

CHAPTER: I

INTRODUCTION

1.1 Background of the study

Banking sector is the backbone of any country's economy and bank deposits are the major tool of success for banking sector. Bank deposits are also a major part and determinant of countries saving. According to economic theories and practical considerations, interest rate is considered one of the major elements that can affect savings as well as bank deposits. Interest rate is the reward that accrues to people who provide the fund with which capital goods are brought (Soyibe and Adekanye, 1992).interest can be define as the payment made to a lender by a borrower for the use of a sum of money for certain period of time. Interest is both a payment and receipt for the use of money, interest therefore can be consider from the above two viewpoints. 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'.

Interest is the amount of money that lender receives or borrower pays in excess of actual money or we can say it cost of capital. Interest rate affect all sector of economy but it has a major impact on banking sector because they directly deal with money. Bank deposits are considered as major part of any country's economic performance, bank deposit are defined as the amount of money that a customer of bank keeps in his account either in form of cash, cheque or sent through a wire transfer. In return banks pay some amount of interest according to prevalent rate to the customer. On the other hand credit is considered to be the key to economic growth and financial stability of the economy. Credit is the aggregate amount of funds provided by commercial banks to individual, business organization and government. Commercial banks performs the act of financial intermediation that collect money from the surplus sector in the form of deposit and lend it to be various sector of the economy. Lending behavior of bank depend upon deposit, interest rate, capital, inflation, internal policy of the bank as well as other non-economic factors. Credit usually represents the bulk of the institution's assets, while interest on the credit represents the major sources of income. Loans involve the high degree of risk and have profound impact on the bank's profitability, liquidity and solvency. Poor management of loan portfolio is the major

cause of liquidity crises and bank's failures around the world. Although credit growth can spur investment and economic activity, an excessive growth in credit can impact the stability of the financial system by increasing the prudential risk at the micro and macro levels (Igan and Pinheiro, 2011). The basic purpose of this study is to investigate the impact of interest rate on deposit and lending of joint venture commercial banks in Nepal. Deposits are backbone of banking sector, interest rate is an effective tool to attract customer (Saba Musntaq, Danish Ahmed Siddiqui, 2017).

Interest rate is determined by the force of demand and supply of capital and for the condition that demand and supply of fund are equal. Hence, interest level is arrived at by the intersection between saving and investment (Luckett,1984). Saving is defined as that portion of income after tax, which is not spent on consumption goods. Saving can also be seen as that parts income, which is not devoted to the purchase of household items and firm (Mc Kinnon,1973). Investment on the other hand can be defined as the expenditure of fund almost exclusively by firms. Interest rate favors the investors when the interest rate is low. The major factor that determines investment is interest rate and this is influenced by savings. The act of saving and lending and the borrowing and investing activities within in financial system are significantly influence by the interest rate. The interest rate is the price paid for borrowing the scarce loan able funds from a lender for an agreed upon time. Interest rate is one of tool for shaping economy. It plays important role in borrowing and lending. Generally, the rate of interest is computed dividing the cost of borrowing funds in rupees by the borrower. The interest rate is expressed in an annual percentage basis.

An appropriate interest rate structure affects the deposit and lending of any financial institution, which in turn affects the economic up liftmen of the whole country. The impact of interest rate is both the saving and investment in the economy. Interest rates provide the price signals to borrowers, lenders, savers and investors. Higher rate encourage savings in greater volume and increases the lending activities of funds. Lower interest rate, in other hand, discourages the saving and reduces the lending activities as well.

Interest rate in the free market economy is determined by the free interplay of the demand and supply forces. The interest rate performs several important roles in order to function properly the money and capital market in the economy. It performs the several major functions like generating adequate volume of savings to fund investment to grow the economy, to direct the flow of credit in the economy towards those investment projects having greater expected rate of return, bringing into balance the supply of money within the public's demand for money and acting as a tool to adopt government policy.

1.2 Brief profiles of the sample banks under study

1.2.1 Everest Bank Limited (EBL)

Everest bank limited (EBL) started its operations in 1994 with a view and objective of extending professionalized and efficient banking services to various segments of the society. The jointed hand with Punjab National Bank (PNB) India as its joint venture partner is the largest nationalized bank in India having presence virtually in all important centres. In this bank 50% share holding by Nepali promoters, 30% share holding by general people and 20% by Punjab national bank. The bank is providing customer-friendly services through its Branch Network. All the branches of the bank are connected through anywhere Branch Banking System (ABBS), which enables customer for operational transactions from any Branches.

1.2.2 Nabil Bank Limited (NABIL)

Nabil Bank limited is a commercial bank in Nepal. Founded in 1984, the bank has branches all across the nation with its head office in Kathmandu. Nabil, the first foreign joint venture bank of Nepal, started operations in July 7, 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Nabil provides a range of commercial banking services through its 51 points of representation across the country and over 170 correspondent banks across the globe. It was earlier known as Nepal Arab Bank Ltd. It has its head office located at Nabil Center, Durbar marg, which is also a premium location of the capital. It has the largest staff among private commercial banks of Nepal.

1.2.3 Nepal SBI bank limited (NSBL)

Nepal SBI Bank Ltd. (NSBL) is a subsidiary of state bank of India (SBI) having 55% of ownership. The local partner viz. employee provident fund holds 15% equity and general public 30%. In terms of the Technical Services Agreement between SBI and the NSBL, the former provides management support to the bank through its expatriate officers including Managing Director who is also the CEO of the Bank. NSBL was established in July 1993 and has emerged as one of the leading banks of Nepal, with 679 skilled and dedicated Nepalese employees working in 62 branches, 7 extension counters, 3 Regional Offices and Corporate Office. With presence in 32 districts in Nepal, the Bank is providing value added services to its customers through its wide network of 85 ATMs, internet banking, mobile wallet, SMS banking, facility etc.

1.2.4 Himalayan Bank Limited

Himalayan bank was established in 1993 in joint venture with Habib bank limited of Pakistan. HBL does not include government ownership. Its ownership is composed of founder shareholder 51%, Habib bank of Pakistan 20%, employee's provident fund 14% and general public 15%. It is the first bank having domestic ownership more than 50%. HBL has been operating in high profit from the establishment period till now. It accepts deposit through current deposit, saving deposit, fixed deposit and call deposit.

1.3 Statement of the problems

Interest rate is an essential tool in the field of finance and economies. According to economic theory saving increase as, increase in interest rate with investment increases as decrease in interest rate. Generally, when interest providing in deposits is very less and when interest charge on lending is very high the possible investors also cannot borrow funds for investment in priority sector of the economy. In such situation how could be possible to develop country's economy in international market.

Interest rate play important role for the banking development. Favorable investment climate makes appropriate interest rate. The interest rate is a price of credit. The interest rate is charged and offered of a financial institution and commercial banks was regulated by central bank before liberalization, but now these financial institution

and commercial bank are free to fix their interest rate. Commercial bank can play the vital role by adopting effective interest rate policy on deposits and lending for encourage investment in every sector of economy. An appropriate interest rate helps to mobilize the fund in proper field. On the hand the lending rate of interest must be attractive to the borrowers. However, the study tries to find out the answers of the following research questions.

1. What are the interest rate structures of joint venture commercial banks in Nepal?
2. How does interest rate affect the volume of deposits of joint venture commercial banks?
3. How does interest rate affect the volume of lending of joint venture commercial banks?

1.4 Purposes of the study

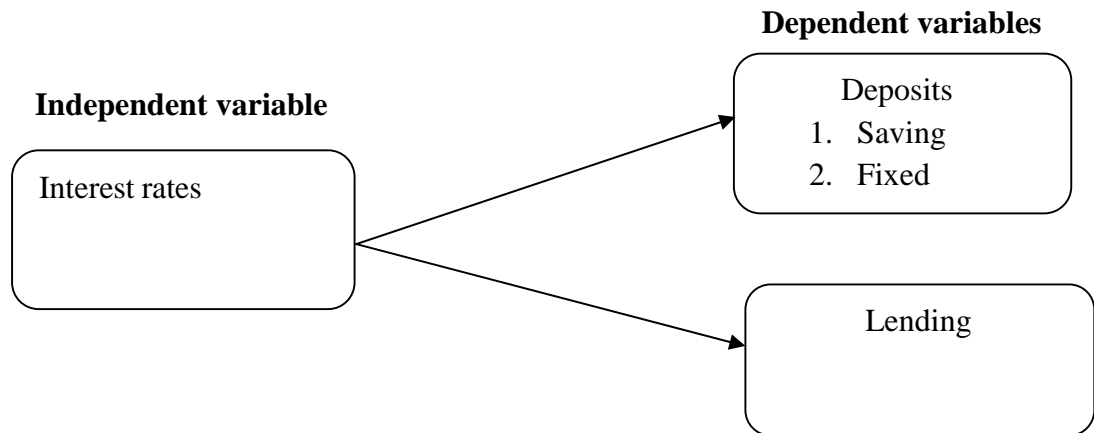
The basic objectives of this study is to analyze the overall influence of interest rate on deposit and lending of joint venture commercial banks in Nepal. The specific objectives of the study are as follows.

1. To analyze the interest rate structure of various joint venture commercial banks.
2. To explore the relationship between interest rate and volume of deposit of joint venture commercial banks.
3. To examine the relationship between interest rate structure of the volume of lending of joint venture commercial banks.

1.5 Conceptual framework

In this study, independent variable is interest rate. Similarly, dependent variables are lending and deposit amount. In the study, lending and deposit amount are dependent variable, which has significant relationship with interest rate. Here, interest rate is independent variable which has impact on the deposit and lending amount of joint venture commercial banks in Nepal.

Conceptual framework



1.6 Research hypothesis

The purpose of hypothesis is to organize a study. From the theoretical framework discussed above, the following alternative hypotheses have been formulated based on the objective of study and research questions.

First hypothesis:

H₁: there is positive relationship between interest rate and saving deposit amount.

Second hypothesis:

H₂: there is positive relationship between interest rate and fixed deposit amount.

Third hypothesis:

H₃: there is negative relationship between lending rate and lending amount.

1.7 Significance of the study

Interest rate is simply the price of credit. Higher interest generally brings a lending investment. Lower interest rates on the other hand discourage the saving and encourage the investment. Higher the inflation, higher will be the interest rate.

It is crucial task of top-level management to fix interest rate. Event through people have more souring and even need more money for investment are not familiar with the interest rate structure of banks. In this study major function of joint venture commercial banks will be analyzed by using various mechanisms. This study will help to the further researcher, student, investor, business organization and individual to get useful information about interest rate deposits and lending. Further this study

help to the general public to know the interest rate offered by banks for deposits of the Nepalese joint venture commercial banks.

