## CHAPTER - 1

## INTRODUCTION

### 1.1 Background of the Study

The term 'Investment' has primary significance in 'Financial Sector' which refers to the process of determining the proper area in order to lodge a firm's fund to procure expected gain or profit known as a favorable return by its maximum utility at minimize risk. Investment is the exploitation of opportunities by transferring funds from surplus to needed sectors through the transaction of financial instruments. Investment, in its broadest sense, means the sacrifice of current currencies and resources for the sake of future currencies and resources. An investment is one of the decisions of finance function that involves the decision of capital to establish commercial or industrial venture (Thirumalia\& Chandra, 2014).

There must be a compulsory return on the investment but there may be unfavorable situations so that investor may insure losses. However so, investment is the act of proper utilization of a fund to be mobilized so that achievement of a high return could be ensured. It also implies all such expenditure of fund into capital nature assets. It is one of the decisions of financial management which involves the decision of capital investment, or commitment of funds to long- term assets that would provide benefits in future.

Investment, in its broadest sense, means the sacrifice of current currencies and resources for the sake of future currencies and resources. An investment is one of the decisions of finance function that involves the decision of capital to establish commercial or industrial venture. Investment decisions mainly have two aspects i.e. (a) the evaluation of the prospective profitability of new investment and (b) the measurement of cut-off rate against the prospective return of the new investment that could be compared. Future is always uncertain, therefore future benefits of an investment cannot be assessed so easily and the amount of risk is umpire cognitive as well. Investment, in its broadest sense, means the sacrifice of current dollars for future dollars. Two different attributes are generally involved time and risk. The sacrifice
takes place in present and is certain. The reward comes later, if at all and the magnitude is generally uncertain. In some cases, the element of time predominates. (Shrestha, 1993).

Investment is primary factor for economic development of any country. Investment is refers to as using present money to get long term benefit. Investment in its broadest sense means the sacrifice of current money for future money. Two different attributes are generally involved time and risk. The sacrifice takes place in the present and is certain. The reward or result of sacrifice comes later and the magnitude is generally uncertain. Time and risk are predominates for investment. Such as Investment in government bonds time is predominates whereas in common stock time and risk both are important. (Sharpe, Gordon, Alexander and Bailey, 2000).

The commercial banks of corporate bodies i.e. Joining of two or more enterprises with the purpose of carrying out specific operation such as investment in trade, business and industry in the form of negotiation between various groups of industries on trades to achieve mutual exchange of goods and services. They are the modes trading to achieve mutual exchange of goods and services for sharing competitive advantage by performing joint investment scheme between investors, financial and non- financial institutions.

The commercial bank are those bank, which are established to accept deposit and grant loan to the industries, individual and traders with a view to earn profit. Apart from financing, they also render services like collection of bills and cheques, safekeeping of valuables financial advising etc. to their customer. A commercial bank refers to such type of bank, which deals in money exchange accepting deposit advance loan and commercial transaction except specific banking related to cooperative agriculture industry and other objectives. Basic source of funds of commercial bank are capital reserve, undistributed profit and several of deposits. Basic uses of funds are loans advance and investments (Nepal Company Act 2031B.S.).

The role of commercial banks in economy is obviously prime requisite in the formulation of banks polity. A key factor in the development in the country is the mobilization of domestic resources and their investment for productive use to the various sectors. To make it more effective, commercial banks formulate sound investment policies, which eventually contribute to the economic growth of a country. The sound policies help commercial banks maximize quality and quality of investment and thereby. The banking sector has to play development role to boost the economy by adopting the growth oriented investment policy and building up the financial structure for future economic development formulation of sound investment policies and coordinated and planned efforts pushes forward the of economic growth.

In the study of the financial institutions, the investment and investment problems will revolve around the concept of managing the surplus financial assets in such a way, that will lead to the wealth maximization and providing a significant further source of income. Thus, the investment is the management of the surplus resources in such a way that it works for providing benefits to the supplier of the funds that is the banks. However, the investment needs to be a procedural task. It must follow a definite process, to ensure the formulation of proper investment policy. Banks are disbursing their money as investment in trade business and industry. Therefore, banks should be following the principle of investment for profit. An investment policy should ensure maximum profit and minimum Risk (Thirumalia\& Chandra, 2014).

The investment is the management of the surplus resources in such a way that it will provide benefits to the supplier of the funds that is banks. It must follow a definite process, to ensure the formulation of proper investment policy. An investment policy should ensure maximum profit and minimum risk. A huge collection and investment policy plays vital role for the economic development of whole economy.

### 1.2 Statement of Problems

Investment is the most important factor from the shareholders' and bank's management point of view. Though several CBs have been established in Nepal with in short period of time, sufficient return cannot have been earned and strong, stable and appropriate investment policy has not been followed. In one hand, these banks
collect lots of deposits where as in the other hand investment opportunities are comparatively very low. Due to less investment opportunity banks use to discourage depositors by reducing the interest on deposit hold balance. Such condition may cause the high liquid market and can impact the condition of the whole country negatively. Due to throat-cut competition of financial environment, banks seem to be ready to grant much more loan, advances and other facilities against their clients' insufficient deposit. If the funds are wrongly invested without thinking any financial risk, business risk and other related facts, the bank cannot obtain profitable return as well as it should sometimes lose its principal.

The main economic goal of developing countries is to accelerate the growth rate. Although, most of the developing countries are predominantly agricultural, industrial development is crying need of these countries for their economic development and investment is the dominant factor for industrial development, but rate of investment in Nepal is very low. It is due to political instability, low investor confidences, lack of knowledge on Investment management, lack of improved prospectus to investors, restriction on foreign portfolio investment of Nepal, lack of efficient capital market and slow privatization process.

According to Nepal Rastra Bank (NRB) record, there were twenty-seven commercial banks, twenty-five development banks, twenty- three finance companies, and fortyseven micro credit development banks till November 2019 https://www.nrb.org.np/. The fast growth of such organizations has made pro-rata increment in collecting deposits and their investment. Many banks or companies succumbed to liquidation although they had sustainable investment capital. The increasing rate of liquidity has caused a down ward trend in investment sectors. It has ensured bad impact on interest rate to the depositor's lower market value of shares etc. for the assessment of such adverse impact, this study has shown the contrast and analyses the investment policy of commercial banks.

Commercial banks don't seem to invest their funds in more profitable sector. They are found to be more interested Investment in risky and high liquid sector i.e. treasury bills development bonds and other securities. They keep high liquid position and flow
lower funds to the productive sectors, this result into lower profitability to commercial banks and ignorance to the national economic growth process. This is the main reason for crisis in the commercial banks and in the whole national economy as well.

This study tries to answer the following research questions.
1 What is the investment made by selected commercial banks in total investment made by commercial banks?

2 What is the position of liquidity, asset management, profitability, risk position and growth of the banks under study?

3 What the relationship between investment and total deposits, loans \& advances, interest earned, and net profit, net profit to outsides assets and total working fund, loan and advances to interest paid \& compare them.?

