CHAPTER - I

INTRODUCTION

1.1 Background of the Study

The interest rate is the price charged to borrower for taking loan. In very general term, interest rate is the price paid for credit. So, it is computed dividing the cost of borrowed fund in rupees by the amount of money actually used by the borrower. An interest rate is the cost of borrowing money. Without it, people would not be willing to lend or even save their cash, both of which require a deferment of the opportunity to give up spending in the present. But prevailing interest rates are always changing and different types of loans will offer various interest rates. The interest rate is expressed in an annual percent basis. As the interest rate provides the price signal in the financial system, thus it is important to all the participants: the borrowers, the lenders, savers, and investors for example, higher interest rate encourages savings in greater volume and increases the lending activities of funds. Lower interest rate, in other hand, discourages the savings and reduces the lending activities as well. Interest is the price that one pays for utilising a certain amount of money for a specific period of time. Interest can thus be considered a cost for one entity and income for another. Interest is the opportunity cost of keeping your money as cash under your mattress as opposed to lending. If you borrow money, then the interest you have to pay is less than the cost of forgoing the opportunity to have the money in the present. It is the rent paid for using money provided by a lender.

Interest is both a payment and receipt for the use of money. Interest, therefore, can be considered from the above two points. If the interest is paid, it can be considered as a 'cost'. On the other hand, if interest is received, it can be considered as a 'return'. Since, money can earn a return over a period of time; interest rates are often considered as an expression of the time value of money and are expressed in percent. All business organizations or individuals are responsive to interest rate of the banks and financial institutions in one way or another. A variety of interest rate risk exists in the financial markets. However, in the context of Nepal, interest rate is regulated by the central bank during the early stage of financial market, development taking the period from 1955 to 1965. But gradually dramatic change had been made in the regulation on the interest rate by the central bank i.e. Nepal Rastra Bank according to the compatibility of the banks and financial institutions through liberalization. In the early mid 1980's Nepal has adopted liberal economic policy as a result of which many banks and financial institutions came into existence. But the interest rate deregulation, curtailment or elimination of directed credits, lifting entry and exit barriers for financial intermediaries, restructuring of banking system and institution of regulatory and supervisory mechanism are some of the components which open the door of such liberalization. There was full discretions to NRB in determining interest rate structure of banks and financial institutions from the period 1960 to 1975 as it was the sole and whole institution authorized to determine the interest rate as per NRB act .

Essentially, there are three components in the interest rates – risk free rate, risk premium and adjustment for inflationary or deflationary situations. Risk-free rate is paid as compensation for deferred consumption by the borrower to the lender. As a borrower derives satisfaction well in advance by bringing forward his consumption, he is required to pay some price, which can be considered as risk-free part of the interest rates Risk-premium depends on the credit worthiness of the borrower. An interest rate also has adjustments for inflationary or deflationary economic situations. When value of money is going to fall in inflationary economy, equivalent amount of premium is added to the interest rates, whereas in deflationary economies, interest rates are discounted to factor increase in the value of the money (Peter, 1997).

The market rate of interest is that percent return per year which has to be paid on any safe loan of money, which has to be yielded by any safe bond or other type of security, and which has to be earned on the value of any capital assets (such as a machine, a hotel building, a patent right) in any competitive market where there are no risks or where all risk factors have already been taken care of by special premium payments to protect against risk. Thus, in an ideal capital market, the risk less rate of interest might be set by supply and demand (Samuelson, 1967).

Thus, we see that interest rate paid to savers depends in the following ways:

- On the rate of return, bank expects to earn on invested capital
- On Saver's time preference for current versus future consumption
- On the risk of the loan and
- On the expected rate of inflation

Deposit collection and mobilization is one of the major sources of capital formation. Deposit mobilization is primary and crucial function of any commercial bank. Bank provides facility of saving to general public and provides funds to investors, which help in mobilization of public fund in fruitful purposes, which helps in country's economic development. The collection of deposit and its mobilisation are the two sides of the same coin, in the absence of one, another cannot work i.e. without the collection of deposit, mobilisation of deposits would be quite impossible and vice versa. Interest is the main factor in fund activities of commercial banks. Interest rate affects on the collection of deposits mobilisation of saving position.