1.8 Limitations of the study

This study helps to know the relationship between interest rate and deposit & lending of Nepalese joint ventures commercial banks. Findings of the study may be very useful for future researcher. However, this study has the following limitation.

1. This study includes only four joint venture commercial banks.
2. There are many factors that affect the deposit amount and lending amount of joint venture commercial banks. However this study is focused on the interest rate only.
3. This study covers the period from F.Y 2012 to 2017.
4. This study is based on secondary data.
5. Only the statistical tools are used in the study such as mean, standard deviation, correlation coefficient, coefficient of determination and t-test.

1.8.1 Chapter plan

The whole study is divided into five different chapters. They are:

Chapter-I Introduction

This chapter includes the background of the study, statement of problems, purpose of study, Theoretical/Conceptual Framework, significance of the study and the limitations of the study.

Chapter- II Review of literature

This chapter deals with the review of available literature. It includes conceptual review of books, reports, thesis and journals, review of previous works and research gap.

Chapter - III Research methodology

This chapter includes the research methodology used in the study which includes research design, population and sample , sources of data , data collection and processing procedure and data analysis tools and techniques.

Chapter – IV Results

This chapter is most important and plays vital role in this study. This chapter deals with the results and findings of the study carried to meet the objectives of the study.

Chapter - V: Conclusions

This chapter presents of the brief discussion, conclusions and implications of whole research report. It also provides some useful suggestion and recommendations to concerned parties.

CHAPTER: II

REVIEW OF LITERATURE

2.1 Conceptual review

Reviews of different books related to the research topic are presented in this section. They were reviewed for the purpose of concepts of related topics and variables used in research. Similarly, this section has also incorporated different variables which show the relationship between interest rate and deposit & lending. To know the theories which are related to the research topic, researcher has presented conceptual review based on various books related to the topic.

2.1.1 Meaning of interest rate

On the usage of funds, a certain sum of money paid or received is known as interest rate. Creditor receives interest when he lent money and debtor pays interest when he borrows. It is opportunity cost of borrowing money from a lender to finance investment project. Interest rates are normally expressed as a percentage rate. Anyone can make loan to someone and receive the interest or any institution like bank can accept the deposits and pay the certain amount of interest. According to Keynes, interest rate is the reward for the not holding but for parting with liquidity for a specific period of time. Keynes definition of interest rate focuses more on the lending rate. Typically it is the job of banks to provide the loan and accept the deposits. Generally the banks encourage the depositors to deposit their money by offering the certain interest rate which motivate the public to deposit by opening their different account with the bank and the banks use their funds for making loan to other people. Practically, when the bank makes loan to a customer it charges higher rate but pays lower rates to the depositor. With this difference of interest rate bank makes profit in return of giving these services.

Due to the competition among the banks Interest rate remains in a comparable range. For tracking and managing the significant development interest rate is to be addressed a significant economic problem (Boulier, Hung &Taillard 2001, Laubach , 2009).on the other hand, in the profit and loss statement interest rate also engage in managing the interest component entirely (Buiter & Panigirtzoglou, 2003). In addition, the

interest rate also summarizes the way of whole business debt summary including the receipt of debt, excellence of the debt, expectation of visions participation proportions and fixed floating mixture of the debt (Brigo & Mercurio , 2006: Einav, Jenkins & Levin, 2008). Interest rates are applied in various shapes like there are different interest rates for deposits and for lending.

2.1.2 NRB directives and interest rate in Nepal

Taking the reference of history on interest rates, we observe different changes in interest rate. The sole controller for regulating interest rate in Nepal is central bank, Nepal Rastra bank. In the beginning, the interest rate charged and offered by banks and financial institutions was mentioned at a lower level with a view to stimulate real income and employment. However, dramatic change had been made time to time. Regulation of interest rate by Nepal Rastra bank is made in the early stage of financial market development taking the period from 1955 to 1965. But NRB gradually began to liberalize the determination of interest rate on a phase-wise basis according to compatibility of the banks and the financial institutions that have developed in the country. In the early mid 1980's Nepal has adapted liberal economic policy. Number of finance companies and commercial banks began to develop and government made the liberal policy in maintaining the interest rate were encourage for commercial banks, established under joint venture in association with foreign banks in private sectors. Similarly, deregulated of interest rate was applied to under financial institutions like development banks, micro financial institutions. NGO and licensed cooperative under, NRB were also made competitive in the determination of interest. The central bank, the sole institution authorized to determine the interest rate as per NRB act. There are full discretions to NRB determining interest rate structure of banks and financial institutions taking from the period 1960 to 1975. On 16 November 1984 government had provided autonomy in offering the interest rate on saving and time deposit to the extent of 1.5% and 1% points respectively above the prevailing rates. In 1986 financial institutions got freedom in fixing their interest rate on different loans provided for the productive and priority and full deprived sector. However there was limitation imposed on certain sectors of lending such as the rate of maximum of 15% on the priority sectors loan. And for other kind of loans financial

institutions were given freedom to maintain the interest rate structure. In this way government provided freedom as well as limitation on the determination of interest rate.

On August 22, 1992, Nepal Rastra bank issued some directives to commercial banks and financial institutions to clearly spell out the interest rate on deposits. Nepal Rastra bank also instructed the bank and financial institutions to limit their interest rate spread on deposit and credit at 6% within the mid-December 1993. A further instruction to bank and financial institutions was issued in 2002, and now the interest rate spread required to be maintained by commercial banks and financial institutions has also been removed.

The interest rate regime in Nepalese perspectives change from rigid control and monopoly of NRB from 1960-1980 to that of ultimate deregulation of interest rate and removal of spread from 1986 to 2002. At present there is complete freedom to have competitive system an important part of government's financial liberalization policy. In this way, the interest rate become a market determined phenomena rather than a regulated phenomena. The process of interest rate deregulation became a major indicative factor of the financial sectors reform in the country.

2.1.3 Functions of interest rate in economy

"Interest rate has opposite relation with the value of financial assets. It means that if the interest rate increases, the value of assets decreases and vice versa. This concept is very useful for the valuation of the investable securities. Beside this there are some important functions that interest rate play in the economy" (Joshi, 2005)

1. It helps guarantee that current savings will flow into investment to promote economic growth.
2. It rations the available supply of credit, generally providing loanable funds to those investment projects with the highest expected returns.
3. It brings into balance the supply of the money with the public's demand for money.
4. It is also important tool of government policy to simulate or discourage saving and investment through its influence on the volume of saving and investment.

If the economy is growing too slowly and unemployment is raising 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 both borrowing and spending.

2.1.4 Theories of interest rate

Several theories explained why interest is paid (Elliot, 1984). The theories of interest rate can be divided into two parts. First one is the monetary theories and second one is non-monetary theories. The monetary theories are those theories of interest that stress the liquidity aspect of money, while the non-monetary theories of interest are those theories which gives consideration to savings and productivity aspect of money. However, for the purpose of this study, we examine the three theories of interest rate classical theories, liquidity preference theories and loanable fund theories.

2.1.4.1 Classical theories of interest rate

The classical theory of interest rate is determined by two forces, the supply of savings and the demand for investment capital. Thus the interest rate is an equilibrium factor between the demand for and the supply of investable funds. According to Keynes, true classical theory of interest rate is the savings investment theory. Basically, the theory holds the proposition based on the general equilibrium theory that the rate of interest is determined by the interaction of the demand for and supply of capital. Caplan (2000) argued that an equilibrium rate of interest is determined at a point at which the demand for capital equals its supply. Demand for capital stems from investment decision of the entrepreneur class. Investment demand schedule, thus, reflects the demand for capital, while the supply of capital results from savings in the community. Savings schedule, thus, represents the supply of capital. It follows that savings and investment are the two real factors determining the rate of interest.

The equality between savings and investment is brought about by the mechanism of interest rate. When saving exceeds investment, rate of investment will fall discouraging saving on one hand and encouraging investment on the other hand. This tendency continues operating till equality between saving and investment get

established. Similarly, if investment exceeds savings, the rate of interest rises to discourage investment and encourage savings till equality between saving and investment get established. Thus classical theories regard that the rate of interest is determined by interaction between savings and investment forces.

2.1.4.2 Loanable funds theory

Loanable funds theory assumed that interest rate are determined by demand and supply of credit. This theory attempts to improve upon the classical theory of interest rate. It recognizes that money can play an important role in the saving and investment process and thereby causes variations in the level of income. It is monetary approach to the theory of interest and different from that of the classical economists. In fact, the loanable funds theory synthesizes both the monetary and non- monetary aspects of the problem (Wensheng,Wung and Shu, 2002).

According to loanable fund theory, the rate of interest is the price that equates the demand for and supply of loanable funds equal's the demand for loanable funds. In the equilibrium point where the supply of loanable funds equal's the demand for loanable funds. Fluctuation in the interest rates arises from variations either in the demand or in the supply of loan funds available for lending.

Loanable funds are the sums of money supplied and demanded at any time in the money market. The supply of credit or funds available for lending would be influenced by the saving of the people and the addition to the money supply during that period. The demand side of loanable funds, on the other hand, would be determined by the demand for investment plus the demand for hoarding money (Turnovsky,1985). Loanable fund theory has implication on banks saver and borrower according to this theory this two groups should well compensated at equilibrium.

2.1.4.3 Liquidity preference theory of interest rate

It is assumed that individuals inherently prefer money among all financial assets since it can used to make payments and is thus the most liquid assets. So to encourage people to part with their liquidity they should be rewarded in the form of interest.

Higher the liquidity, higher is the interest demand for parting with liquidity. According to this theory the demand for the supply of money determined the interest rate.

A. The demand of liquidity

Prof. Keynes has divided the objective or the references of the people to hold cash with them into three parts.

- i. **Transaction motives:** transactions motives represent the demand of money to purchase goods and services.
- ii. **Precautionary motives:** some money also must be hold as a motive for precautionary because future is uncertain and we cannot predict exactly what expenses or investment opportunities will arise in the future.
- iii. **Speculative motives:** speculative motive represents the demand of money due to uncertainty about the future prices of bonds.

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.

B. Supply of money

In modern economics, the supply of money is controlled by the government and the central bank. The total supply of money consists of coins plus bank notes plus bank deposit. The supply of money is made by the central bank in fixed quantity for a particular period.

The interplay of the total demand for and the supply of money or cash balances determine the equilibrium rate of interest in the short run.

2.1.5 Concept of lending

Lending which may be on short, medium or long-term basis is one of the service that commercial bank do render to their customers. In other words, banks do grant loans and advance to individual, business organization as well as government in order enable them embark on investment and development activities as a mean of aiding

their growth in particular or contributing towards the economic development of a country in general. Commercial banks are the most important institution that mobilized the savings and financial resources in a coordinate manner.