4 What is the trend of deposits, investment, net profit and loan and advances, for next five years of EBL, NBBL \& CBL?

### 1.3 Purposes of the Study

Investment is necessary for economic development of the country. This study attempts to assess the role and impact of investment on economic development of the country. The main objective of this study is to analyze the impact of investment policy on its profitability of NBBL, EBL and CBL. The specific objectives are as follows:

1 To see the investment made by selected commercial banks in total investment made by commercial banks.

2 To see fund utilization or investment trend and situation of selected banks.
3 To see the position of liquidity, asset management, profitability, risk position and growth of the banks

4 To examine the relationship between investment and total deposits, loans \& advances, interest earned, and net profit, net profit to outsides assets and total working fund, loan and advances to interest paid \& compare them.

5 To analyze the trend of deposits, investment, net profit and loan and advances, for next five years of EBL, NBBL \& CBL.

### 1.4 Significance of Study

Investment activity is the life-blood of any financial institution, since only accumulating deposits has no meaning. Better return can be ensure only when deposits are properly mobilized through sound investment policy. This study "A Study on Investment Policy of Nepalese Commercial Banks" deserve some importance in this field will provide a useful feed bank for academic institutions, bank employees, trainees and investor and also for financial person, Policy-making bodies banks. This study helps to the management of financial institution to make new plans, policies and strategies. It will suggest to policy makers the areas for further improvement in financial institutions. This study will serve to be a guide to the management of banks financial institutions, related parties, shareholders, general public (customers, depositors and creditors) etc.

Central bank, ministry, officers of government, security exchange and tax office can formulate appropriate policy regarding commercial bank with the help of this study. This study helps Shareholders for acquiring the answer to the questions like

1 How the funds are utilized as investment?
2 To what extent they are gaining?
3 Is the productivity of their limited resources satisfactory?
Debtors and depositors, creditors, competitors, investors, financing agencies, stock exchange, and personnel can get information about the investment policy of commercial banks with the help of this analysis, regarding investment decision.

### 1.5 Limitations of the Study

The present study of investment policy has the following assumptions and limitations
1 This study based on secondary data, which has been collected from websites, books, financial statements and reports maintained by banks published in annual reports.

2 The study covers only five year's period.
3 Out of various commercial banks, this study is concerned with the only three commercial banks viz. NBBL, EBL, and CBL

4 Although there are various aspects of financial management, this is mainly concerned with the investment policy aspects of the sample banks.

5 Mainly statistical tools and financial tools are use for the need of the analysis of the investment policy of Nepalese commercial banks.

### 1.6 Chapter Plan

The entire study has divided into five main chapters as:
Chapter I - Introduction: This chapter deals with background of the study, statement of problem, objective of the study, significance of the study and limitations of the study.

Chapter II - Literature Review: This chapter reviews the theoretical base of the study as well as the previous studies on impact of investment policy on profit maximization of sample banks

Chapter III - Research Methodology: This chapter covers the method used in the conduct of this study from the process of data collection to data analysis.

Chapter IV -Results and Findings: This chapter is analyzing chapter, which deals with presentation and analysis of relevant data through definite courses of research methodology with financial and statistical analysis related to investment policy of NBBL, EBL and CBL. Major findings of the study will be presented at the end of this chapter.

Chapter V -Conclusion: This chapter, summarized the overall study and discusses the conclusion drawn from the findings of the study. Finally, suggestions and recommendations will be set for improving the future performance of the sample banks. Besides these chapters, Bibliography and Appendix are included in this research paper.

## CHAPTER - 2

## REVIEW OF LITERATURE

The term review of literature is very important for researcher or investigator in the area of concern problem. It distributes the knowledge and information for the researcher to discover the uncover things by other researcher. So, review of literature means reviewing the research studies or other relevant propositions in the related areas of the study. So that, all the past studies, their conclusion and deficiencies may be known and further research can be conducted. It is an integral and mandatory process in research works.

A literature review is an essential part of all studies. It is a way to discover what other researchers have covered and left in the area. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research works that relates to the present study. The literature review is designed to familiarize the investigator with any relevant information pertaining to the topic being studied (Black \& Champion, 1976).

It is also a way to avoid investigation problems that have already been definitely answered. Thus, a literature review is the process of locating, obtaining, reading and evaluating the research literature in the area of the student's interest (Wolf \& Pant, 2006).

The main reason for a full review of research in the past is to know the outcomes of those investigators in areas where similar concept and methodologies had been used successfully. Further an extensive or even exhaustive process of such review may offer vital links with the various trends and phases in the researches in one's area of specialization, familiarizing with characteristic percepts, concept and interpretation with special terminology with the rationale for understanding one's proposed investigation.

### 2.1 Conceptual Framework

Investment is a present sacrifice for the sake of future benefits. Therefore, investment always involves risk. Present decision about selecting the best alternatives should always take the future risk in consideration. The few alternatives of investment in the past have new expanded into hundreds. Hence, the complexity of investment has also been increasing day by day. To select the best alternative and to construct an efficient portfolio, a wise analysis and decision is required. Before making any decision on investment, it must be well informed about the factors, which affect investment. Investment decision related with saving, capital formation, capital market, risk involve with it, return, inflation etc.

Investment, in its broadest sense, means the sacrifice of current rupees (dollars) and resources to the sake of future rupees (dollars) and resources. In other words, it is a commitment of money and other resources that are expected to generate additional money and resources in the future. Such a commitment takes place in the present and is certain to occur but the reward comes in the future and always remains uncertain. Therefore, every investment entails some degree of risk.

Bhattari (2004), states that "Investments are made in assets. Assets generally are two types: real assets (Land, Building, Factories etc) and financial assets (Stock, Bonds, T-Bills etc). These two types of investment are not competitive but complementary, highly developed institution for financial investment greatly facilitating real investment."

Frank \& Reilly (2004), said that, "Investment is the current commitment of funds for a period of time to derive a future flow of funds that will compensate the investing unit for the time funds are committed, for the expected rate of inflation and also for uncertainty involved in the future flow of the funds."

Charles (1991), defined that, "Investment as the commitment of funds to one or more assets that will be held over some future time period. Investment is concerned with the management of an investor's wealth, which is the sum of current income and present value of all income."

A bank makes investments for the purpose of earning profit. First it keeps primary and secondary reserves to meet its liquidity requirements. This is essential to satisfy the credit needs of the society by granting short-term loans to its customers. Whatever is left with the bank after making advances is invested for long period to improve its earning capacity.

The investment policy of a bank consists of earning high returns on its unloaned resources. But it has to keep in view the safety and liquidity of its resources so as to meet the potential demand of its customers. Since the objective of profitability conflict with those of safety and liquidity, the wise investment policy is to strike a judicious balance among them. Therefore, a bank should lay down its investment policy in such a manner so as to ensure the safety and liquidity of its funds and at the same time maximize its profit. This requires adherence to certain principles.

### 2.2 Features of a Sound Lending and Investment Policy

Income and profit of the financial institutions like commercial banks and financial institutions depend upon its lending procedure, lending policy and mobilizing collected fund through investing in different securities. The greater the credit created by the bank the higher will be the profitability. A sound lending and investment policy is not only pre-requisite for bank's profitability but also of utmost significance for the promotion of commercial savings of an under developed and backward country like Nepal. Some required features of sound lending policy and fund mobilization is explained as under:

## a) Safety and Security

Bank should invest their deposit in profitable and secured sectors. They should not invest their fund in securities of those companies whose securities are too much depreciated and fluctuated because of risk of loss factors. It must not advance its funds to speculative business, which may earn millions in a minute or may become bankrupt the next minute. Since risk is overpriced during recession and under priced during boom banks should invest in medium grade and high-grade securities during recession and boom respectively. They should accept those securities, which are
marketable, durable, profitable and high market price as well as stable. In this case MAST should be applied for the investment.

