of the sample period we have taken especially for this study i.e. from FY 2000/01 to FY 2006/07. But recent recession of FY 2007/08 has made deposit less availability and in same way loan amount as well. And this cause deposit rate of interest and loan interest rate move up. This means that the interest rate pattern in saving and borrowing both moves in the same direction.
-) Interest rate on both deposit and lending has found to move in the opposite direction with the inflation rate which contradicts with the general principal. The reasons might be saving patterns and lack of investment opportunities due to political instability, weak management, lack of security, etc.
-) Risk free rate taken as foundation of interest rate is found to be positively related with the market rate which supports or general principal of scaling up the interest from risk free rate as the premium is charged on risk free rate according to the special characteristics of individual assets.
-) The interest rate is determined by the situation of competition between finance companies to a large extent. This has been drawn on the basis of interviews taken with respondents of finance companies. This is likely to be increase or not to stop in future as analyzing the current situation of financial markets and increasing numbers of financial institutions in Nepal current days.
-) Negotiation between customers and the finance company may make the quoted rate according to the sector differ since the boundary to fix interest rate for finance company has been made more liberal by the NRB directives.
-) Political instability, violence, open boarder with India are responsible for economic slackness which ultimately affects interest rate through influencing demand and supply forces. Those effects could be for short run as well as long run.
-) Due to current political situation depositors' and investors' are not quite sure about their money in such an unrest environment. So all the investors are in the situation of wait and watch until the new constituency will be formed. The situation after then is likely to shape out the new demand and supply of loan-able fund and interest rate accordingly.
-) Various policies and directives (Fiscal and Monetary) of government and Nepal Rastra bank are also the responsible factors for determining the interest rate charged and offered by Nepalese finance companies. There is high possibility of changes in interest rate charged and offered by financial institutions in every change in government and governor of NRB.
-) Currently, NRB has issued a directive relating to paid up capital of financial institutions. All the financial institution are instructed to double up their paid up capital by the end of fiscal year 2064/065(2007/08). This will encourage

merger and acquisition which, obviously, decreases the number of financial institutions and changes the level of competition. Because large number of financial institution in such a small country Nepal likely to be disastrous. This situation is likely to shape up new level of demand and supply of loan-able fund in future. But exact prediction has not been drawn due to lack of sufficient data relating to this directive.

-) Even in the context of global recession our remittance still support 65.3% of our country budget. Which is apparently good sign but it has been forecasted that in coming years it will definitely in descending trend. This has been increased the remittance income from foreign employment and we have lack of investment alternatives. Ultimately, the deposits in financial institutions are growing up where as demand of invest-able fund from those institutions is also not sufficient which decreases the interest rate on both deposit and lending and set a new interaction point of interest rate. But the interest rate on deposits likely to be affected more than in lending we can say this as analyzing the interest rate trend of financial institutions from few years before.
-) This is also seen that inflation and risk free rate does not make much impact in depositors' and lenders' statistically. Due to depositors do not have any opportunity to invest in more gainful market and lenders also don't have opportunity to diversify the portfolio.

CHAPTER -FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter concludes summary, conclusion and recommendation which have been discovered all the way of findings. Most important of this chapter, gives result of finding and suggestion if there is any space for improvisation. Summary part includes revision of all four chapters. Conclusion part contains the summary of the result from the research and eventually in recommendations part, suggestions or recommendations are made based on the results and experiences of thesis. Recommendations are made to the concerned authorities and further researchers to improve or solve the problem on the basis of findings.

5.1 SUMMARY

Financial institutions are business organizations that act as mobilizing body and depositories of savings and suppliers of credits and finance. After the government adopted the open and liberal fiscal policy in the financial sector, among other institutions, finance companies have been incorporated under Nepal Company Act, 2053. Finance companies are perhaps, the fastest growing financial institution in Nepal. The growth of finance companies may be due to its flexibility and benefit to adjust the demand of the borrowers and the depositors of the growing economy of the country. They are authorized to accept deposits under several schemes and to mobilize the funds in wide range of productive sectors like agricultural, industrial, trade and commerce. They perform the varying roles of providing specialized services to their clients, offering higher rate of interest, employment and revenue generation scheme.