In the view of Nwankwo (2000), credit constitutes the largest single income-earning assets in the portfolio of most banks. This explains why banks spend enormous resources to estimate, monitor and manage credit quality. This is understandably a practice that impact greatly on the lending behavior of banks as large resources are involved. Chodechai (2004) while investigating factors that affect interest rates, degree of lending volume and collateral setting in the loan decision of banks, says bank have to be careful with their pricing decision as regards to lending as banks cannot charge loan rates that are too low because the revenue from the interest income will not be enough to cover the cost of deposits, general expenses and the loss of revenue from same borrowers that do not pay. Moreover, charging too high loan rates many also create an advance selection situation and moral hazard problems for the borrower.

In credit transactions the creditors turns over to the debtor to repay an equivalent amount usually money in future plus an added sum called interest. In other words bank earns profit by lending the amount in term of loan or credit and in return in gets interest. Banks loans are classified as:

1. Loan and advances
2. Overdrafts
3. Cash credit and discounting of bills

2.1.6 Concept of lending rates

The lending rate is the charge that a lender charges a borrower in order to make a loan. The term lending rate is synonymous with the term interest rate. Though this rate can be a very important factor in determining what the final cost of the loan will be, there are others that should not be ignored. Many different things can also affect lending rate. Therefore, those who are borrowing money should make sure they understand what some of these factors are. The function of interest rates is to entice those with the money to lend it to other individuals or organizations. If there is no

financial benefit to the bank or lending institution to lend the money out, then there is no reason to lend the money. This could ultimately be very harmful to the economy and cause hardships for the borrower.

All lending rates apply to loans, but there are different types of loans that may influence what those rates are. Secured loans, such as those for mortgages or vehicles, are the safety for the lender and come with rates. Credit cards and other unsecured loans represent the most risk and therefore are charged at higher rates.

While lending rates are necessary, there are ways to make the rates more affordable for the buyer. Rates are tied to the Federal Reserve fed funds rate. Therefore, when this rate is lower, the borrower gets a better deal. An individual's credit score can also affect interest rates.

2.1.7 Concept of deposits

Bank deposits is a type of saving hence all theories related to saving will be true for banks deposits. Banks deposit consists of money placed into banking institutions for safekeeping. These deposits are made to deposit account such as savings account, checking account and money market accounts. The account holder has the right to withdraw deposited funds, as set forth in the term and conditions governing the account agreement. The rate of interest varies depending on the nature of the deposits. The banks attract deposits from customer by offering different rates of interest and different kinds of facilities. Though the bank plays an important role influencing the customer to art with his funds and open deposit account with it, it is ultimately the customer who decides whether he /she should deposit his surplus founds in current deposit account, saving deposits or fixed deposit account. Bank deposits arise in two ways. When the banker receives cash, it credits the customer's account, it is known as a primary or a simple deposit. People deposit cash in the bank and thereby convert one from of money, cash into another form of bank money.

They prefer to keep money in deposit account and issue cheques against them to their creditors. Deposit also arise when customer are granted accommodation in the form of loan. When a bank grants a loan to a customer it doesn't usually pay cash but simply

credits the customer's account with the amount of loan. Of course, there is nothing that prevents the borrower from withdrawing the entire amount of borrowing in cash but quite often retains the amount with the bank in a deposit (Manandhar, et.al.,2011:86).

2.1.7.1 Types of deposit

Banks and financial institutions offer various types of deposit account to attract the saving from the customers. Under this study only three types of deposit are taken which are mentions below.

Current deposit

A current deposit, also called a demand deposit, is a basic checking account. Consumers deposit money which they can withdraw as desired on demand. These accounts often allow the account holder to withdraw funds using bank cards, checks or over-the-counter withdrawal slips. In some cases, banks charge monthly fees for current accounts, but they may waive the fee if the account holder meets other requirements such as setting up direct deposit or making a certain number of monthly transfers to a savings account.

Saving deposit

According to commercial bank act 2063 saving account means "an account of amounts deposited in a bank for saving purpose". Savings accounts offer the account holder interest on his deposits. However, in some cases, account holders may incur a monthly fee if they do not maintain a set balance or a certain number of deposits. Although savings accounts are not linked to paper checks or cards like current accounts, their funds are relatively easy for account holders to access. In contrast, money market accounts offer slightly higher interest rates than savings accounts, but account holders face limitations on the number of checks or transfers they can make from these accounts.

Fixed deposit

Fixed deposits constitute a very important resource for banks and financial institutions as they need not to keep greater reserve in respect of such deposits. Under the commercial bank act 2063, "fixed account means as account of amounts deposits in a

bank for certain period of time." The customers opening such account deposit their money in the account for a fixed period. Usually, only the person or institution who wants to gain more interest opens such type of account. Bank paid higher interest rate on this account compared with saving deposit. The bank invests this money on the productive sector and gains profit and the customer too can be made his financial transaction stronger by getting more interest from this deposit. The principal amount with interest must be returned to the customer after expiry of fixed time. Bank generally gives loans up to 90% of the amount deposited under fixed deposit account against the security of the deposit.

2.2 Legal provision

NRB act 2002 has made "provisions relating to interest rates " the following directives have been issued, with regard to the interest to be paid for the deposits and interest to be charged for loans and advances by the licensed institutions (www.nrb.org.np)

Provisions relating to interest rates: the "A", "B" and "C" class licensed institutions shall be free to fix interest rates for both deposits and lending, including fixation of types of interest and procedures on their own.

Prohibition for fixing flat rate of interest: the licensed institutions other than "D" class institutions shall not be allowed to fix flat interest rates on the loan and advances.

Interest rate to be approved: licensed institutions shall implement the interest rates for deposits and lending, procedures for calculation of interest, penal interest commission and services charges only after approval. The institutions may increase the interest rate for deposits up to a point of 0.5% over the published rates, but in case of interest rate on lending it should not be higher than published rate. provided that, interest rate may be fixed on the agreement between bank or financial institution and customer in the case of perpetual fund or in case of deposit having the maturity period of more than five year and no provision of published interest rate shall be applicable in case of the institutional deposit to be collected on the basis of bidding.

Submission of return on interest rate: The licensed institutions shall compulsorily furnish the statement of interest rates on deposits and lending to banks and financial institutions regulation department and the concerned supervision department of this bank within seven days of the end of each quarter. Moreover, the licensed institutions shall submit all provisions and procedures relating to interest rates according to clause 3 above at the time of beginning of the implementation and changes made there to within seven days.

Interest rate to published: the national level "A","B"and "C" class licensed institutions shall publish the particulars according to clause 4 above at the time of each amendment made in the interest rates on deposit and lending in national daily newspapers. The regional/district level institutions shall publish the particulars of changes in the requirement of about the minimum level newspapers. Provided that the "D" class institutions may publish the rates putting the information on it notice board.

Provisions of recording interest income: the interest accruals on loan and advances shall be recognized as income on cash basis only. The interest accrued but not realized in cash shall be recognized in the year of cash realization and the account shall be reconciled accordingly. Interest receivable for a period shall be debited to "interest receivable account" and credit to "interest suspense account".

Provision relating to providing interest: in situation where interest on credit by banks and financial institutions on a quarterly basis, interest shall be credited to the savings account of depositors at least on every 3/3 months basis. Interest to be provided to depositors shall be provided at least on average deposit balance of week, month, quarter or other duration on the basis of which the interest has to be calculated according to the basic of the concerned bank and financial institution to provide interest on deposit liability.

2.3 Review of Previous Works

This review of previous works incorporates review of articles and review of previous theses, which are separately presented below:

2.3.1 Review of articles in the journal

Manandhr (2012) a study "NRB directive and interest rate in Nepal" Nepal Rastra bank as a central bank as a central bank of Nepal control and regulate all the financial activities as well as formulate and implement necessary financial rules and regulation in the country. As a central bank of the country it is the sole controller for regulating interest rate in county. In the early 1980's Nepal has adopted liberal economic policy. Number of finance companies and commercial banks being to develop and government made the liberal policy in maintaining the interest rate were encouraged for commercial banks, established under joint venture in association with foreign banks in private sector. Similarly, deregulated of interest rate was applied to under finance companies established finance company acts. As a sole institution authorized to determine interest rate NRB has full discretions on determining interest rates structure from 1960 to 1975. On August 22, 1992, Nepal Rastra bank issued some directives to commercial banks and financial institutions to clearly spell out the interest rate on deposits. NRB also instructed the bank and financial institutions to limit their interest rate spread on deposit and credit at 6% within mid –December 1993. A further instruction to banks and financial institutions was issued in 2002, and now the interest rate spread required to be maintained by commercial banks and financial institutions has also been removed. The interest rate regime in Nepalese perspective changed from rigid control and monopoly of NRB to liberalization from 1960. At present there is complete freedom to have competitive system as an important part of government's liberalization policy. In this way interest rate become a market determined phenomena rather than a regulated phenomenon. The process of interest rate deregulation becomes a major indicative factor of the financial system reform in the country.

Paul ojeaga & Omosefe odejimi (2014) a study "The impact of interest rate on bank deposit "it reveals that there are many factors that affect the customers saving behavior in banks, some include the fixed saving interest rates which is likely to affect customers incentive to save, country specific wage rates which will depict the average allowance available after the individual budget demands, aggregate average annual bank losses which is likely to affect customer perception of how well banks are ding,

institutional and regulatory strengths which depicts the level of oversight function and internal control effectiveness, average bank lending and country apex financial agency such as the central bank.

Fixed savings account interest rates can also have strong consequences on overall average bank deposit and in most cases it is also affected by bank specific lending interest rates since it is customer deposits that are lent to private sector business with the expectations of returns on borrowed capital, making nominal interest rate to have a bank effect on fixed saving interest rates. Nominal interest rates therefore is likely to have an indirect casual effect on customer saving though fixed saving account interest rates which will probably be true since interest on savings are likely to be paid from returns on borrowed capital obtained from nominal interest on borrowed capital. This article reveals that interest rate were probably increasing bank deposits while income was also found to affect bank deposits in general.