In 1986, financial institutions got freedom in fixing their interest rates in their deposits and loans. In addition, there was also limitation on the interest rate amounts on the different loans provided for productive and priority and full deprived sector. However, there were limitations on certain sectors of lending such as the rate of maximum of 15 percent on the priority sector loan. In this way the government has provided freedom as well as limitations on the determination of interest rate.

Interest rate in the free market economy is determined by the free interplay of the demand and supply forces. Although interest rate is influenced by various factors the main factors which determine the interest rate are demand and supply of loanable fund. If supply increases and demand remains constant, interest rate in the market decreases. Similarly if demand for loanable fund increases and supply remain constant, interest rates in the market increase. But Nepalese economy has not developed up to that level so that free market can determine the interest rates. Nepal Rastra Bank as a guardian, fixes the terms had conditions regarding the interest and other activities of financial institutions in Nepal. But in recent years banks are permitted to fix the interest rate they charge and offer on loan deposits.

1.2 Statement of Problem

Banking sector has always been the promising sector giving high return and value to its promoters and shareholders; their down looking financial scenarios has created very less investment alternatives and comparatively lower return. Our country showed several banks within short period of time fighting for small amount of market share, which requires excessive force making high operational cost. Interest rates as a major tool to change the fortune of the bank it has always been modified as per situation and economy.

Interest rate is an essential tool in the field of finance and economics. Generally other things remaining the same increase in deposit interest rate promotes saving and while it is decrease encourages investment. The interest rate plays important role for the banking development. The favorable investment climate makes appropriate interest rate. They are facing the problems on refund of investment like government owned bank more but in another parts commercial banks were making good profit in competition each other. They are generating the new ideas and provide the various facilities to accuracy the bank customer. The interest is a price of money.

The interest rate is different for depositor and lender. That differences margin in the gain of bank. The interest rate charged and offered of a financial institution and commercial banks was regulated by central bank until before few years, but now these institutions are free to fix their interest rate. Commercial banks can play vital role by adopting effective interest rate policy on deposits and lending for encourage investment in every sector of economy. But it is true that commercial banks established with proper motives and interest rate may affect its profits too. An appropriate interest rate can divert investment in proper field. In short interest a deposit must be able to increase the amount of deposit must be able to increase the amount of deposit by encouraging people to save their income. On the other hand the lending rate of interest must be attractive to the borrowers. So that they will be able to enjoy benefits by utilizing borrowed fund. This is possible only when the fund seeking people will be able to earn more than what they pay as interest on borrowing funds. But whether our country is able to attain such situations or not it is a matter of concern for us.

Thus the process of study attempts at answering the following questions.

i. What are the interest rates structures of Commercial Banks in Nepal?
ii. Is the interest rate on deposit of Commercial Banks attract the depositors?
iii. Has the lending rate of Commercial Banks seen able to attract the borrowers for investments?
iv. What are the relationship between interest rate and inflation?
v. What are the relationship between profitability and interest rate of the bank?
vi. Is the spread interest rate of Commercial Banks attractive?

1.3 Objectives of the Study

The main objective of the study is to identify the impact of interest rate on deposit and lending volume of Commercial. The specific objectives related to this study are as given below.

i. To analyze the interest rate structure of various Commercial Banks at different time period.
ii. To examine and analyze the influence (i.e. relationship) of interest rate on deposit amount and lending amount of Commercial Banks.
iii. To identify the relationship of interest rate with inflation and profitability.

1.4 Significance of the Study

Interest is simply the price on borrowed fund. Higher interest generally brings lending investment on to other hand Lower interest rates discourage the saving and encourage the investment. Higher the inflation, higher shall be the interest rate. But in real world the theory may or may not come true in context of a developing country like Nepal because most of the theories of financial markets and institutions are determined and developed by the study conducted by developed countries.