Where,
M = Marketability
A = Ascertain ability
S = Stability
T = Transferability

## b) Legality

Each and every bank follow the rules and regulation of the company, government and various directions supplied by Nepal Rastra Bank, Ministry of Finance and on while issuing securities and mobilizing their fund. Illegal securities will bring out any problems to the investors. Lastly, the reputation and goodwill of the firm may be lost.

## c) Liquidity

Liquidity is the position of the firm to meet current or short-term obligations. General public or customers deposit their savings at the banks in different accounts having full confidence of repayment by the banks whenever they require. To show a good current position and maintain the confidence, every firm must keep proper cash balance with them while investing in different securities and granting loan for excess fund.

## d) Profitability

To maximize the return on investment and lending position, bank must invest their collected fund in proper sectors. Finally they can maximize their volume of wealth. Their return depends upon the interest rate, volume of loan its time period and nature of investment on different securities and sectors.

## e) Tangibility

A commercial bank should prefer tangible security to an intangible one. Though it may be considered that tangible properly doesn't yield an income apart from intangible securities, which have lost their value due to price level inflation.

## f) Purpose of Loan

Banks and other financial institutions must examine why loan is required to the customer. If customers do not use their borrowings, they can never repay and the financial institutions will have heavy bad debts. So, they should collect detailed information about the plan and scheme of the borrowing.

## g) Diversification

Bank can invest its deposit collection in various securities to minimize the risk. So, all the bank must diversify their fund or make portfolio investment. As the saying goes "bank should not put all its eggs in the same basket", therefore, in order to earn a good return and minimize the risks and uncertainty. So, the firms are making portfolio investment with different securities of different companies.

### 2.3 Some Important Terms

The study in this section comprises of some important banking terms for which efforts have been made to clarity the meaning, which are frequently used in this study, which are given below.

## a. Loan and Advances

Loan, advances and overdraft are the main source of income for a bank. Bank deposits can cross beyond a desired level but the level of loans, advances and overdraft will never cross it. The facilities of granting loan, advances and overdrafts are the main service in which customers of the bank can enjoy.

Funds borrowed from the banks are much cheaper than those borrowed from unorganized money lenders. The demand for loan has excessively increased due to cheaper interest rate. Furthermore, an increase in an economic and business activity always increases the demand for funds. Due to limited resources and increasing loans, there is some fear that commercial banks and other financial institutions too may take more preferential collateral while granting loans causing unnecessary botheration to the general customers. Such loans from the institutions would be available on special request only and there is a chance of utilization of resources in economically less productive fields. There lies the undesirable effect, of low interest rate.

In additional to this, some portion of loan, advances and overdraft includes that amount which is given to staff of the bank for house loan, vehicle loan, personal loan and others, in mobilization of commercial banks fund, loan, advances and overdrafts have occupied a large portion.

## b. Investment on Government Securities, Share and Debenture

Though a commercial bank can earn some interest and dividend from the investment on government securities, share and debentures, it is not the major portion of income, but it is treated as a second source of banking business. A commercial bank may extend credit by purchasing government securities bond and share for several reasons. Some of them are given as:

- It may want to space its maturate so that the inflow of cash coincide with expected withdrawals by depositors or large loan demands of its customers.
- It may wish to have high-grade marketable securities to liquidate if its primary reserve becomes inadequate.
- It may also be forced to invest because the demand for loans has decreased or is not sufficient to absorb its excess reserves. However, investment portfolio of commercial bank is established and maintained primarily with a view of nature of banks liabilities that is since depositors' may demand funds in great volume without previous notice to banks. The investment must be of a type that can be marketed quickly with little or no shrinkage in volume.


## c. Investment on Other Company's Share and Debenture

Due to excess funds and least opportunity to invest the funds in much more profitable sector and to meet the requirement of Nepal Rastra Bank's directives many commercial banks have to utilize their funds to purchase shares and debentures of many other financial and non-financial companies. Nowadays most of the commercial banks have purchased regional development bank's and other development bank's shares.

## d. Deposits

For a commercial bank, deposit is the most important source of the liquidity. For bank's financial strength, it is treated as a barometer. In the word of Eugene, "a
bank's deposits are the amount that it owes to its customers." Deposit is the lifeblood of the commercial bank. Though, they constitute the great bulk liabilities, the success of a bank greatly depends upon the extent to which it may attract more and more deposits, for accounting and analyzing purpose, deposits are categorized in three headings. They are: Current Deposits Saving Deposits Fixed Deposits

### 2.4 Policy of Legislative Provision

Legislative environment has significant impact on the commercial banks established, their mobilization and utilization of resources. All the commercial banks have to conform to the legislative provisions specified in the commercial bank act 2031 and the rules and regulation formulated to facilitate the smooth running of commercial banks.

Under the provision in Nepal Rastra Bank, (NRB) Act 2002, the NRB has formulated and implemented monetary policies so far. The focus of monetary policy has been to insure price, external and financial sector stability so as to create the environment supportive for high and sustainable economic growth.

NRB issues new monetary policy on fiscal year 2017/18. The provision under this policy as follows:
i. The compulsory cash reserve ratio (CRR) has been kept unchanged at minimum 5.5 Percent on account.
ii. The capital adequacy ratio (CAR) should have to maintain 11.0 percentages.
iii. Export credit refinance facility in domestic currency has been kept unchanged at 2.0 percent. Commercial banks are allowed not to charge more than 5.0 percent to the concerned borrower on such facility.
iv. The penal rate for SLF has been kept unchanged at 3.0 percent along with the existing cap of 90 percent and maturity period of 5 days.
v. The existing provision of refinance facility of Rs. 2 billion to sick industries and the refinance rate at 1.5 percent will be continued for 2017/18.
vi. The commercial banks, development banks and finance companies are
now required to invest in government securities at a ratio of 6.0 percent, 2.0 percent and 1.0 percent of their total domestic deposit mobilization respectively by second quarter of 2017/18. Such ratio should be maintained at a rate of 8.0 percent, 3.0 percent and 2.0 percent respectively by the end of fourth quarter of 2017/18.
(Source: Monetary Policy for Fiscal Year 2017/18 NRB, Central office, Baluwatar, Kathmandu, Nepal)

### 2.5 Literature Review

The study of the existing literature helps the researcher to draw the inference of the study and also helps to acquire in depth knowledge about the subject. The literature under review is obtained from journal articles, textbooks and websites. The following are the review of some related literature:

Bhattarai (2018), in his journal "Impact of Bank Specific and Macroeconomic Variables on Investment of Commercial Banks in Nepal" he found that Non Interest Income (NII), Deposit Ratio (CD), Gross Domestic Product (GDP) and Exchange Rate (ER) the major factors are affecting the investment of commercial banks in Nepal. Whereas NII is positive impact on Investment and rest three variables are negative effects of Nepalese context. The descriptive and causal comparative research design has been used for the study. The relationship between investment and size(SZ), non interest income(NII), credit to deposit ratio (CD), Spread, cost of production(COP), cash, return on assets(ROA), profit before tax(PRFT), gross domestic product(GDP), Interest rate, exchange rate(ER), inflation rate has been analyzed with the help of the multiple regression technique.