Abdul sattar & wseem Ahmad khan (2014) conduct the study of "impact of interest rate changes on the profitability of four major commercial banks in Pakistan". The core objective of this project is to analyze the impact of interest rate changes on the profitability of commercial banks being operated in Pkistaning by examining the financial statement of four major banks during 2008 to 2012, like the efficiency of banking sector is considered most important for economic growth, Monetary policy implementation and macro-economic stability. From the past few years, interest spread of banking sector of Pakistan is raising. As a result variations in the interest rate depress the saving and investment and on the other hand it increases the efficiency of banks' leading. In this paper interest rate is a independent variable and bank profitability is a dependent variable. To examine the impact of interest rate changes on profitability of commercial bank in Pakistan, person correlation method is used in this study. As a result it is found that there is strong and positive correlation between interest rate and commercial banks profitability. It means if the value of interest rate is increases/decreases then as result value of bank's profitability will also increases/decreases.

Neelam Timsina (2017) the study of "Determinants of banks lending in Nepal" reveals that the commercial banks constitute a major chunk of total assets in the banking system in Nepal and extension of credit is one of the major functions of banking institution. If banks are not efficient in their lending behavior, it may not contribute to economic to economic growth. On the other hand, their inefficient and imprudent banking practices may lead to riskier financial instability. The main objective of the study is to test and confirm the effectiveness of the determinants of commercial bank leasing behavior in Nepal by using time series ordinary least square regression approach for empirical analysis. The model involves Nepalese commercial banks private sector credit as dependent variable and other variable such as their volume of deposits, interest rate, stipulated cash reserves requirement ratio, liquidity ratio, inflation, exchange rate and gross domestic product as independent variables for the period; 1975 to 2014 from the regression analysis, it was found that gross domestic product and liquidity ratio of banks have the greatest impact on their leading behavior. Granger causality test shoes the evidence of unidirectional causal relationship from GDP to private sector credit. The study lies that GDP is the barometer of the economic and commercial banks should pay their attention to the overall macro economic situation of the country, factor affecting the GDP in general and their liquidity ratio in particular while taking lending decision.

Felicia omowunmi olokoyo (2011) made the study of "determinants of commercial bank's lending behavior in Nigeria". This study investigated the determinants of commercial banks' lending behavior in the Nigerian context. The study aimed to test and confirm the effectiveness of the common determinants of commercial banks lending behavior and how it affects the lending behavior of commercial banks in Nigeria. The model used is estimated using Nigerian commercial banks loan advance (LOA) and other determinants or variables such as their volume of deposits (Vd), their investment portfolio (Ip), interest (lending) rate (Ir), stipulated cash reserve requirements ratio (Rr) and their liquidity ratio (Lr) for the period; 1980 – 2005. The model hypothesizes that there is functional relationship between the dependent variable and the specified independent variables. From the regression analysis, the model was found to be significant and its estimators turned out as expected and it was

discovered that commercial banks deposits have the greatest impacts on their lending behavior. The study then suggests that commercial banks should focus on mobilizing more deposits as this will enhance their lending performance and should formulate critical, realistic and comprehensive strategic and financial plans.

Saba mushtag & Danish ahmed siddiqui (2017) made a study on "Effect of interest rate on Bank deposits evidences from Islamic and non-Islamic economies". Banking sector is the backbone of any country's economy and bank deposits are the major tool of success for banking sector. Bank deposits are also a major part and determinant of countries saving. According to economic theories and practical considerations, interest rate is considered one of the major elements that can affect savings as well as bank deposits. But as we knows that in Islam interest is considered for bidden and Muslims tries to avoid interest income, So the basic purpose of this study is to know the fact that either religious factors have any effect on Muslim's decision while keeping their saving in banks. We used panel ARDL (Auto regressive Distributed Lag) method by using 23 non-Islamic and 23 Islamic countries data from 1999 to 2014 for this study. Results showed that in Islamic countries interest rate don't have any impact on bank deposits both in long run and short run. But in the case of non-Islamic countries interest rate have positive significant impact on bank deposits. Hence there is need of Islamic banks in countries with more Muslim population and there should be different economic policies for Islamic countries as religious factor affects decision of Muslims and interest rate doesn't have any impact on bank's deposits.

Hassan, olanrewaju makinde (2016) the study of "effect of interest rate on commercial bank deposits in Nigeria". This study is on the effect of interest rate on commercial bank deposits in Nigeria. Ordinarily, high interest rate should spur the desire for bank customers to want to deposit their fund in the bank vault. Likewise, low interest rate should naturally discourage depositors. But most oftentimes this is not the case, hence this study to examine how interest rates affects commercial bank deposits between 2000 and 2013 in Nigeria. The study made use of secondary data sourced from the Central Bank of Nigeria statistical bulletin and the National Bureau of Statistics between 2000 and 2013. The model for the study has as its dependent variable the

Commercial Bank Deposits (CBD) while its explanatory variables were the interest rates and the Gross Domestic Product (GDP). Using the Ordinary Least Square (OLS) multiple regression techniques; the study revealed that there is a negative relationship between the interest rates and the commercial bank deposits suggesting that interest rates has not been responsible for customers deposits in commercial banks in Nigeria. The study, therefore recommended that adequate awareness be made by commercial banks to attract more of customers' deposits by educating on the measure of interest that will accrue to them when they deposit their funds with the commercial banks.

2.4 Review of previous theses

Neupane (2009) made a study on "interest rate structure and its influence on deposit and lending of joint venture banks in Nepal". The researcher has shown the influence of interest rate on deposit and lending in Nepalese joint venture banks. The major findings of this study are shown below:

The interest rate of all sample banks is found to be in decreasing trends.

1. Analysis of sample banks shown that interest rates on lending are far higher than deposit rate.
2. Analysis of sample banks concludes that interest rate on deposit is found low which does not attract to the depositors.
3. Lending interest rate of sample banks have decreased every year which provide better opportunities for the borrower's investors.
4. Sample banks under study show weak on mobilization of collected deposit.

Pokharel (2010) made a study on "determination of interest rates in Nepalese financial markets." The researcher also gives some ideas about the interest rates in Nepalese markets. Thought, this thesis tried to identify the factors that shape the interest rates in Nepalese markets, it also tried to explore the relationship between the interest rate, deposits, credit rates and inflation. The major findings of this study are shown below:

1. The correlation coefficient between interest rate on deposit and amount of deposit collected of all sample organizations were highly negative.
2. It mean that, deposit amount of all sample banks are found to increase

even if the interest rate of deposit, the attracting factors for deposit, is decreasing.

3. The correlation coefficient between amount loaned and interest rate on lending of banks is found to be highly negative.
4. It is concluded both interest rate deposit rate and lending rate are determining factors of each other.
5. In the same manner, the researcher explored that the relation between interest rate on deposit and inflation rate is little positive.
6. Interest rate in Nepalese financial market is affected by inflation rate to some extent.

Another study conducted by Dangol,(2012) on the "impact of interest rate on financial performance of commercial banks" concludes :

1. Most of the commercial banks contradict the general financial theories.
2. The relation between amount of deposits and interest rate on deposit, in 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 sectors as well as general investors.
3. 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.
4. Correlation coefficient between interest rate and inflation is not significant.

Peter (2013) made a study on "The effect of interest rate spread on financial performance of commercial banks in Kenya". The last decade has been a period of dramatic changes for the banking sector in Kenya. Interest charged to borrowers rose to thirty percent and above in 2012 while interest earned by the savers remains relatively low. This resulted debate by members of parliament to control banks interest rate due to their skewed way of increasing interest rate, argument was bank only increase interest rate charged to customers only, on the other side banks argues if interest rate is controlled many banks will collapse. Banks as other business sought to maximize profit one way of achieving this is enlarging spread. The study sought to

determine the effect of interest spread on Kenya commercial banks financial performance.

The target population in this study is all 43 commercial banks in Kenya. Data is collected from central banks supervision report. The data collected was analyzed using SPSS (Statistical Package for Social Scientists). Regression analysis was used to analyze the data and find out whether exists a relationship between interest rate spread and the performance of commercial banks in Kenya.

The study found that there is strong positive relationship between financial performances of commercial banks with interest rate spread. Study found variables are significance to influencing financial performance of Kenya banks. The study found that interest rate spread affect performance assets in banks as it increases the cost of loans charged on the borrowers, regulation on interest rates have far reaching effects on assets non-performance. The study recommends there is need for government to regulate interest rates as this would help to safeguard borrowers from exploitation by commercial banks.

2.5 Research gap

A few research studies have been conducted by the different studies, experts and researcher about impact of interest rate on deposit and lending. Some studies are related to case study of two company and some others are comparative in nature. However, the study on interest rate structure of joint venture banks and its impact on deposit and lending of four sample commercial banks can be hardly found.

There is research gap between the present study and previous studies at first, fiscal years i.e time period and in the sample banks. Most of the researcher were used the different financial tools to analyze the data rather than statistical tool. This study includes different statistical tools like correlation analysis, t- test, co-efficient of determination as specific tools. Thus the research study made on "interest rate structure and its impact on deposit and lending" will be an effort to analyze on details about the impact of interest rate with deposit and lending, in present situation with the help of various related statistical tools and techniques.

CHAPTER: III

RESEARCH METHODOLOGY

For the purpose of research, several methods and approaches are used. Here describe the different methods and approaches used in data collection and discussed the tools that are used to analyze the collected data. For the purpose, quantitative research methods are used to perform this research study. Person correlation method is used to identify the relationship between interest rate and deposit and lending. The study used quantitative method because this research is about analyzing the impact of interest rate on deposit and lending of joint venture commercial banks in Nepal. This method is used with the aim to investigate the complete solution of an underlying task and to analyze the results with the help of numbers, table and other tools.

3.1 Research design

To achieve the specific objective of the study, descriptive and correlational research has been used. Correlational techniques have been adopted to find the relationship between lending and saving amount with interest rates of joint venture commercial banks in Nepal.

3.2 Population and sample

The population data for this study comprise all joint venture commercial banks, which are current operating in Nepal. At present, there are six joint venture commercial banks operating in country. The sampling technique adopted in this research is the non-probability sampling method. The major non-probability sampling method adopted is the convenience sampling methods. Also the choice of the period is based on the availability of data. So out of six joint venture commercial banks only four joint venture commercial banks are selected for sample. The selected sample banks for the analysis are presented below:

Nepal SBI Bank Ltd
Everest Bank Ltd
NABIL Bank Ltd
Himalayan Bank Ltd

3.3 Research variable

The research variables employed in this study are those of interest rate since it has direct bearing and impact on joint venture commercial Banks lending and deposit.

3.4 Sources of data

The nature and sources of data for this research is secondary data sources. The secondary data source is through the annual reports and banking and financial statistics of the central bank of Nepal under consideration in the research.

3.5 Data collection and processing procedure

To fulfill the predetermine objective, secondary sources of data has been used to facilitate the useful information for this study. The Secondary data has been collected first hand from the original sources, and from data collected and extracted from annual statement and statistics of the central bank of Nepal (NRB).