It is the responsibility crucial task of top level management to fixed interest rate. Even though people have more souring an even need more money for investments are not familiar with the interest rate structure of banks. In this study major functions of commercial banks would be analyzed by using various mechanisms. Since this study deal the part of the managerial function, hence it is hoped to some extent this study will help the policy makers to formulate strong policy regarding interest rate charged on deposits and lending in Nepalese context. This study will be also useful to various parties such as researcher, students, teachers, financial institutions, investors, business organization, and general individual to get some useful information about interest rate deposit and lending.

1.5 Limitation of the Study

Though this study has been attempted to an accurate and deficiency free, the use of different econometric models for the analysis of impact of interest rate on deposit mobilization may have rendered it quite reliable. This study is limited by the following factors.

- This study includes only four commercial banks.
- This study is based on the data of five years period and hence the conclusion drawn confines only to this period.
- The reliability of this study depends upon the information provided by concerned commercial banks and published data.
- Most of the data used in study are of secondary type and primary type.
- There are many factors that affect the deposit amount and lending amount of commercial banks. However this study is focused on the interest rate.

1.6 Organization of the Study

This study is divided in to five chapters.

Chapter I: Introduction: The first chapter presents a brief introduction of the study. It includes background, interest rate of commercial banks, interest rate structure profile of sample banks, and statement of problem, objective, significance, research hypothesis and limitation of study.

Chapter II: Review of literature: The second chapter of deals with the review of literature including concept of interest rate, theories of interest rate, factors effecting interest rate from different books, journals and thesis.

Chapter III: Research methodology: Research design, population and sample sources of data and collection procedure, data processing and presentation and tools and method of analysis have been outlined in the third chapter.

Chapter IV: Data presentation and analysis: Chapter four presents analysis and interpretation of data of related topic based on annual reports of sample banks. In this chapter collected and processed data are presented, analyzed and interpreted with using analytical tools with presenting charts and figures.

Chapter V: Summary, conclusion and recommendations: Last chapter, summaries the whole study, conclusion and put forwards the recommendation.

CHAPTER - III

RESEARCH METHODOLOGY

Research methodology describes methods and process applied in the entire aspect of the study. In other words, research methodology describes methods and process applied in the entire aspect of the study. In this chapter, efforts have been made to present and explain the specific research design for the sake of attaining the research objective.

3.1 Research Design

A research design is the arrangement of continuous collection and analysis of data is a manner that aims to combine relevance to the research purpose with economy in procedure. It is simply the frame work for study and helps the analysis of data related to study topic. It constitutes the blue print for the collection, measurement and analysis of data. It is descriptive and prescriptive in nature. The relevant and necessary data were collected from annual reports of various commercial banks and publications of Nepal Rastra Bank for analytical purpose.

3.2 Population and Sample

Presently 27 commercial banks (including government owned, public and joint venture) are under operations in Nepal. Due to the time and resource constraints, it is not possible to study all of them. The population for the study comprises 27 commercial banks out of them all four commercial banks which are choosen through the random sampling method viz. NABIL, HBL, EBL and SCBNL are taken as sample to draw the conclusion about population since population of commercial banks are not large. It is well-known fact that the renowned and highly profitable banks in Nepal are NABIL, HBL, EBL and SCBNL. To know the fact that how they are getting optimum profit was my curious. So NABIL, HBL, EBL and SCBNL have been taken as sample for study.

Hence they have been able to perform satisfactory through service excellence and customer satisfaction, there by earning a stable and consistent return to their shareholders.

3.3 Sources of Data and collection Procedure

The research is based secondary as well as primary data. Secondary data are collected mainly from sources like annual report, published bulletins, newspaper, journals internet and other sources. Besides this in some cases primary data are also used. They are collected through questionnaire.