Andu, Kruttli, McCabe and Shin (2018), on their research "The Shift from Active to Passive Investing: Potential Risks to Financial Stability?", found that it has has profoundly affected the asset management industry in the past couple of decades, and the ongoing nature of the shift suggests that its effects will continue to ripple through the financial system for years to come. They found the shift may be contributing to index-inclusion effects for financial assets, including increased co movement among the assets that are included in indexes. Greater co movement could allow shocks to
spread more broadly, although the evidence is mixed on trends in co movement and their link to the growing popularity of index investing.

Someshwar (2015), in her journal "An investment pattern of Scheduled Commercial Banks in India", says banks are more concentrating on advances as compare to investment out of their total deposits. With this, there is also a downfall in income of banks, because return on investment is lesser as compare to interest income. Thus, banks must be motivated to invest outside India to earn maximum foreign exchange. For this RBI may limit some portion of investment as mandatory in foreign securities. Thus, Portfolio of investments may be upgraded to earn maximum returns on investments.

Echandi, Krajcovicova and Qiang (2015), in their research "The Impact of Investment Policy in a Changing Global Economy: A Review of the Literature" the paper presents an overview of the literature on the impact of foreign direct investment. The paper argues that a logical framework is needed to organize existing evidence from research to fill gaps in the literature and make existing evidence more useful in targeting policy making. Evidence shows that foreign direct investment can provide many benefits to host countries, including productivity improvements, better jobs, and knowledge transfer. Further, it can serve as a vehicle for transformation of domestic production and better integration with global value chains. Nonetheless, these benefits are not automatic. Investment policies are required to maximize the potential gains of foreign direct investment. One challenge is that there are different kinds of foreign direct investment, and each may have different economic, social, and environmental impacts. However, the literature analyzing foreign direct investment often tends to swing from an extremely case-specific focus analyzing experiences in one particular country in a single sector during a given period to lumping together the analysis as if it was a homogenous phenomenon. Investment policy formulation requires a framework sophisticated enough to differentiate between the various kinds of foreign direct investment, as well as potential challenges and benefits for development. It must also be simple enough to enable governments to organize and prioritize the multiple and complex variables affecting the maximization of investment benefits.

Thirumalia\& Chandra (2014), in his article "Investment Policy by Commercial Banks", he found banks are not investing in the private company. He found it can be allowed up to $10 \%$ of its deposits to be invested in those sector too. It will induce the production level of many industries. And it also boosts up the operating profit. It helps in Industrial development and it increases standard of living. This investment is must for the developing country like us for our development. It will also bring down the inflation rate prevailing in our country. So the money value will increase. This will enhance the development of our country in the nearby future. However, the investment needs to be a procedural task. It must follow a definite process, to ensure the formulation of proper investment policy. Banks are disbursing their money as investment in trade business and industry. Therefore, banks should be following the principle of investment for profit. An investment policy should ensure maximum profit and minimum Risk. A huge collection and investment policy plays vital role for the economic development of whole economy.

Shrestha (1993),has conducted a study on "Investment planning of Commercial Bank in Nepal". The researcher found debt equity ratios are very high, greater than $100 \%$. Risk taking attitude is higher in foreign joint venture banks. The total management achievement index is higher in case of foreign banks in comparison to the Nepalese banks. Furthermore, she found the investment of commercial banks in share and securities are normal and not found to have strategic decision towards investment in shares and securities. Yield from the security has been found to be satisfactory. Investment in various economic sectors shows industrial and commercial sector taking higher shares of loan till 1990. Investment in various sectors has a positive impact on the national income from their respective sectors. Lending in priority sector should cottage and small industry sector sharing higher loans. Priority sector lending showed positive impact on national income. The secured loan analysis showed commercial loan as being very important followed by social and industrial loans. The loan loss ratio has been found to be increases with low recovery of loan. Demand of bank credit has been found to be affected by the national income and lending \& Treasury bill rate. The investment of commercial banks in government securities is observed to be affected by total deposit, cash reserve requirements and treasury bill,
and lending rates. Interest rates, lending rate and deposit rate were found to constitute as set of significant variables affecting the bank portfolio composition.

Pradhan (2003), in his research paper "Role of saving, investment and capital formation in economic development, A case of Nepal," has analyzed about the strong role and impact of saving, investment and capital formation on economic development of Nepal. The result presented in the chapter suggest that in all cases GDP is significantly associated with saving, investment and capital formation both at current prices and in real terms. The results of the empirical analysis led to three conclusions: First, saving, investment and capital formation have positive impact on economic development. Second, the current values and past value of saving, investment and capital formation have positive impact on economic development but the current values have the largest impact. Third, there is a strong role played by saving and capital formation on economic development while weak role-played by investment.

Although a number of research have been carried out in investment policy on commercial banks in foreign countries not enough research has been carried out in this regard in Nepalese context. So this research attempts to examine impact investment policy on utilization of its assets and profit maximization of commercial banks in Nepal.

Khadka (1998),on his study "A study on the investment policy of Nepal Arab Bank Ltd. (NABIL) compared NABIL with that of Nepal Grindlays Bank Ltd. (NGBL) and Nepal Indosuez Bank Ltd. (NIBL) the main objectives of the study were to evaluate the liquidity assets management efficiency and profitability positions in related to fund mobilization of NABIL in comparison to other joint venture banks (JVBs) with the objectives as follows; To evaluate the liquidity, assets management efficiency and profitability position in relation to fund mobilization of NABIL Bank Ltd. in the comparison of other joint venture banks, to discuss fund mobilization of NABIL Bank Ltd. in respect to its based off-balance sheet transactions and based on balance-sheet transactions in comparison of other joint venture banks (JVBs), to evaluate the growth ratio of loans and advances and total investment with respective growth rate of total
deposit and net profit of NABIL Bank Ltd. in comparison to other JVBs, to find out the relationship between total deposit and total investment, total and total loan and advances, and net profit and outside assets of NABIL Bank in the comparison to other JVBs.

The findings of the study are as follows; the liquidity position of NABIL Bank Ltd. is comparatively worse than that of other JVBs. NABIL Bank has more portions of current assets as loans and advances but less portion of investment on government securities, ABIL Bank is comparatively less successful in on-balance-sheet operation as well as off-balance sheet operation than that of other JVBs, There is significant relationship between deposit and loan advances as well as outside assets and net profit but not between deposit and total investment in case of both NABIL Bank Ltd. and other JVBs, Profitability position of NABIL Bank Ltd. is not better than that of other JVBs, NABIL Bank is more successful in deposit mobilization but failure to mountain high growth rate of profit in comparison to other JVBs

Manandhar (2003),has conducted a thesis research on, "A comparative study in investment policies of finance companies in the context of Nepal."Following objectives were appointed. To evaluate the trends of deposit utilization and its projection for the next five years in case of these companies, to evaluate the liquidity, assets management efficiency and profitability position in relation to fund mobilization of above listed companies, To evaluate the growth ratio of loans and advance and total investment with respective growth rate of total deposits and net profits of the companies, To find out relationship between deposits and total investment, deposit and loans and advance and net profit and outside assets of the listed companies, To discuss the fund mobilization and investment policy of these companies in respect to its fee based off-balance sheet transactions and fund based on-balance sheet transactions.