3.6 Data analysis tool and techniques

The analysis of data is done according to pattern of data available and felt necessity. This study requires more statistical tools rather than financial tools for analysis and presentation. So emphasis is given on statistical tools has been used to meet the objective of the study. The statistical tools arithmetic mean, standard deviation, correlation coefficient, coefficient of determination and t-test are used for this study.

3.6.1 Statistical tools

The statistical tool is essential to measure the relationship of two or more variable. It is the mathematical technique used to facilitate the analysis and interpretation of the performances of the organizations. It also helps to present the data, show the relation and deviations or differences of variables of organizations. In this research study some statistical tools are used for the analysis of the data more accurately, which are given below.

Arithmetic mean

The arithmetic mean or simple mean is a set of observations in the sum of all the observation divided by the number of observations. It is the best value, which

Represent to the whole group means is the arithmetic average of a variable.

Arithmetic mean of a series is given by:

$$\text{Mean } (\bar{X}) = \frac{\sum x}{n}$$

Where,

\bar{X} = Sum of the variables 'x'

N = No. of Observation

Standard deviation

The standard deviation is the absolute measure of dispersion in which the drawback present in other measure of dispersion as it satisfied most of the requisites of a good measure of dispersion. Standard deviation is defined as the positive square root of the mean as square of the deviation takes from the arithmetic mean. It indicates the ranges and size of deviance from the middle or mean. It measures the absolute dispersion. Higher the standard deviation Higher will be the variability and vice versa. Dispersion measures the variation of the data from the central value. In other words, it helps to analyze the quality of data regarding its variability. It is calculate as:

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

This tool is used to calculate the deviation of total deposit, total loan and advances, loan loss provision and non-performing assets.

Correlation coefficient (r)

Correlation coefficient is defined as the association between the independent Variable and independent variable. It is a method of determining the relationship between these two variables. If the two variables are so related change in the value of independent variable cause the change in the value of dependent variable then it is said to have correlation coefficient.

$$\text{Correlation Coefficient (r)} = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

Where,

- n : Number of observations in series X and Y
- X: Sum of observations in series X
- Y: Sum of observations in series Y
- X^2 : Sum of squared observations in series X
- Y^2 : Sum of squared observations in series Y
- XY : Sum of product of observations in series X and Y

The value of correlation coefficient 'r' lies between -1 to 1, i.e. $-1 \leq r \leq 1$.

If $r = 1$, there is perfect positive relationship. If $r = -1$, there is perfect negative relationship. If $r = 0$, there is no correlation at all

“The closer the value of 'r' is 1 or -1, the closer the relationship between the variables and the closer 'r' is to 0, the less close relationship”

Coefficient of determination (r^2)

The coefficient of determination is the primary way to measure the extent or strength of the association that exists between two variables, x and y. it refers to a measure at the total variance in a dependent variable that is explained by its linear relationship to and independent variable. The coefficient of determination is denoted by r square and the value lies between zero and infinity. The close to infinity means greater the explanatory power. A value can occur only in the explained diagram that falls exactly on the regression line. The r square is always positive. It can't tell whether the relationship between 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 significance of the coefficient of determination is to represent the position of total variations due to independent variable.

$$\text{Coefficient of determination } (r_1^2) = (r_1)^2$$

Simple regression analysis

Regression is the estimation of unknown values or prediction of one variable from known values of other variables. It is a mathematical measure of the average relationship between two or more variables in terms of the original units of the data.

Line of regression of X on Y

The line of regression of X on Y is the line which gives the best estimates of X for any given amount of Y. The regression equation is expressed as:

$$Y = a + bx$$

We shall get the normal equation for estimating 'a' and 'b' as:

$$Y = na + b \sum x \dots\dots\dots(i)$$

$$\sum XY = a \sum X + b \sum x^2 \dots\dots\dots(ii)$$

Where, Y = the value of dependent variable (deposit and lending)

a = Y-intercept

b = Slope of the trend line/coefficient of regression

X = independent variable (interest rate).

Coefficient of regression

The coefficient 'b', which is the slope of line of regression of Y on X is called the coefficient of regression of Y on X. It represents the increment in the value of the independent variable Y for a unit change the values in value of the independent variable X. In other words, it represents the rate of change. The convenient way to calculate the value of 'b' is as:

$$b = \frac{n\sum XY - \sum X \sum Y}{N\sum X^2 - (\sum X)^2}$$

Similarly, the value of Y-intercept can be computed as:

$$a = \frac{(\sum X^2)(\sum Y) - \sum X \sum Y}{N\sum X^2 - (\sum X)^2}$$

t- Statistics

T-test, commonly known as Student's T-Distribution, is used when sample size is equal to or less than 30, the parent population from which the sample is drawn is normal, the population standard deviation is unknown. In order to test the significance of an observed sample correlation coefficient, the following procedure has been applied:

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

Where,

r = Sample correlation between two variables

r² = Coefficient Determination

n = No of Pair of observations

Decision: If calculated 't' is less than or equal to tabulated value of 't' it falls in the accepted region and the null hypothesis is accepted and if calculated 't' is greater than tabulated 't' null hypothesis is rejected.

CHAPTER: IV

RESULTS

This chapter deals with the presentation of data sourced from secondary sources. This chapter will present the data on table and figure. The main objective of the study is to present data and analyze them with the help of various statistical tools. This chapter consists of analysis and presentation of empirical data. The important variables are taken into consideration, so this chapter will present the analysis of components of deposit, lending and interest rate. This chapter presents the relationship between interest rate and deposit & lending by using various statistical tools which deals in the research methodology chapter three.

4.1 Interest rate structure

4.1.1 Analysis of deposit and interest rate

In this section, detail study is made about deposit amount and interest rate of sample banks. For this study only saving and fixed deposits are considered because current deposit doesn't earn any interest.

4.1.1.1 NABIL Bank Limited

Prior to entering into the main topics, it is preferable to take a glance on the interest rate structure on different types of deposits. This is essential because the interest rates are generally different in magnitude for every sample banks. These different are due to the numerous factors like maturity period, policy of bank, goodwill of organization and so on. In real world government owned bank and bank with high reputation and goodwill have lower deposit rates. Similarly, finance companies, co-operative and development bank quotes higher interest rate on deposit than commercial banks do.

Table 4. 1 Interest rate structure on deposit of NABIL

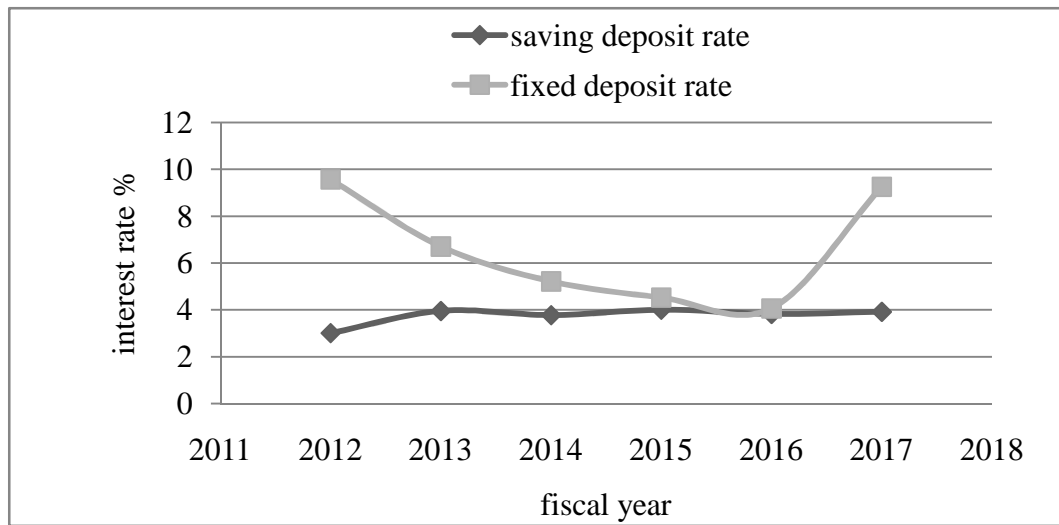
(wt.avg. interest in %)

Deposits	2012	2013	2014	2015	2016	2017
Saving	3	3.95	3.77	4	3.82	3.91
Fixed						
UP to 1 month	10.68	7.15	4.12	5.61	1	5.2
1-3 months	10.7	6.47	5.52	3.82	2.43	5.36
3-6 months	10.17	6.52	5.15	4.77	1.77	7.29
6-12 months	8.65	6.55	5.41	4.31	4.27	10.42
1-2 year	10.15	6.94	6.12	4.74	3.78	9.43
2 year and above	10.43	8.81	8.8	5.2	4.88	10.29
Fixed deposit wt.avg. interest rate	9.56	7.70	5.21	4.52	4.06	9.25
Whole mean	9.11	6.63	5.56	4.64	3.14	7.41
standard deviation from whole mean	2.11					

Sources: Banking and financial statistic Nepal Rastra Bank.

Table 4.1 shows the deposit interest rate of NABIL in six different FY. The table portraits, the interest rate that were prevailed in the Nepalese financial market during last six FYs. The data shows the increasing trend of interest rate on saving deposits. The interest rate on saving deposit in the beginning year was 3% then it has increased between 3% and 4%. In the same manner, the bank used to quote the interest rate on fixed deposit in different time period like 1 month, 3 month, 6month, 12month, 2year and 2 year above. The weighted average interest rate on fixed deposit in the beginning year was 9.56% then gradually decreased to 4.06% in 2016 but ultimately rises to the 9.25% in 2017. Similarly, if weighted average interest rate on fixed deposit of different period is taken, then the result is almost similar with "whole average" interest rate. The average figure also shows the decreasing tendency in interest rate between 9.11% and 7.41%. The deviation is measured by standard deviation which is 2.11% of each interest rate.

Figure 4. 1 Interest rate trend of NABIL



The figure 4.1 reveals that interest rate on saving and fixed deposit. The interest rate on saving deposit is in increasing trend up to 2015, and then after the interest rate decreasing on increasing trend. Similarly, interest rate on fixed deposit are also decreasing trend up to 2016 and then starting to increases.

4.1.1.2 Himalayan Bank Limited

As similar to previous parts, it is better to present the general interest rate structure before entering to the main analysis. The interest rate structure for Himalayan bank limited on saving and fixed deposits for six FYs are presented on table 4.2.