3.4 Data Processing and Presentation

The information obtained from different sources will be in has been process and convert it into required form. For presentation different figures and tables are used. Similarly graphical presentation is also made. For the reference the photo copies of raw data are attached in the last portion of thesis. So far as the computation is concerned, it has been done with the help of scientific calculator and computer software program.

3.5 Tools for Data Analysis and Presentation

The analysis of data is done according to pattern of data available and felt necessity has used. Statistical tools and some financial tools are used to meet the objectives of the study.

3.5.1 Statistical Tools

Arithmetic Mean ($\overline{X}$)

Arithmetic mean is a given set of observation in their sum divided by the number of observation. In such case all items are equally important. It depicts the characteristic of the whole group. It is an envoy of the entire mass homogeneous data. Generally the average value lies somewhere in between the extremes i.e. the largest and the smallest items. It is calculated as follows.

Arithmetic Mean ($\overline{X}$)= $\frac{x_1 + x_2 + x_3 + ...x_n}{N}$

Or

$$\bar{X} = \frac{\sum X}{N}$$

$\sum X$ = Sum of the sizes of items

N= Number of items

Standard Deviation (σ)

Karl Pearson first introduced the concept of standard deviation in 1983. Standard deviation is the positive square root of the arithmetic average of the square of all deviation measured from the arithmetic average of the series. The standard deviation measures the absolute dispersion of a distribution. The greater the amount of dispersion the greater will be the magnitude of the values from their mean. A small standard deviation means a high degree of uniformity of the observation as well as homogeneity of a serves. Standard deviation is denoted by a Greek letter 'σ' (sigma) and is calculated as follows.

Standard Deviation (σ)= $\sqrt{\frac{\sum(x-\bar{x})^2}{n}}$

Where

n= Number of items in the series

$\bar{X}$ = Mean

X= Variable

Coefficient of Correlation (r)

The correlation analysis s the technique used to measure the closeness of the relationship between the variables. It helps in determining the degree of relationship between two or more variables. It describes not only the magnitude of correlation but also its direction. The coefficient of correlation is a number which indicates to what extent two variables are related with each other and to what extent variations is one leads to the variation in the other. Correlation may be positive or negative which lies between ±1. Simple correlation between interest rate on deposit and deposit amount interest rate on lending and credit or lending amount and is computed in this thesis. The correlation between interest rate on deposit and deposit amount is positive. Interest rate on lending and leading amount is negative when inflation increases, interest rate also increases in same direction and vice versa. For our study following reference is used.

The correlation coefficient can be calculated as:

Correlation of coefficient 'r' $= \frac{n\sum x_1x_2 - (\sum x_1)(\sum x_2)}{\sqrt{n\sum x_1^2 - (\sum x_1)^2 n\sum x_2^2 - (\sum x_2)^2}}$

Alternatively r = $\frac{\text{cov}(x_1x_2)}{\text{var}\,x_1\ \text{var}\,x_2}$

Where,

Covariance (x_1,x_2)-1/n $\sum(x_1-\bar{x}_1)(x_2-\bar{x}_2)$

x_1 and x_2 = two variables, correlation between them are calculated.

n= total number of observations

Coefficient of Determination (R^2)

The coefficient of determination is the primary way to measure the extent of the association that exist between two variables, x and y. it refers to a measure at the total variance in the dependent variable that is explained by its liner relationship to and independent variable the coefficient of determination is denoted by R^2 and the value lies between zero and infinity. The R^2 is always a positive number. It can't tell whether the relationship between the two variables is positive or negative. 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 significant of the coefficient of determination is to represent the portion of total variations due to independent variable.

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

T-test for significance of Correlation Coefficient

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

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

Where,

(n-2)= degree of freedom

n=sample

t= t-distribution

The (1-α) percent confidence limits for estimating population correlation coefficient (ρ) are given by

r ± t_a(n-2) × S.E®

= r ± t_a(n-2)× $\frac{1-r^2}{\sqrt{n}}$

REFERNCES

Books:

Arnold, R.A. (1989). *Economics: Test Bank to Accompany*. Eagan: West Publishing.