The findings of the research were as follows; the liquidity position of National Finance and NEFINSCO are comparatively better than of other companies. Nevertheless, that of Goodwill finance and Union finance seems to be quite weaker, Most of the finance companies are successful in on-balance sheet utilization as well as
off-balance sheet operation. Among them, NEFINSCO and Goodwill comes ahead of all, Profitability position of most of the companies is comparatively not better. Most of the finance companies are able to maintain the growth ratios among them. Nepal share markets seem to be more successful to increase their source of funds and mobilization as well as net profit. There is significant relationship between deposits and loans advances of all finance companies. Similarly, there is no significant relationship between deposits and total investment of all companies except NEFINSCO and Goodwill Finance Co. Ltd. There is also no significant relationship between outside assets and net profit of all companies except Union Finance Co. and National Finance Co. Ltd. The trend value of total investment to total deposit ratio and loans and advances to total deposits ratio in increasing trend.

Acharaya (2007), has conducted a study on "Investment policy analysis of commercial bank: a comparative study of NIBL with EBL and NABIL bank" will the following objectives, to evaluate the liquidity, profitability, risk position and assets management of the sample banks, to evaluate and discuss the investment policy and fund mobilization of NIBL, EBL and NABIL, to show the relationship between deposit and investment trends of the bank.

From the study, conclusion can be drawn as; Liquidity position of NIBL is comparatively average than NABIL and EBL. Assets management ratios of NIBL occupy the average position in comparison with other two banks NABIL and EBL.NIBL is successful in utilization its overall working fund on profit generating activity than the NABIL and EBL. But return from loan and advances ratio is comparatively average, in this EBL has taken best position. From the study of capital risk ratio and credit risk ratio of all three banks comparatively NIBL is successful to attract the deposits and inter banks fund, and utilize its loan and advances form total assets in safest way by taking high risk, which helps to increase the level of profit and maximizing the value of the firm.

Raya (2008), entitled with 'Investment policy and Analysis of Commercial Banks in Nepal' made a comparative study of SCBL with NIBL and NB Bank. His main objectives were as follows; To discuss fund mobilization and Investment policy of

SCBL in respect to its fee based off-balance sheet transaction and fund based on balance sheet transaction, To evaluate the quality, efficiency and profitability and risk position, To evaluate trend of deposit, Investment, loan and advances and projection for next years. From his study major findings are; Mean current ratio of SCBL is slightly higher than that of SCBL and NIBL, Mean ratio of cash and bank balance to total deposit of SCBL is lower than NIBL and NBBL .Liquidity position of SCBL is comparatively better. It has the lowest cash and bank balance to total deposit and cash and bank balance to current ratio. It has made enough Investment on government securities but low Investment policy on loan and advances. SCBL is comparatively average successful in it's on balance sheet operation. But off balance sheet operation activities maintained the strong position. There is significant relationship between deposit of loan and advances and between asset and net profit of SCBL.

### 2.6 Research Gap

The purpose of this study is to draw some ideas concerning to maintain good investment policy and to see what new contribution can be made and to receive some ideas, knowledge and suggestion in relation to maintain good investment policies of sample banks.

The previous studies cannot be ignored because they provide the foundation to the present study. In other word there has to be continuity research. This continuity research is ensured by linking the present study with the past research studies. It is clear that the reference of new research cannot be found on the exact topic that is "Investment Policy of Commercial banks in Nepal". Therefore to complete this research many book, journals, articles and various published and unpublished dissertation and field opinion are followed as guideline to make the research easier and smooth though the reference materials. The researcher can find out the gaping from the past research that has to be fulfilled by the present research work. In this regard, here the researcher is going to analyze the different policy in this topic. It is expected to the uncovered areas of this research work will be studied. The gaping between old and new research work will be focused and filled up based on the given objectives and limitation in this research.

## CHAPTER- 3

## RESEARCH METHODOLOGY

Research methodology is another important aspect of the thesis writing. It is the process of arriving to the solution of the problems through planned and systematic dealing with the collection, analysis and interpretation of fact and figures. . In other words, research methodology provides the various tools and techniques as regard to the problem and provides the various instructions as regard to the methods and process associated with over all study. "Research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objectives in view (Kothari, 1994)." Research methodology is very helpful in identifying the research problems. In fact, research is an art of scientific investigation.

This study attempts to analyze the "Investment Policy" in Nepalese commercial bank, in order to fulfill the basic objective. It consists of research design, sources of data, population and sample, data processing procedure and tools and technique of analysis of data. It covers quantitative methodology using financial and statistical tools.

### 3.1 Research Design

This study is based on descriptive research design. Various historical secondary data has taken to analyze the investment policy of Nepalese commercial banks with a view of achieve better result from the analysis. Therefore, research design has been made to describe and explore the composition of investment policy of the selected commercial banks for the period of five years. Hence, the study shows the research is quantitative rather than qualitative.

### 3.2 Population and Sample

The population of the study consisted of 27 commercial banks that are currently operating in Nepal. Out of them only three banks (i.e. Nepal Bangladesh Bank Ltd, Everest Bank Ltd and Civil Bank Limited) have been used in the study. This represents $11.11 \%$ of the total population. According to Muiruri and Ngari (2014), as sample size of more than $10 \%$ is a good representation of the population. Therefore, a
representation of $11.11 \%$ considered adequate for the study. The data utilized in this study are compiled from the annual reports of the banks.

### 3.3 Sources of Data

This study is based on secondary data. The necessary data and information has been collected from the annual reports of selected commercial banks, banking and financial statistics published by Nepal Rastra Bank.

### 3.4 Data Collection and Processing Procedure

Mainly, the study is conducted on the basis of the secondary data. Primary data has not been used for collecting responses from the individual investors. All the study, analysis and evaluation have been based on the available annual report (Balance Sheet and Profit and Loss Account) of the selected commercial bank. All the secondary data and information are properly arrange and synthesized tabulated and calculated accordance with the requirement of the study

### 3.5 Data Analysis Tools and Techniques

Analysis and presentation of the data is the core of project study. In the process of data analysis, various statistical and financial tools has been used to get the meaningful result. Two kinds of tools have been used to achieve the purpose,
namely:- 1. Financial tools and
2. Statistical tools

### 3.5.1 Financial Tools

Financial tools help to analyze the strength and weakness of a firm. It helps to show the mathematical relationship between two accounting items or figures. Although, there are various types of ratios to analyzed and interpret the financial statement only four ratios has been considered in the study, which are mainly related to investment policy of banks. They are as follows:

### 3.5.1.1 Liquidity Ratio

Liquidity Ratio measures the firm's ability to meet its current obligation. Commercial banks collect fund from the community with a commitment to return depositor's fund,
facilitate withdrawal on demand. A firm should ensure that it does not suffer from lack of liquidity and also that it does not have excess liquidity. It is necessary to strike a proper balance between high liquidity and lack of liquidity. The following ratios are evaluated under liquidity ratio:

## a) Current Ratio (CR)

It refers to the relationship between current assets and current liabilities of a firm that also measures the short-term solvency of the firm. Current assets involve cash and bank balance, money at call or short, loans \& advances, investment on government securities and others interest receivables, overdrafts, bills purchased and discounted and miscellaneous current assets. Similarly, current liabilities include deposits and other short-term loan, bills payable, tax provision, staff bonus, dividend payables and other miscellaneous current liabilities.