Table 4. 2 Interest rate structure on deposit of Himalayan Bank Limited

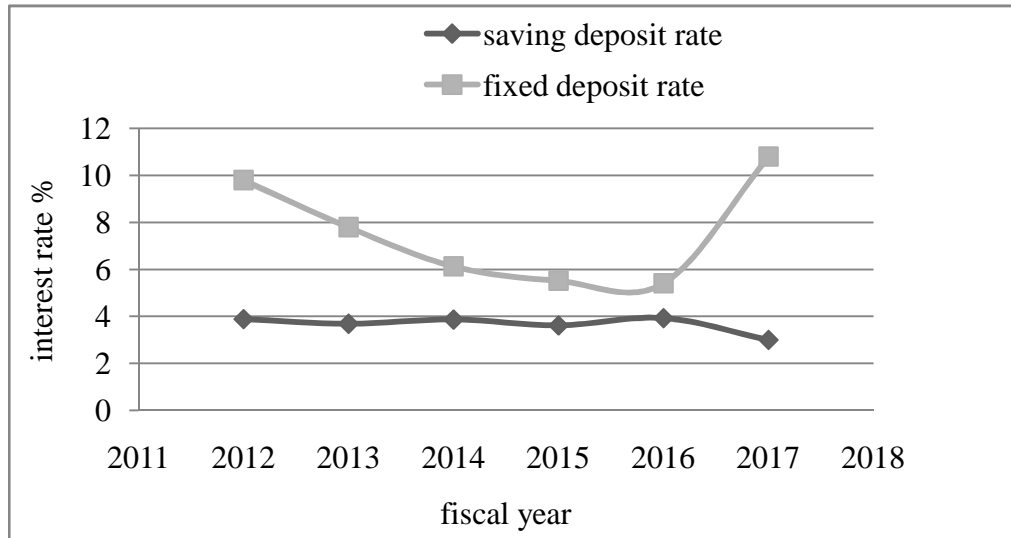
(wt. avg. interest in %)

Deposits	2012	2013	2014	2015	2016	2017
Saving	3.89	3.69	3.87	3.62	3.93	3
Fixed						
UP to 1 month	4	6.8	6.84	5.36	3.87	9.31
1-3 months	4.47	6.8	6.57	5.37	4.25	8.56
3-6 months	7.61	6.6	5.24	4.92	3.37	8.29
6-12 months	9.65	8.4	6.02	5.78	6.11	11.9
1-2 year	10.84	8.1	6.17	5.37	4.57	11.8
2 year and above	9.26	9.1	7.07	5.79	5.2	6.7
Fixed deposit wt. avg. interest	9.8	7.8	6.13	5.52	5.41	10.8
Whole mean	7.10	7.07	5.97	5.17	4.47	8.51
standard deviation from whole mean	1.470					

Sources: Banking and financial statistics Nepal Rastra Bank.

Table 4.2 shows the deposit interest rate of Himalayan bank limited in six different FY. The table portrays, the interest rate that were prevailed in the Nepalese financial markets during last past six FYs. The data shows the decreasing tendency of interest rate on fixed and saving deposits. The interest rate on saving deposit in the beginning year was 3.5% and decreased by 22.87% in 2017. In the same manner, the bank used to quote the interest rate of fixed deposits in different short term period like up to 1 month, 1-3 month, 3-6 month, 1 year, 2 year & above. The weighted average interest rate on fixed deposit in the beginning year was 9.8% then gradually decreased to 5.41% in 2016 but ultimately rises to the 10.8% in 2017. Similarly the interest rate on whole mean in the beginning year was 7.10% then it has increased between 7.10% and 8.51%. The deviation is measured by standard deviation which is 1.47% of each year interest rate.

Figure 4. 2 Interest rate trend of Himalayan Bank Limited



The figure 4.2 portrays the interest rate of Himalayan bank limited on saving and fixed deposits. The interest rate on saving deposit is in decreasing trend. The interest rate on saving deposit was 3.89% in the beginning year but it has decreased to 3% in 2017. Similarly, the interest rate on fixed deposit is in decreasing trend up to 2016 but it has increased in 2017. The fixed deposit interest rate was 9.8% in 2012 but it has decreased to 5.41% in 2016.

4.1.1.3 Everest Bank Limited

As similar to previous parts, it is better to present the general interest rate structure before entering to the main analysis. The interest rate structure for Everest bank limited on saving and fixed deposits for six FYs are presented on table 4.3.

Table 4. 3 Interest rate structure on deposit of EBL

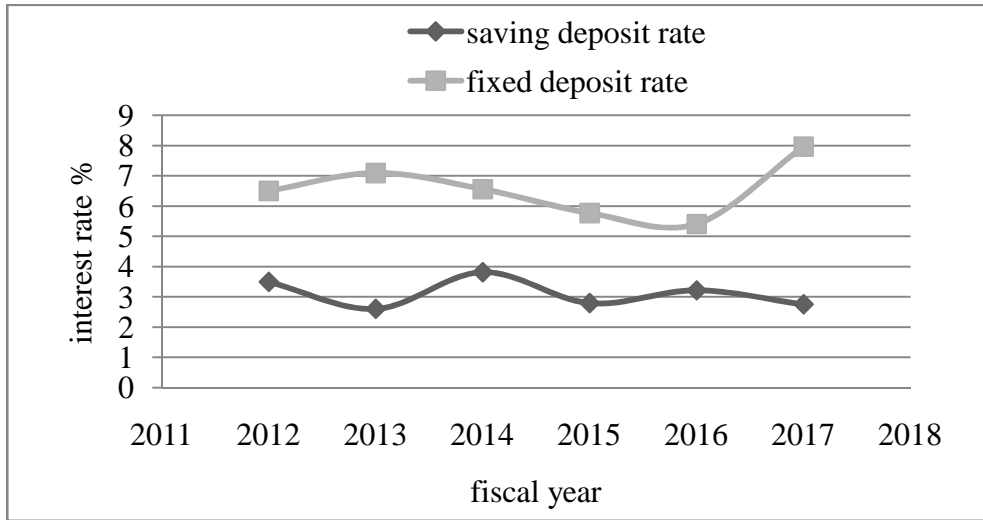
(wt. avg. interest in %)

Deposits	2012	2013	2014	2015	2016	2017
Saving	3.5	2.61	3.82	2.8	3.22	2.76
Fixed						
UP to 1 month	0	0	0	0	0	0
1-3 months	5.37	6.37	6.72	5.24	4.08	6.96
3-6 months	5.27	6.28	5.5	5.09	4.99	8.2
6-12 months	6	7	5.54	5.63	5.7	9.41
1-2 year	6.92	7.92	6.49	5.16	5.31	7.03
2 year and above	7.95	8.95	8.65	8.84	8.92	6.47
Fixed deposit wt.avg. interest rate	6.5	7.09	6.56	5.77	5.41	7.96
Whole mean	5.00	5.59	5.25	4.68	4.60	5.83
standard deviation from whole mean	0.49					

Sources: Banking and financial statistic Nepal Rastra Bank.

Table 4.3 shows the deposit interest rate of Everest bank limited on different time period. For the study 2012 is taken as initial year and 2017 as a final year. This data shows decreasing tendency of interest rate on saving. The interest rate on saving deposit in the beginning year was 3.5% then it has decreased to 2.76% in 2017. Similarly weighted average interest rate on fixed deposits of different period is taken. The interest rate on fixed deposit in the beginning year was 6.5% then it has increased between 6.5% and 7.96%. The average figures also show the increasing tendency in interest rate except 2014, 2015 and then it has increased to 5.83% in 2017. The deviation is measured by standard deviation which is 0.49% of each year interest rate.

Figure 4. 3 Interest rate trend of EBL



The figure 4.3 portrays the interest rate of Everest bank limited on saving deposit and fixed deposit. The saving deposit rate is in decreasing trend but fixed deposit interest rates are in increasing trend with some fluctuation. It means that there is a rise and fall for deposit rate.

4.1.1.4 Nepal SBI Bank Limited

As similar to previous parts, it is better to present the general interest rate structure before entering to the main analysis. The interest rate structure for Nepal SBI bank limited on saving and fixed deposits for six FYs are presented on table 4.4.

Table 4. 4 Interest rate structure on deposit of NSBI

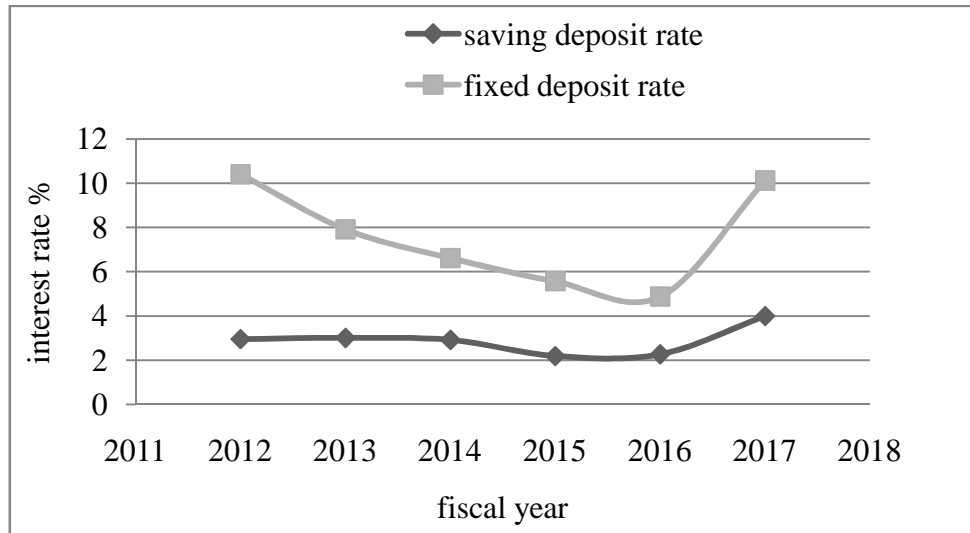
(wt. avg. interest in %)

Deposits	2012	2013	2014	2015	2016	2017
Saving	2.95	3	2.91	2.18	2.26	3.99
Fixed						
UP to 1 month	9.62	7.16	6.9	5.63	4.9	6.27
1-3 months	10.58	7.57	5.92	4.84	4.72	6.61
3-6 months	11.11	7.14	6.37	5.25	4.41	8.43
6-12 months	10.67	8.17	6.59	5.76	4.91	11.89
1-2 year	9.85	8.95	7.54	7	4.89	9.65
2 year and above	10.59	10.13	8.92	6.24	8.59	9.85
Fixed deposit wt. avg. interest rate	10.4	7.91	6.61	5.56	4.87	10.12
Whole mean	9.34	7.45	6.45	5.27	4.95	8.10
standard deviation from whole mean	1.692					

Sources: Banking and financial statistic Nepal Rastra Bank.