Bhandari, D.R. (2003). *Principle and practice of Banking and Insurance*. Kathmandu: Asian Publication.

Bhattarai, R. and Bajracharya S. M. (2015). *Corporate Financial Management*. Kathmandu: Buddha Academic Publisher and Distributer.

Khan, M. (1999). *Financial Institutions and Markets* (sixth edition). New Delhi; Tata McGraw Hill Publishing.

Khan, M.Y. and Jain, P.K. (1990). *Financial Management* (9^{th} edition). New Delhi: Tata McGraw-Hill Publishing Company Limited.

Kothari, C.R. (1994). *Research Methodology, Methods and Techniques*. New Delhi: Vikash Publishing House.

Pandey, I.M. (1999). *Financial Management.* New Delhi: Vikash Publishing House Pvt. Ltd.

Peter, S.R. (1997). *Money and capital markets, Financial Institution and Instruments in Global Market place* (6^{th} edition). New Delhi: Tata McGraw Hill Publishing Company Limited.

Reynolds, L.G. (1988). *Economics: A General Introduction* (fifth edition). Chicago: Irwin Publication in Economics.

Samuelson, P.A. (1967). *Economics* (seventh edition). New Delhi: Tata McGraw Hill Publishing Company Limited.

Shapiro, E. (2001). *Macroeconomic Analysis* (5^{th} edition).Ohio: University of Toledo.

Shrestha, M. K. and Bhandari, D.R. (2013). *Financials Market and Institutions*. Kathmandu: Srijana Publication.

JOURNALS / ARTICLES AND REPORTS:

Bhandari, D.R. (2018). *"Impact of Interest Rate Structure on Investment Portfolio of Commercial Banks of Nepal*". Prashasan. Kathmandu: Public Administration Campus, Vol. 48: 11-47

K.C., D.L. (2019). *"Interest Rate Policies*". Nepal Bank Patrika. Kathmandu: Nepal Bank Limited. Volume 131: 1-40

Khati, K.K. (2019). *"Nepal Bank Limited and Its four Decades*". Nepal Bank Patrika. Kathmandu: Nepal Bank Limited, Vol. 129: 12-36

Pant, R. (2008). *"Management of Internal Loan*". Nepal Bank Patrika. Kathmandu: Nepal Bank Limited. Vol. 5: 1-28

Shrestha, S. (2016). *"Cash management of Corporations*". Prashasan. Kathmandu: The Nepalese Journal of Public Administration, Public Administration Campus, Vol. 27: 5-43

THESIS:

Bhatta, S. (2019). *Interest Rate and Its Effect on Deposit and Lending*. Kathmandu: Central Department of Management, T.U.

Ghimire, S.K. (2014). *Interest Rate of Commercial Banks and Its Impact on Deposit and Lending of Money.* Kathmandu: Central Department of Management, T.U.

Gupta, R.C. (2017). *Interest Rate Structure of Joint Venture Banks in Nepal and Its Impact on Deposit and lending.* Kathmandu: Shanker Dev Campus, T.U.

Khanal, D.R. (2013). *Impact of Interest Rate on Deposit Mobilization in Nepalese Commercial Banks*. Kathmandu: Central Department of Management, T.U.

Kshetri, K. (2018). *Interest Rate Structure and Its Relation with Deposits, Inflation and Credits in Nepal.* Kathmandu: Central Department of Management, T.U.

Parajuli, S. (2019). *Interest Rate and Its Relation with Deposit, Lending and Inflation in Nepal*. Kathmandu: Central Department of Management, T.U.

Poudel, S. (2016). *Interest Rate and Its Effect on Deposit and Lending.* Kathmandu: Central Department of Management, T.U.

Upadhyaya, L. (2017). *Impact of Interest Rate on Deposit and Lending of Commercial Banks*. Kathmandu: Central Department of Management, T.U.

Websites:

www.ebl.come.np
www.google.com
www.himalayanbank.com
www.standchartered.com.np
www.nabilbank.com