Current Ratio (CR) $=\frac{\text { Current Assets (CA) }}{\text { Current Liabilities (CL) }}$
The widely accepted slandered of current ratio is $2: 1$ but accurate standard depends on circumstances in case of seasonal business ratio and the nature of business.

## b) Cash Reserve Ratio

Cash and bank balance are the most Liquid current assets. This ratio measures the percentage of most liquid fund with the bank to take immediate payment to the depositor. Cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic banks and balance held in foreign banks. The total deposit includes current, fixed, call, margin etc. It is computed as follows:

Cash and bank balance to total deposit ratio $=\frac{\text { Cash and Bank balance }}{\text { Total Deposit }}$

## c) Investment in Government Securities to Current Assets Ratio

This ratio shows that how much amount has been the part of the total current assets on investment on government securities which is risk free asset. Investment on government securities includes treasury bills and development bond. This ratio is calculated by dividing investment on govt. securities by current assets.
This can be presented as,

Investment on government securities to $\quad=\frac{\text { Investment on government securities }}{\text { Current assets }}$
current assets ratio

## d) Ratio of Commercial Banks Investment to Sample Bank Investment

Total commercial banks Investment to sample banks Investment ratio is used to analysis how much Investment has cover by the sample bank Investment. It is derived by following equation.

Total Commercial Banks Investment to $=\underline{\text { Sample Bank Investment }}$ Sample Banks Investment ratio Total Commercial Banks

## e) Segregation of Total Investment of Sample Banks

It is used to analyze how the sample banks have invested its collected funds. Banks generally Investment in government securities, share and debentures of other companies and NRB bond. An attempt is made to analyze how much percentage is invested by the banks in different sectors. The following equation is used for this purpose.
I. Total Investment to govt. sec. Investment $=\frac{\text { Investment on Government Security }}{\text { Total Investment }}$
II. Total Investment to share $\&$ Debenture $=\frac{\text { Investment on Share \& Debenture }}{\text { Total Investment }}$
III. Total Investment to NRB Bond $=\frac{\text { Investment on NRB Bond }}{\text { Total Investment }}$
IV. Total Investment to Other $=\frac{\text { Investment on Other Sector }}{\text { Total Investment }}$

### 3.5.1.2 Asset Management Ratio

Assets management ratio measures the proportion of various assets and liabilities in balance sheet. The proper management of assets and liability ensures its effective utilization. The banking business converts the liability into assets by way of its lending and investing functions. Assets and liability management ratio measures its
efficiency in multiplying various liabilities in performing assets. The following financial ratios related to investment policy are calculated under asset management ratio and interpretations are made by these calculations.

## a) Loan \& Advances to Total Deposit Ratio

This ratio shows how successfully the banks are utilizing their total collection/deposits on loan \& advances for generating profit. Higher ratio implies the better utilization of total deposits. Mathematically it is presented as,
Loan \& advances to total deposit ratio $=\frac{\text { Total Loan and Advances }}{\text { Total Deposit }}$

## b) Total Investment to Total Assets Ratio

Investment is major component in the total working fund which indicates the ability of bank to channelize its deposits in the form of loan and Investment to earn high return. Investment and loan and advances are the only income generating source of bank. This ratio can be computed by dividing total of Investment, Loan and advances by total Assets. This can be stated as follows:
Total investment to total assets ratio $=\frac{\text { Total Investment }}{\text { Total Assets }}$

## c) Total Investment to Total Deposit Ratio

This ratio implies the utilization of firms deposit on investment in government securities and share, debentures of other companies and bank. Mathematically it is presented as,
Total investment to total deposit ratio $=\frac{\text { Total Investment }}{\text { Total Deposits }}$
The numerator consists of investment on government securities, investment on debenture and bond, shares in subsidiary companies, shares in other companies and other investment.

## d) Investment on Government Securities to Total Working Fund Ratio

This ratio shows the percentage of total working fund invested in government securities. In other words, this ratio measures the extent to which the banks have been successful in mobilizing their total working fund on different type of government
securities. The logic behind investment on government securities by banks is to diversify the risk by not putting all the eggs in the same basket. This is also beneficial in the sense that banks are assured of adequate liquidity. A high ratio indicates better mobilization of funds as investment on government securities and vice-versa. This ratio can be calculated by dividing total amount of investment in government securities by the total working fund.
Mathematically,
Investment on government = Investment on government securities securities to total working fund

Total working fund ratio

### 3.5.1.3 Profitability Ratios

Profit is the difference between the revenues and the expenditure over a period. Profit is the main elements that make and organization to survive in long run. Measuring the profitability ratio is also significant in this study and shall reflect how much investment position has affected the profit situation. These ratios have been used in determining the efficiency of the lending.

Commercial banks provide short term loan and advances, cash credit local and foreign bill purchased and discounted. Commercial banks should not keep its all collected funds as cash and bank balance they should be invested as loan and advances to the customers and there must be favorable return. This ratio indicated how efficiently the bank has employed its resources in the form of loan and advances. It is true indication of financial performance of any institutions. Higher the profit ratio, the higher will be the efficiency bank and vice versa. Profitability position can be evaluated through following different ways:

## a) Return on Total Assets Ratio

Return on total assets shows the overall profitability of working fund or total assets. Return on working fund ratio is a measuring rod of the profitability with respect to each financial resource investment of banks asset. If the banks total working fund is well managed and utilized efficiently, return on such assets will be higher and vice-
versa. This ratio is calculated by dividing net profit by total working fund. It is calculated by dividing net profit by total assets. Mathematically, Return on total assets $=\frac{\text { Net profit (loss) }}{\text { Total assets }}$

## b) Return on Loan and Advance Ratio

Return on loan and advances ratio indicates how efficiently the bank has utilized its resources in the form of loan and advances to generate good return. It measures the earning capacity of a commercial bank. This ratio is calculated by dividing net profit by loan and advances. Mathematically,

Return on loan \& advances ratio $=$ Net profit (loss)
Total loan \& advances

## c) Return on investment Ratio

Return on investment ratio shows how efficiently the organization is investing it fund in different sector for generating profit. The higher the ratio the better the organization profit. The ROI ratio measures how efficiently the organization can earn on its investment. It is a technique that measures the profitability position of the organization.

$$
\text { Return on investment ratio }=\frac{\text { Net profit }}{\text { Total Investment }}
$$

## d) Return on Total Shareholder's Equity Ratio

This ratio measures how efficiently the bank has used the funds of the owners. This ratio is calculated by dividing net profit/loss by total equity capital (net worth).This can be stated as,

Return on shareholder's equity ratio $=$ Net Profit
Total equity

## e) Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to find the percentage of interest earned to total assets. This ratio reflects the extent to which banks are successful in mobilizing their assets to generate high income. This ratio presents the earning capacity of a bank on its total working fund. Higher ratio indicates better performance or proper utilization of total
assets in the form of interest earned on its working fund. This ratio is calculated by dividing total interest earned by total working fund.

Mathematically,
Total interest earned to total working fund ratio $=\frac{\text { Total interest earned }}{\text { Total assets }}$

### 3.5.1.4 Risk Ratios

Risk means uncertainty, variability of return, which is inherent in any investment portfolio of a business enterprise. Risk is an important element since investment with greater risk requires higher return than investments with lower risk. Risk ratios measures the degree of risk involved in various financial operations. The possibility of risk involved in bank's financial operations makes the bank investment a challenging task. As the notion goes," no risk no gain", therefore, if a bank expects high return on its investment it must be prepared to accept the risk and manage it efficiently. The following risk ratios are used to analyze and interpret the financial data and investment policy.