Table 4.4 shows the deposit interest rate of NSBI on different time period. For the study 2012 is taken as initial year and 2017 as a final year. This data shows increasing tendency of interest rate on saving deposit with some fluctuation. The interest rate on saving deposit in the beginning year was 2.95% then it has increased to 3.99% in 2017. Similarly weighted average interest rate on fixed deposits of different period is taken. The interest rate on fixed deposit in the beginning year was 10.4% then it has increased between 10.4% and 10.12%. The average figures also shows the decreasing tend of interest rate. The interest rate on whole mean in the beginning year was 9.34% then it has decreased to 8.10%. The deviation is measured by standard deviation which is 1.692% of each year interest rate.

Figure 4. 4 Interest rate trend of NSBI



The figure 4.4 portrays the interest rate of NSBI on saving and fixed deposits. The figure shows interest rates on fixed deposits are in decreasing trend up to 2016 and then it has increased in 2017. Interest rates on saving deposit are in increasing trend with some fluctuation.

The interest rates on deposits of all sample banks are increasing trend with some fluctuation during the study period 2012 to 2017. The main objectives of increasing deposits rate is to attract saving into the banking sector. Thus, higher deposit rate encourage saving in greater volume. Similarly, lower deposits rate in other hand discourage the saving to the depositors. Therefore the interest rate on deposits of all sample banks is increased due to the causes of liquidity crunch.

4.2 Relationship between interest rate and deposit & lending

The measure of the strength of linear association between two variables. Correlation will always between -1.0 and +1.0. If the correlation is positive, we have a positive relationship. If it is negative, the relationship is negative. The Pearson co-efficient of correlation is used to assess the relationship between interest rate and deposits and lending at 1% and 5% level of significance. The correlation analysis results have been presented in Table 4.5.

Table 4.5 Relationship between interest rate and deposit & lending

	Lending amount	Fixed amount	Saving amount	Lending rate	Fixed deposit rate	Saving deposit rate
Lending amount	1					
Fixed amount	.468	1				
Saving amount	.909	.184	1			
Lending rate	-.514	.126	-.721	1		
Fixed deposit rate	-.097	.476	-.300	.713	1	
Saving deposit rate	.129	-.509	.423	-.110	-.122	1

Sources: SPSS output

Table 4.5 shows the correlation between fixed deposit rate and fixed deposit amount is 0.476. It shows that fixed interest rate is significantly positively correlated with fixed deposit amount at 0.05 levels of significance (2-tailed). It indicates that when fixed interest rate increase fixed deposit amount also increase and vice-versa. The correlation between saving deposit rate and saving amount is 0.423. It reveals that saving deposit rate is significantly positively correlated with saving amount at 0.05 levels of significance (2-tailed). It indicates that when saving deposit rate increase saving amount also increase and vice versa. Correlation between lending rate and lending amount is -0.514. It shows that there is moderate degree of negative relationship, thus increase in lending rate lead to a decrease in aggregate lending amount for the periods under study.

4.3 Regression analysis

The regression analysis is carried out to determine whether the dependent variable is influenced by the given independent variables or not. In this analysis deposit amount and lending amount are dependent variable and interest rate is independent variable.

4.3.1 Regression analysis between interest rate and saving deposit

Table 4. 6 Variation in saving amount explained by interest rate

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.424 ^a	.180	.142	10079.48208

Sources: SPSS output

The results on coefficient of multiple determination (R) are presented in Table 4.6. This shows the total variation in saving amount explained by interest rate.

As shown in Table 4.6, the value of coefficient of multiple determination is 0.180. This implies that the variation in saving amount can be explained by interest rate is 18% and remaining 82% is explained by other factors. It has been found that the explanation variable having similar value of R square is processed by previous researches too.

Table 4. 7 Goodness of fit of Regression (ANOVA)

Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	489625193.293	489625193.293	4.819	0.039
	Residual	2235111097.957	101595958.998		

Sources: SPSS output

ANOVA is used in testing the hypotheses. The results of this test are presented in Table 4.7. Finding form the Fishers ratio (i.e. the F-Statistics which is a proof of the validity of the estimated model) as reflected in Table 4.7 indicates that the F is about 4.819 and a P-value is 0.039. This invariably suggests clearly that simultaneously the explanatory variables are significantly associated with the dependent variable. The P value is 0.039,

Which is lesser than alpha value 0.05, these shows that independent variable interest rate statistically significantly predict the dependent variable saving amount.

Therefore, the model is a good predictor of the relationship between the dependent and independent variable. As a result, the independent variables are significant in explaining the variance in amount.

Table 4. 8 Coefficient analysis

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1256.501	12328.167		.102	.920
	Saving rate	7960.556	3626.183	.424	2.195	.039

Sources: SPSS output

Table 4.8 shows the relationship between saving amount and interest rate is significant since p-value (.039) is less than .05. This implies that the probability of the correlation between saving amount and interest rate not being true is 3.9%. The constant value is found to be Rs 1256.501 billion, which is the Y intercept. This implies that saving amount does not change when interest rate is zero percent. The slope of regression line is Rs 7960.556 billion. This means that if the saving interest rate changes by 1% the banks saving amount will change in the same direction by Rs 7960.556 billion. Thus, the regression equation of impact of interest on saving amount in line with the equation $Y = a + bX$ is given by:

$$\text{Saving amount} = 1256.501 + 7960.556 (\text{interest rate})$$

Where,

Y = Dependent Variable (saving amount)

X = Independent Variable (saving interest rate)

4.3.2 Regression analysis between interest rate and fixed deposit

Table 4. 9 Variation in fixed amount explained by interest rate

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.476 ^a	.227	.192	6533.07290

Sources: SPSS output

Table 4.9 shows the adjusted capital R square, also called the coefficient of multiple determination is the percentage of the variance in the dependent variable uniquely or jointly by the independent variable and is 22.7%. This means that 22.7% of the change in the fixed amount will be explained by changes in the interest rate. The remaining 77.3% of the change in the fixed amount is explained by other factors.

Table 4. 10 Goodness of fit of Regression (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	275341766.141	1	275341766.141	6.451	.019 ^b
	Residual	938982913.741	22	42681041.534		

Sources: SPSS output

For the goodness of fit of regression analysis, analysis of variance test was made. The results of this test are presented in Table 4.10.

Table 4.10 shows the alternative hypothesis is accepted since p-value is significant (.019). This implies that the fixed interest rate is significantly associated with fixed amount.

Table 4. 11 Coefficient analysis

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4353.725	4984.110		.874	.392
	Fixed deposit rate	1726.286	679.664	.476	2.540	.019

Sources: SPSS output

Table 4.11 shows the relationship between fixed amount and interest rate is significant since p-value (.019) is less than .05. This implies that the probability of the correlation between fixed amount and interest rate not being true is 1.9%. The constant value is found to be Rs 4353.725 billion, which is the Y intercept. The slope of regression line is Rs 1726.286 billion. This means that, 1% increase in fixed interest rate will lead to a 1726.286 billion increase in fixed amount. Thus, the regression equation of impact of interest on fixed amount in line with the equation $Y = a + bX$ is given by:

$$\text{Fixed amount} = 4353.725 + 1726.286 (\text{interest rate})$$

Where,

Y = Dependent Variable (fixed amount)

X = Independent Variable (fixed interest rate)

4.3.3 Regression analysis between interest rate and lending amount

Table 4. 12 Variation in lending amount explained by interest rate

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.514 ^a	.264	.230	14434.92663

Sources: SPSS output

The results on coefficient of multiple determination (R) are presented in Table 4.12. This shows the total variation in lending amount explained by the interest rate.

As shown in Table 4.12, the value of coefficient of multiple determination is 0.264. This implies that the variation in lending amount can be explained by interest rate is 26.4% and remaining 73.6% is explained by other factors. It has been found that the explanation variable having similar value of R square is processed by previous researches too.

Table 4. 13 Goodness of fit of Regression (ANOVA)

Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	1642192032.136	1642192032.136	7.881	0.01
	Residual	4584076350.929	208367106.860		

Sources: SPSS output

ANOVA is used in testing the hypotheses. The results of this test are presented in Table 4.13. Finding form the Fishers ratio (i.e. the F-Statistics which is a proof of the validity of the estimated model) as reflected in Table 4.13 indicates that the F is about 7.881 and a P-value is 0.01. This invariably suggests clearly that simultaneously the explanatory variables are significantly associated with the dependent variable. The P value is 0.01, which is lesser than alpha value 0.05, these shows that independent variable interest rate statistically significantly predict the dependent variable lending amount. Therefore, the model is a good predictor of the relationship between the dependent and independent variable. As a result, the independent variables are significant in explaining the variance in lending amount.

Table 4. 14 Coefficient analysis

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	110550.793	21074.201		5.246	.000
	Lending rate	-5827.569	2075.822	-.514	-2.807	.010

Sources: SPSS output

As indicated in Table 4.14, the relationship between lending amount and interest rate is significant since p-value (.01) is less than .05. This implies that the probability of

the correlation between saving amount and interest rate not being true is 1%. The constant value is found to be Rs 110550.793 billion, which is the Y intercept. The slope of regression line is Rs -5827.569 billion. This means that if the lending interest rate increased by 1% the bank lending amount will decreased in the same direction by Rs 5827.569 billion. Thus, the regression equation of impact of interest rate on lending amount in line with the equation $Y = a + bX$ is given by:

$$\text{Lending amount} = 110550.793 - 5827.569 (\text{interest rate})$$

Where,

Y = Dependent Variable (lending amount)

X = Independent Variable (lending interest rate)

4.4 Hypothesis testing

Three alternative hypotheses were drawn for the purpose of identifying relationship between dependent and independent variables in this study. Each hypothesis is tested on the basis of the Pearson's correlation coefficient presented in above table. Test on each of these hypotheses is discussed below:

Hypothesis 1

H1: There is positive relationship between interest rate and saving deposit amount.

The correlation analysis shows that there is Positive relationship between interest rate and saving deposit amount (0.423) at 5% significant level. The correlation is significant at 5% where p-value is less than alpha i.e. $0.039 < 0.05$.

Hence, the alternative hypothesis (H_1) is accepted. It means that there is significant relationship between interest rate and saving deposit amount.

Hypothesis 2

H2: There is positive relationship between interest rate and fixed deposit amount.

The correlation analysis shows that there is Positive relationship between interest rate and saving deposit amount at 5% significant level. The correlation is significant at 5% where p-value is less than alpha i.e. $0.019 < 0.05$.

Hence, the alternative hypothesis (H_2) is accepted. It means that there is significant relationship between interest rate and saving deposit amount.

Hypothesis 3

H3: There is negative relationship between lending rate and lending amount.