Finance companies of Nepal, licensed under the Finance Company Act 2042, are the third largest group of deposit taking financial institution after commercial banks and development banks. These finance companies are the creation of early 1990's. Finance companies are recently incorporated under Nepal Company Act, 2053. Finance companies are the institutions that are incorporated under finance company act to perform non-banking activities, arrangement and operation of different schemes. These institutions collect the funds under different arrangements they have made and disburse the funds to the demanders of funds and meet their objectives. The finance companies survive by making profit which is the interest spread i.e. difference between interest received and interest charged.

Interest is the payment made for the use of money and interest rate is the amount of interest paid per unit of time expressed as a percentage of the amount borrowed. What are the responsible factors for determining the interest rate of Nepalese financial companies was the main purpose of this study.

In first chapter content finance companies brief system, history, objectives and significance with tabulation of its growth. Different views of interest and theories determining interest rate have been reviewed in second chapter which offers insights into the functioning of the financial system. The classical theory of interest emphasizes saving and investment demand as interest rate determining forces, while the liquidity preference theory points to the demand and supply of cash balances. Loanable fund theory views the interest rate as determined by the total demand for and supply of credit while the rational expectations theory emphasizes the roles played by public expectations regarding interest rate, economy and the impact of new information on the movement of interest rates to a new equilibrium. According to fisher effect, if expected inflation rate rises, the nominal interest rate on a financial asset must also rise by exactly the same amount, point for point. The yield curve or term structure of interest rate expresses the relationship between the annual rate of return on a financial company and its term to maturity when all other factors are held constant. Regardless of which theory is valid yield curve can play a key role in management of financial companies, which borrow a substantial portion their funds are the short end of the maturity spectrum and lend heavily at longer maturities the price of security and its yield are inversely related. We have examined four different methods of calculating effective interest rate in chapter two. Interest rate is also affected by economic growth budget deficit, servicing cost exchange rate risk etc. Even the study on this topic is not available some thesis and independent studies relating to some aspect of the study have been reviewed in this chapter.

The factors affecting interest rate charged and offered by Nepalese financial companies are analyzed using statistical tools mentioned in chapter three. Out of the total financial companies only seven are taken as samples. Primary data are collected using questionnaire & interview and secondary data are collected from various publications, websites, and annual reports of respective organizations. Collected datas are presented in tabular and graphic form and analyzed using various statistical tools like mean, correlation coefficient, t-statistics and coefficient of determination in chapter four.

5.2 CONCLUSION

From the analysis of relevant data of sample finance companies under study using various statistical tools following conclusions have been drawn out which also has been expressed in tabular form in “Appendix C”.

-) The correlation coefficient between interest rate on deposit and amount of deposit (r_{ab}) is analyzed, it is found that UFCL (-0.4472) and NMBF (-0.3247) has negative relation but UFC (0.0327) has positive relation. Where the correlation coefficients of UFCL, NMBF and UFC are statistically insignificant. General theories of interest says that if interest rate is high deposit rise up but trend in two finance companies have adverse trend and only one to some extent accept the theories. Hence the negative correlation shows that when supply increases, price

(interest rate) decreases. The negative relationship shows that saving is increasing even if the rate of such deposit is decreasing.

-) The relationship between interest rate on deposit and on lending (r_{bd}) for all sample organizations are positive. The correlation coefficient ranges from 0.1131 to 0.9884 among sample finance companies. It denotes that interest rate of deposit and lending are interrelated. NMBF and UFC are highly correlated by 0.9884 and 0.7463 respectively. But UFCL and UFC are statistically insignificant which don't relate to general theories. Only NMBF has statistically significant.
-) The amount of loan is the factor affecting interest rate on lending. The relation between these variables has been analyzed through correlation coefficient (r_{cd}). The correlation coefficient between amount of loan and interest rate on lending of selected companies except UFCL (0.5951) are found negative. UFC and NMBF correlation are -0.4477 and -0.6670 respectively. And all the sample companies are statistically insignificant. But correlation coefficient of UFCL is observed to be positive which means that less amount is loaned at lower rate. The contradictory relationship of lending of fund with interest rate of three different finance companies might be due to the several factors like unsecured investment opportunities, saving pattern of individuals, households etc.
-) The relationship between interest rate on deposit and inflation rate (r_{be}) all the sample organization are negative which among the organizations ranges from -0.3952 to -0.8322. The correlation coefficient of UFCL and UFC sample companies are statistically insignificant and NMBF have significant. Theoretically there should be positive correlation between these two variables. According to Fisher's theories it has to be positive correlation but effect is not properly functioning in Nepalese financial market. Even increase in inflationary rates individuals is willing to save more and more fund causing the lower in market interest rate.
-) Correlation coefficient between interest rate on deposit and risk free rate (r_{bf}) of selected sample organizations is highly positive. UFCL, UFC and NMBF have correlation of 0.7190, 0.7024 and 0.6754 respectively. This means change of risk free rate affect the deposit interest rate as well. In terms of statistic way UFCL and NMBF have insignificant and only UFC has significant relation.
-) The correlation between interest rate on lending and inflation rate (r_{de}) is negative of UFCL by -0.5695 and UFC by -0.7776. Except NMBF which has positive by 0.8709. Two companies UFCL and UFC have no affect of inflation on lending and have statistically insignificant. NMBF has affect of inflation and statistically significant as well. There should be a positive and perfect relationship between interest rate on lending and inflation rate but Nepalese financial market is affected by inflation by some extent. It may be due to the higher liquidity position cause by either Nepalese individuals saving pattern or lack of investment opportunities.