## a) Liquidity Risk Ratio

Liquidity risk of the bank defines its liquidity needs for deposit. Cash and bank balance are the most liquid of all the assets and are considered bank's liquidity sources. Deposits on the other hand refer to the liquidity needs of banks. This ratio measures the risk associated with the liquid assets i.e., cash and bank balance that are kept to satisfy the cash demand of customers. A higher ratio shows that the banks has sufficient cash to meet its current obligations i.e. lower liquidity risk, but that may have an adverse impact on the profitability position of the bank. A tradeoff between liquidity and profitability must be maintained. This ratio is calculated by dividing cash and bank balance by total deposit.

Mathematically,

$$
\text { Liquidity risk ratio }=\frac{\text { Total cash \&bank balance }}{\text { Total deposit }}
$$

## b) Credit Risk Ratio

Normally, every credit is good at the time it is sanctioned. Most of the bank failures are due to shrinkage in the value of loan and advances. Loan is a risky asset and risk of non-repayment of loan in known as credit risk or default risk. Credit risk ratio measures the possibility of loan going into default. While sanctioning loans banks measure credit risk involved in the project. Credit risk is calculated by dividing total loan and advances by total assets. Mathematically,

$$
\text { Credit risk ratio }=\frac{\text { Total loan \& advances }}{\text { Total assets }}
$$

### 3.5.1.5 Growth Ratios

This ratio indicates how properly the banks are maintained their economic and financial condition. Growth ratios are related to fund mobilization and investment management of bank. Higher ratios represent the better performance of selected banks. Following growth ratios are calculated under this:
i. Growth ratio of total deposits
ii. Growth ratio of total investment
iii. Growth ratio of loan \& advances
iv. Growth ratio of net profit

The following equation is used to calculate the growth rate of the items;

$$
\begin{aligned}
& \begin{array}{l}
D_{1}=D_{0}(1+g)^{n-1} \\
\text { Where, } \\
\quad \mathrm{g}=\text { growth rate } \\
\mathrm{n}=\text { No. of years } \\
\mathrm{D}_{1}=\text { Value at the end of the year } \\
\mathrm{D}_{0}=\text { Value of the beginning of year }
\end{array}
\end{aligned}
$$

### 3.5.2 Statistical Tools

Just the financial analysis of the data does not give the answers to the entire question on the bank's performance. Like we know that the decision made by two heads is always better than the decision made by one head; varying analysis done to any research results to a more comprehensive interpretation. Hence here the analysis of the collected data are done with the help of the financial tools as well as the statistical
tools so that the combination of these two will give us the comprehensive and clear picture on the performance of the bank on its investment aspect.

Some important statistical tool have been used to present and analyze the data for achieving the objectives of this study. Co-efficient of variance, Co-efficient of correlation, standard deviation, tend analysis etc. have been used for the purpose of investment policy analysis.

### 3.5.2.1 Standard Deviation (S.D.)

Standard deviation is the most popular and most useful measure of dispersion and gives uniform, correct and stable result. The chief characteristic of standard deviation is that it is based on mean which gives uniform and dependable results. Furthermore standard deviation is always a positive number. Standard deviation is denoted by sigma ( $\sigma$ ). Standard deviation is calculated to measure dispersion, it is computed as

$$
\sigma=\sqrt{\frac{\sum(X-\bar{X})^{2}}{n-1}}
$$

### 3.5.2.2 Co-efficient of Variation (C.V.)

The relative measure of dispersion based on the standard deviation is known as the coefficient of standard deviation. The percentage of measure of co-efficient of standard deviation is called co-efficient of variation.

$$
\text { C.V }=\frac{\text { S.D. }}{\text { Mean }} \times 100
$$

It is used for comparing the homogeneity and the uniformity of two or more distributions.

### 3.5.2.3 Karl Pearson's Correlation Co-efficient Analysis

This statistical tool interprets and identifies the relationship between two or more variables. It identifies whether two or more variables are positively correlated or negatively correlated Statistical tool helps to analyze the relationship between these variables and aids the selected banks to prepare appropriate investment policy relating to deposit collection, fund utilization (loan and advances and investment) and profit
maximization. This study attempts to find out relationship between the following variables:-

$$
\mathrm{R}=\frac{\mathrm{N} \Sigma X Y-\Sigma X \Sigma \mathrm{Y}}{\left.\left\{\Sigma \mathrm{X}^{2}-(\Sigma \mathrm{X})^{2}\right\} \mathrm{K} \Sigma \mathrm{Y}^{2}-(\Sigma \mathrm{Y})^{2}\right\}}
$$

Where,
$\mathrm{n} \quad=$ Number of observation in series $\mathrm{X} \& \mathrm{Y}$
$\Sigma \mathrm{X}=$ Sum of observation in series X
$\Sigma \mathrm{Y}=$ Sum of observation in series Y
$\Sigma \mathrm{X}^{2}=$ Sum of squares of observation in series X
$\Sigma \mathrm{Y}^{2}=$ Sum of squares of observation in series Y
$\Sigma \mathrm{XY}=$ Sum of product of observation in series $\mathrm{X} \& \mathrm{Y}$

The co-efficient of correlation (r) lies between -1 to +1 , If $r=+1$ there exists a significant relationship between the two variables. If $r=-1$, then the two variables are negatively correlated or there is no significant relationship between the two variables.

### 3.5.2.4 Trend Analysis

A widely and mostly commonly used method to describe the trend is the method of least square. Under this, a trend line is fitted to the data satisfying the conditions. It is used to describe the trend of any variable whether it increases or decreases with the passage of time.

The trend line between the two variables x and y is represented by:
$y_{c}=a+b x$
Where, $a=\frac{\sum y}{n} \quad$ and $b=\frac{\sum x y}{\sum \mathrm{x}^{2}}$

Here, $\mathrm{y}_{\mathrm{c}}$ is used to designate the trend value to distinguish the actual value. The x variable represents the time, 'a' refers to the $y$-intercept or value of $y_{c}$ when $x=0$ and
' $b$ ' is the slope of the trend line. For the trend analysis of different banks, the following heads has been considered:
i. Total deposit analysis
ii. Investment analysis
iii. Loan \& advances
iv. Net profit

## CHAPTER -4

## RESULTS

## 4 Results

This chapter is concerned with financial analysis and statistical analysis that is concerned about comparative analysis and interpretation of available data. Data are collected from various secondary sources. Various financial and statistic tools have been used in this part. Necessary figures and tables are also presented in this part to describe about the Investment mechanism of the banks. For this purpose, interpretations are categorized into two heading:

1. Financial Analysis
2. Statistical Analysis

### 4.1 Financial Analysis

Under this topic various financial ratios related to the investment management and the fund mobilization are calculated to evaluate and analyze the performance of NBBL, EBL and CBL. Study of all types of ratios has not been done, only those ratios that are important from the point of view of the fund mobilization and investment are calculated.

### 4.1.1 Liquidity Ratios

A commercial bank must maintain its satisfactory liquidity position to satisfy the credit needs of the community, to meet the demands for deposits withdrawal, pay maturity obligation in time and convert non cash into cash to satisfy immediate needs without loss to the bank and without consequent impact on long-run profitability of the bank. To measure the liquidity position of the bank, the following measures of liquidity ratio has been calculated and a brief analysis of the same has been done as below.