The correlation analysis shows that there is negative relationship between lending rate and lending amount at 5% significant level. The correlation is significant at 5% where p-value is less than alpha i.e. $0.01 < 0.05$.

Hence, the Null hypothesis (H_0) is rejected. It means that there is negative significant relationship between lending rate and lending amount.

4.5 Major findings

Because of the different nature of data, the major findings of the study are presented separately for the data analysis.

1. Table 4.1 shows the interest rate structure of NABIL on saving deposit and fixed deposits. The data shows the increasing trend of interest rate on saving deposit. The interest rate on saving deposit in the beginning year was 3% then it has increased between 3% and 4%. Similarly, interest rate on fixed deposit in the beginning year was 9.56% then gradually decreased to 4.06% in 2016 but ultimately rise to 9.25% in 2017. The standard deviation of each year interest rate is 1.47%.
2. Table 4.2 shows the deposit interest rate of Himalayan bank limited in six different FY. The data shows the decreasing tendency of interest rate on fixed and saving deposits. The interest rate on saving deposit in the beginning year was 3.5% and decreased by 22.87% in 2017. Similarly, the interest rate on fixed deposit was 9.8% in the beginning year then decreased to 5.41% in 2016 but ultimately rise to the 10.8% in 2017. The deviation is measured by standard deviation which is 1.47% of each year interest rate.
3. Table 4.3 shows the deposit interest rate of Everest bank limited on different time period. The data shows the decreasing tendency of interest rate on saving deposit but in increasing tendency of interest rate on fixed deposit with some

fluctuation. The deviation is measured by standard deviation which is 0.49% of each year interest rate.

4. Table 4.4 shows the deposit interest rate of NSBI on different time period. The data shows the increasing tendency of interest rate on saving deposit with some fluctuation. The interest rate on saving deposit in the beginning year was 2.95% then it has increased to 3.99% in 2017. Similarly, the interest rate on fixed deposit in the beginning year was 10.4% then it has increased between 10.4% and 10.12%. The standard deviation is 1.692% of each year interest rate.
5. From the correlation analysis, the interest rate of sample banks is positively correlated with saving and fixed deposit amount. It indicated that increase in interest rate of joint venture commercial banks leads to increase in fixed and saving deposits amount and vice- versa. The interest rate of sample banks is negatively correlated with lending amount. Which implies that decrease in interest rate lead to increase in lending amount and vice – versa.
6. There is low degree of positive correlation between saving interest rate and saving amount of sample banks (0.423) and is significant at 0.05 levels of significance (2- tailed).
7. There is low degree of positive correlation between fixed interest rate and fixed amount of sample banks (0.476) and is significant at 0.05 levels of significance (2- tailed).
8. There is high degree of negative correlation between lending rate and lending amount of sample banks (-0.514) and is significant at 0.05 levels of significance (2- tailed).
9. The coefficient of determinants between saving interest rate and saving amount is 0.18 which means that total variation in saving amount has been explained by saving interest rate to the enters 18% and remaining is the effects of other factors.
10. The coefficient of multiple determination between fixed amount and interest rate is 0.227. This means that 22.7% of the change in the fixed amount will be explained by changes in the interest rate. The remaining 77.3% of the change in the fixed amount is explained by other factors.

11. The coefficient of multiple determination between interest rate and lending amount is 0.264. This implies that the variation in lending amount can be explained by interest rate is 26.4% and remaining 73.6% is explained by other factors.
12. The simple regression shows that the regression coefficients are positive for saving amount and fixed amount. Similarly, regression coefficient is negative for lending amount.

CHAPTER V

CONCLUSIONS

This is a last chapter of this study. This chapter presents a summary of the key finding of the study as well as the conclusions and implication for further research. The facts and findings from secondary data analysis are presented in this chapter.

5.1 Summary

Many commercial bank, development banks and financial institutions are operating in the economy to assist in the process of economic development of the country. Due to the high competition between the financial institutions, the collected high amount of deposit from public's not properly to invest. The role of credit is considered to be the key to economic growth especially in developing countries as it lubricate the economy. As commercial banks constitute a major chunk of total assets and total deposits in the banking system in Nepal and extension of credit and collection of deposit is one of the major functions of banking institution. Commercial banks mobilized the fund by collecting the scattered resources from the savers and provide the collected funds to the users. The financial systems sustain by lending the fund on higher interest rate and paying the deposit holder a little interest. The decision made to charge and provide interest on lending and deposit affects the profit position of the organization. Depositors are generally attracted by offering the higher interest rates. Similarly, high credit rate de-motivate the investor as a result investment in the country shrinks down. Even though there are various factors in the economy that affects deposit amount and lending amount of the banks with the curiosity to be clear about interest rate structure of joint venture commercial banks and to be clear about whether interest rate influence deposit and lending amount this study is made.

The review of literature shows that there are so many economic and non economic factors on deposit. But it is real fact that there is relationship between interest rate and deposit. The volumes of deposit amount of banks are highly affected by their interest rate. According to the theoretical views there is positive relationship between interest rate and deposit amount. That, means when interest rates on deposit increases that attract to the deposit and deposit amount of banks are increases and vice versa.

Similarly, the volume of lending amount is highly affected by their lending rate. It means there is a negative relationship between lending rate and lending amount.

Chapter three was structured around research design, target population, sample design, data collection procedures and instrument, and data analysis and presentation. The sample comprised of 4 sampled joint venture commercial banks (i.e. NABIL, HBL, EBL, NSBI) from total population of 6 joint ventures commercial by using convenient sampling methods that meet the eligibility criteria. To achieving the objective of the study, descriptive and correlational research design has been employed.

For the purpose of the study, the necessary data on interest, deposit & lending amount and other related variables were collected for the period 2011/12 to 2016/17. The effect of interest rate on deposit amount is analyzed from four commercial banks of Nepal for six year period by using statistical tools mentioned in chapter there, secondary data are collected from Banking and financial statistics NRB.

The analysis of all banks shows average interest rate on deposit is in increasing trend with some fluctuation but deposit amount is in increasing trend. This trend shows that there is positive relationship between interest rate and deposit amount. This situation actual matched with the actual theory. According to the theoretical concept of interest rate and deposit amount, people prefer to deposits more money when the banks interest rate is high and vice –versa. The statistical analysis also shows that there is significant or insignificant relationship between interest rate and deposit amount and lending rate & lending amount.

5.2 Conclusions

As have been established in this research that interest rate favors savers when the rate is high and not favorable when it is low. Saving is also looked upon as beneficial both for the individual and the society at large thus an increase in saving will ultimately lead to an increase in savings of the community. It was due to this effect that the classists believed in thriftiness. Increase savings on the part of individuals will results in a general curtailment in the expenditure. When savings increases, lending amount is also increase and lending is very essential for the economic development of an

economy. In this research that interest rate favors lenders when the lending rate is low and vice versa.

Interest rates have positive significant impact on aggregate deposits. This is confirmed by positive interest rate coefficient. Also there is positive correlation between interest rate and aggregate deposits, thus an increase in interest rate is lead to an increase in aggregate deposit in economy. On the other hand, lending rate has negative significant impact on aggregate lending amount. This is confirmed by a negative interest rate coefficient. Also there is a negative correlation between lending rate and aggregate lending amount. Thus an increase in aggregate lending rates is lead to decrease aggregate lending amount and vice- versa.

Increase in lending amount is due to the decrease in lending interest rate meaning that the one of the factor to increase the lending amount is decline in interest rate. So it can be concluded that lending interest rate is also one important factor for expansion or contraction of lending amount.

In conclusion, the real interest rate affects the growth of bank deposit significantly positively. This result suggests that trying to influence the bank deposits by interest rate is likely to be a practical policy option in samples banks.

5.3 Implications

This study has also several implications pointing to interesting avenues for future research. Some implication and suggestion for future research are discuses here.

1. This study examined the interest rate only that affects the deposits and lending amount of joint venture commercial banks. Interest rate may not be only one variable that affects the amount of deposit and lending. It is recommended that further research could be conducted to establish whether other variables affect deposit and lending amount of joint venture commercial banks in Nepal.
2. This study has been conducted in the context of Nepalese joint venture commercial banks with short period of time and small sample size. Future researcher may deal with all Nepalese commercial banks with long period of time.

3. This study has been conducted only used the simple statistical tools to analyze the relationship between interest rate and deposit & lending using annual data. Future research can be done by taking more sophisticated econometric methods and quarterly or monthly data.
4. Future researcher can conduct study using primary survey in order to known impact of interest rate on deposit and lending.
5. The deposits and lending process can help inform policy decision aimed at promoting economic development thus government should ensure that interest rate payable on deposits is such as to stimulate savings rather than consumption as it has been proven from this research that interest rate have a positive impact on deposits which in turn stimulate investments.
6. Commercial banks should formulate and implement a client oriented service policy while fixing deposit rates and lending rates. It helps the banks to face the cutthroat competition very boldly.

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ANNEXES

interest rate	fixed deposit amount in (billion)	lending rate	lending amount in (billion)	saving rate	saving amount in (billion)
9.56	12805.03	11.76	40087.55	3	16651.92
6.7	9073.22	11.29	45844.99	3.95	21371.96
5.21	10893.04	9.5	54074.19	3.77	29851.2
4.52	14034.68	8.05	63103.83	4	40084.45
4.06	8154.11	7.26	74689.53	3.82	49992.6
9.25	18899.05	9.27	87603.03	3.91	47915.9
6.5	12914.5	12	36616.83	3.5	17184.5
7.09	14604.54	11.8	42869.28	2.61	20976.83
6.56	14525.83	10.18	46957.44	3.82	26364.45
5.77	19273.69	9.73	54084.68	2.8	22471.66
5.41	21294.65	8.1	68135.75	3.22	38491.66
7.96	32856.46	10.51	77262.44	2.76	35422.04
10.4	16251.5	11.52	26459.53	2.95	10278.5
7.91	15215.39	11.42	29190.31	3	12830.23
6.61	16782.93	10	35707.77	2.91	16459.4
5.56	14528.25	9.22	40461.01	2.18	21291.64
4.87	17950.22	8.28	47358.35	2.26	26641.57
10.12	33513.2	10.93	61758.85	3.99	28415.75
9.8	11091.55	11.38	35108.28	3.89	21195.21
7.86	12714.88	11.06	40369.13	3.69	25651.84
6.13	11422.64	8.86	45510.06	3.87	31788.21
5.52	8976.18	10.12	52609.9	3.62	27489.4
5.41	15912	7.67	66348.23	3.93	45063.45
10.8	33545.46	11.35	75048.67	3	36698.38

Sources: Banking and Financial Statistics Nepal Rastra Bank