-) The relationship interest rate and lending with risk free rate (r_{df}) is positive for all the organizations that range from 0.5951 to 0.8514. This shows that risk free rate effect the lending interest. But the correlation coefficient is statistically insignificant in UFCL and NMBF except UFC has significant.
-) Large number of growing financial institution brought tougher competition among the financial companies where they decide to determine interest rate charged and offered by such companies. Each finance company has targeted specific group of customers and they treat their customers accordingly to prolong good relationship. That is why general principle of interest rate may differ in practices.
-) Maturity period of loan seems not so significant factor to affect interest rate on lending but interest rate on deposit is influenced by the maturity period. Generally institution\ do not prove long term loan rather they renew frequently according to the borrowers credit worthiness.
-) The quoted interest rate by finance companies for different sector loan, it is not as significant in determining interest rate as the rate may be higher or lower than quoted through the negotiation.
-) Political instability and violence in a country has great and significant impact on amount of deposits lending as well as the interest charged and offered by Nepalese finance companies. From the questionnaire and direct interviews it is concluded that frequently changing governments are affecting overall operation of finance companies including interest rate. similarly violence is also reducing investments opportunities
-) Open border with India is not significant factor to affect the interest rate directly charged and offered by the finance companies in short run but may effect in long run.
-) The deposit amount all the sample financial companies is in increasing trend though the interest rate on deposit is in decreasing trend .But in this recent year recession phase worldwide the deposit amount is slightly decreased which make interest rate slightly up. Even though, unavailability of investment opportunities. Because the high supply of saving deposit reduces the cost of borrowing.
-) The interest rate on lending is decreased by more percentage point in comparison to deposit interest rate till mid of 2008. And now of recession and other internal factors causes insecure so lending rate is going up. This is also decreasing deposit trend.
-) Various regulatory and promotional roles played through various monetary measures and directives issued by NRB from time to time affect the interest rate to large extent. CRR, refinance rate, bank rate, buying selling of foreign

Currencies and treasury securities are some of the measures use by NRB to influence interest rate.

) Performance of the borrowing company, collateral base goodwill and reputation of borrower, loyalty, size of business, volume of loan bargaining power etc. are some of the specific factors influencing interest rate on lending. Besides it reduction in lending opportunity due to terrorism, conflict insecurity etc. according to the respondent are some long term economic factors that affects interest rate. The study shows that there is over liquidity with the financial companies which is shown by increasing trend of deposit.

5.3 RECOMMENDATIONS

Finance companies are playing a vital role to accelerate financial market in terms of collecting small depositors from every nook and corners. In this case finance companies are one of the prominent sectors to extent financial transaction for development. Till mid 2008 there are altogether 78 finance companies are on operation. Therefore, finance companies should contribute nation with broad ways utilizing it fund for productive enhancement. But, It existing operational problems, fragile legal frame work and unnecessary political intervention and control of NRB and government are the responsible factors for it's under development. The role of financial companies (the important component of financial market) should be efficient towards transformation of funds between savers and users from nook and corner for the productive uses. Capital and investment is essential as it is considered as the key to success of any organization for good financial system. For the purpose proper decision making in the field of determining interest is very crucial. It rate is one the main clause where two factors depositors and investors are encourage to deposit and invest. Such sorts of mechanism should be applied to implement appropriate interest rate. It is possible only by proper decision making of interest. So, all finance companies are suggested to set proper and practical interest rate policy.

Based on analysis, interpretation & conclusions the following recommendations can be made which would be helpful in near future for the finance companies, researchers and academicians.

-) The correct rules and regulation should be formed and conduct to check time to time by NRB. NRB has authority to issue directives and policies to be applicable in all financial sectors. Therefore, NRB being the information hub for public and other concerned parties has authority to control and stimulate the financial system. Financial information is a strong power. Hence, NRB is suggested to provide, improve and update its mechanism in information dissemination activities so that all the concerned parties can make the correct decision at the right time and at the right place. Lastly NRB shouldn't make contradiction and ambiguous policies and has to set concrete legal framework.
-) The fluctuation interest rate either in deposit or loan is not systemized. Due to their own negotiable rate it may create misconception about the organizations regarding its financial position and profit. So, finance companies are suggested to fix negotiable rates on lending so that it can increase investments opportunities and promote industrial sector.
-) Researcher has to face many hurdle according to get required informative financial data of the organization. So, co-operation towards the researcher without any hesitation can bring out proper conclusion. Furthermore, institutions are suggested to include their interest rate structure in their annual reports. Government and NRB should aim at promulgating suitable policies to enhance the development of economy and motivate financial intermediaries in canalizing the idle funds into productive sectors.

-) Taking deposit and giving loan is the authorized function of finance companies with their various types of schemes. Finance Companies utilize their fund in broad range productive areas such as Agriculture, Commerce, Industries, trade and others as well. So, such organization should perform varying roles of providing specialized services to their clients, introduce new schemes, offering balancing rate of interest which may solve the problem of over liquidity.
-) Considering the inflation while quoting the interest rate on deposit can bring out positive return. Therefore, financial companies are suggested to consider inflation rate because the negative real rate of return hurts the deposit holder.
-) There should be fair competition among the financial companies aiming at providing quality services but in the name of competition the financial companies are suggested not to exploit the customers. Similarly, the clients are suggested to be aware about the fact that the effective interest rate differs with the quoted interest rate.
-) Political instability, lack of investment, insecurity, lack of development progress have increased trend of deposit that pressures down the interest rate shows that financial companies are facing over liquidity problem. Finance companies are suggested to manage the over liquidity through the application of various techniques of liquidity management.
-) The other aspects other than discussed in this study are suggested to be searched by the further researchers
-) After twist and turns of turmoil, Nepal has established as new Republic country in the world. Even such situation there is still remaining to build new constituency. But, political environment not seems to favoring to build up economical environment. Because from road blockage to union encroachment has not stopped yet. Thus, country is facing lack of investment resulting liquidity. To boost up the economy, the stable policies, sustainable peace in the country is the present need. Therefore, all multi-parties and concerned authorities should seriously come along with the concrete vision of development. And last UNO's subsection UNMIN should try more vital role to resolve all the disagreement.

Bibliography

BOOKS

- Barro, Robert J. and Grossman, Herschel I. (1992), "*Money Employment and Inflation*", Cambridge, University Press Cambridge.
- Cheney, John M. and Moses Edward A. (1984), "*Fundamentals of investments*", St. Paul, west publishing Company.
- Cooper, S. Kerry and Fraser, Donald J. Fred (1982), "*The Financial Market Place*", St. Paul. ,West Publishing Company
- Copeland, Thomas E. and Weston, J Fred (1985), "*Managerial Finance*", New York, The Dryden Press: A Harcourt Brace Jovanovich College Publisher.
- Gupta, S.C (2002), "*Fundamental of Statistics*", Bombay, Himalayan Publishing House.
- Johnson, Hazel J. (1993), "*Financial Institutions and Market: A Global Perspective*", New Delhi ,Tata McGraw Hill.
- Joshi, P. R. (2004), "*Research Methodology*", Kathmandu, Buddha Academic Publishers and Distributors Pvt. Ltd.
- K.C. Fatta Bahadur (2003), "*Business Finance*", Kathmandu, Sukunda Pustak Bhawan, Bhotahiti.
- Kohn, Meir (1993), "*Financial institution and market*", New Delhi, Tata McGraw Hill.
- Madura Jeff (2001), "*Financial markets and Institutions*", South Western College Publishing.
- Michael, V. P. (1986) "*Research Method in Management*", Bombay, Himalayan Publishing House.
- Pant, G. D. & Chaudhary A. K.(2053), "*Business Statistics & Mathematics*", Kathmandu ,Bhundipuram Prakashan.
- Rose, Peter S. (2003), "*Money and Capital Markets: Financial Institutions and Instruments in a Global Marketplace*", New Delhi, McGraw Hill.
- Samuelson, Paul A .and Nordhus , William D (1993) "*Economics*", New Delhi, Tata

McGraw Hill Publishing Company Limited.

Sharma P.K. & Chaudhary A. K. (2002), “*Statistical Methods*”, Kathmandu, Khanal Book Prakashan.

Shrestha, Manohar Krishna and Bhandari, Dipak B (2004) “*Financial Markets and Institution*”, Kathmandu, Asmita Books Publisher & Distributor

Thygeson, Kenneth J. (1992), “*Financial Institutions and Capital Markets*”, New York, Harper Collings College Publishers.

Vaidaya, Shakespeare (2001), “*Financial Market and Institution*”, Kathmandu , Taleju Prakashan,

Van Horne James C (1984), “*Financial Management and Policy*”, New Delhi, Prentice Policy of India, Weston

Weston, J.Fred and Copeland, Thomas E. (1992), “*Managerial Finance*” , New York The Dryden Press.

Wolf, Howard K. and Pant, P. R. (2002), “*A Hand Book for Social Science Research and Thesis Writing*”, Kathmandu, Buddha Academic Enterprises Pvt. Ltd.

THESIS

Bhatta Sanjay, (2004), “*Interest Rate and Its Effect on Deposit and Lending*”, Kathmandu, Shanker Dev Campus ,T.U.

Chaudhary, Rajiv (2006), “*Impact of Interest Rate Structure on Investment Portfolio of Commercial Banks*” ,Kathmandu, Shanker Dev Campus,T.U.

Dangol, Neeta (2003), “*Impact of Interest Rate of Financial Performance of Commercial Banks*” ,Kathmandu, Shanker Dev Campus,T.U.

Giri, Arjun (2006), “*The Impact of Interest Rate Structure in Investment Portfolio of Listed Finance Companies*” ,Kathmandu, Shanker Dev College ,T.U.

Pokharel, Gopal (2007), “*Interest Rate Structure and It Relation with Deposit Lending and Inflation in Nepal*” ,Kathmandu, Shanker Dev Campus,T.U.

Pokharel, Rajiv (2004), “*Determinants of Interest Rates in Nepalese Financial Markets*” ,Kathmandu, Shanker Dev Campus,T.U.

Ranjit, Renuka (2003), “*Deposit Interest Rate and Return on Common Stocks of Banks and Finance Companies*”,Kathmandu, Shanker Dev Campus,T.U.

Shah, Sbita (2004), “*Impact of Interest Rate Structure on Investment Portfolio of Commercial Banks in Nepal*” ,Kathmandu, Shanker Dev Campus,T.U.

Shiwakoti, Dhruva (2008), “*Interest Rate Structure and Its Relation with Deposit Lending and Inflation in The Contest of Nepal*” ,Kathmandu,Shanker Dev, Campus,T.U.

Subedi, Pitamber (2005), “*Impact of Interest Rate Structure on Investment Portfolio*” ,Kathmandu, Shnaker Dev Campus,T.U.

ANNUAL REPORTS AND JOURNALS

Jha, Resta (2007) “*Nepali Interest rate – Where is it heading?*”, ***The Boss Magazine***, Kathmandu, Speciality Media Pvt. Ltd.,Jul-Aug: 96

Nepal Rastra Bank (2065), “***Banking and Financial Statistics***”,Kathmandu, *Nepal Rastra Bank*

Razak S. (1998) “*Money and Banking in Malaysia*”, ***Financial Journal***, Kuwalampur, Edwin Press. .XVI: 8

WEBSITES

http:// www.adb.gov.np (visited and downloaded on 2009-04-21)

http:// www.investorword.com.np (visited and downloaded on 2009-04-22)

http:// www.investopedia.com (visited and downloaded on 2009-04-22)

http:// www.nmb.com.np (visited and downloaded on 2009-04-24)

http:// www.nrb.gov.com.np (visited and downloaded on 2009-04-23)

http:// www.ufl.com.np (visited and downloaded on 2009-04-24)

http:// www.unionfinance.org (visited and downloaded on 2009-04-23)