### 4.1.1.1 Current Ratio

Current ratios of NBBL, EBL and CBL bank from the fiscal year 2013/14 to 2017/18 are presented below in table no 4.1 (Detail in appendix 1)

Table No. 4.1
Current Ratios (Times)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5 / 1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 1.09 | 1.03 | 0.97 | 1.03 | 1.01 | 1.03 | 0.04 | 3.71 |  |
| EBL | 1 | 0.91 | 0.91 | 0.98 | 0.92 | 0.95 | 0.04 | 3.9 |  |
| CBL | 0.96 | 0.97 | 1.05 | 1 | 0.78 | 0.95 | 0.09 | 9.81 |  |

Source: Appendix 1
From table 4.1 has revealed that EBL and CBL have been suffering from low current ratios. CBL current ratio is in decreasing trend. The current ratio shows the current assets of the bank are sufficient or not to meet short term obligations or current liabilities. Current assets include all the current assets which are cash and bank balance, money at call and short notice, investment on government securities bills purchase and discounted and loans and advances and other current assets. Both banks EBL and CBL do not have sound current ratio than NBBL but satisfactory. The mean of current ratio of NBBL, EBL and CBL were 1.03 and 0.95 respectively. Standard deviation of NBBL and EBL, which shows the risk of not being able to meet current obligations was 0.04 and CBL 0.09 respectively. Coefficient of variance between the current ratio of NBBL, EBL and CBL is $3.71 \%, 3.9 \% 9.81 \%$ respectively.

Though the optimal standard of current ratio should be $2: 1$, the conventional measure of liquidity is not applicable in banking business. Banking business holds big portion of deposits as a core deposits and this deposits remains all the time throughout the years. This core deposit forms the fixed liability of the bank though it is current in nature so the ratio maintained by the bank at the level of around $1: 1$ can be regarded as sound liquidity position.

### 4.1.1.2 Cash Reserve Ratio

Cash and bank balance are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the
depositors. This ratio is calculated and presented in the Table No. 4.2. These ratios of both higher and lower ratios are not desirable and satisfactory. If a bank maintains higher ratios of cash, it has to pay interest on deposits and some earning may be lost. If a bank maintains low ratio of cash, it may fail to make payment for the demands of the depositors. So, sufficient and appropriate cash reserve should be maintained properly.

Table No. 4.2
Cash Reserve Ratios (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5} / \mathbf{1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 12.46 | 25.37 | 23.53 | 22.34 | 25.8 | 21.9 | 4.88 | 22.28 |  |
| EBL | 16.25 | 18.07 | 17.08 | 27.86 | 20.21 | 19.89 | 4.197 | 21.1 |  |
| CBL | 13.41 | 11.28 | 19.67 | 20.38 | 14.5 | 15.85 | 3.57 | 22.53 |  |

Source: Appendix 2
From Table No. 4.2, reveals that the cash and bank balance to total deposit ratios of all three banks due fluctuating trend. NBBL has highest average ratio of 25.97 percent and CBL has lowest ratio of 15.85 percent

In case of overage, it is found that cash and bank balance to total deposit of CBL has lowest ratio i.e. 15.85 percent, than that of NBBL and EBL where, the means of NBBL and EBLwere21.9 percent and 19.89 percent respectively. On the basis of coefficient of variances, CBL has highest of 22.53 percent, which is comparatively higher 22.28 percent of NBBL and EBL 21.1 percent. It shows the cash reserve ratio of EBL is more stable and consistent than NBBL and CBL.

### 4.1.1.3 Investment in Government Securities to Current Assets Ratio

This ratio examines that portion of commercial banks current assets, which is inverted on different government securities. More or less, each commercial bank is interested to invest their collected fund on different types of securities issued by government at different times to utilize their excess fund and have other purpose. Though, government securities are not so liquid a cash and bank balance of commercial bank, they can be easily sold in the market or converted into cash in other ways and they are risk free also.

This ratio shows that out of total current assets, how much percentage of it has been occupied by the investment on government securities. The ratio is calculated by dividing investment on government securities by total current assets. The ratios are presented in the following table.

Table No. 4.3
Investment on Govt. Securities to Current Assets Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5 / 1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 7.4 | 6.04 | 3.5 | 9.16 | 16.23 | 8.46 | 4.3 | 50.82 |  |
| EBL | 8.22 | 10.91 | 10.29 | 4.02 | 12.51 | 9.19 | 2.93 | 31.87 |  |
| CBL | 0 | 12.31 | 7.58 | 3.81 | 10.79 | 6.9 | 4.52 | 65.46 |  |

Source: Appendix 3
From Table 4.3 has shown that mean ratios for the study period of NBBL, EBL and CBL were 8.46, 9.19 and 6.9 and the CV between them was $50.82 \%, 31.87 \%$ and $65.46 \%$ respectively. On the basis of calculated CV, it is concluded that the ratios are more volatile and inconsistent. However, the data shows EBL has less CV and SD in compare to NBBL and CBL, which indicates EBL is less risky in compare with other two banks. According to the above data presented and analyzed banks invest their some portion of the collected fund on government securities which is also the part of current assets. This can help to meet current obligations of sample banks.

### 4.1.1.4 Ratio of Commercial Banks Investment to Sample Banks Investment

## a) Ratio of NBBL Investment to Total Commercial Banks Investment

 This ratio indicates the portion of Investment made by NBBL to total Investment made by commercial banks of Nepal. It shows how much NBBL is directly involved in Investment. And the ratio is derived by dividing Investment made by NBBL by Total Investment made by commercial banks.Table No. 4.4
Total Commercial Banks Investment to NBBL Investment Ratio (Rs. in millions)

| Fiscal Year | NBB Investment | Total investment of <br> commercial banks | Ratio (\%) |
| :---: | :---: | :---: | :---: |
| $017 / 18$ | 7995.00 | 362645.02 | 2.20 |
| $016 / 17$ | $4,499.29$ | $370,453.53$ | 1.21 |
| $015 / 16$ | $5,754.94$ | $291,836.08$ | 1.97 |
| $014 / 15$ | $3,020.12$ | 226365.3 | 1.33 |
| $013 / 14$ | $3,104.02$ | $209,926.28$ | 1.48 |
| Mean |  |  | 1.64 |
| SD |  |  | 0.38 |
| CV |  |  | 23.28 |

(Source: Banking and Financial Statistics, NRB)
Above table shows the Investment made by all commercial banks and by NBBL bank alone. From the above table it shows that portion of Investment made by NBBL is fluctuating every year but in amount there is increasing. In the FY 017/18 the ratio is almost $2.20 \%$, which is optimum. The mean ratio is $1.64 \%$ during the study period.

## b) Ratio of EBL Investment to Total Commercial Banks Investment

This ratio indicates the portion of Investment made by EBL to total Investment made by commercial banks of Nepal. It shows how much EBL is directly involved in Investment. And the ratio is derived by dividing Investment made by EBL by Total Investment made by commercial banks.

Table No. 4.5
Total Commercial Banks Investment to EBL Investment Ratio

| Fiscal Year | EBL Investment | Total investment of commercial banks | Ratio (\%) |
| :---: | :---: | :---: | :---: |
| 017/18 | 11964.56 | 362645.02 | 3.30 |
| 016/17 | 18,198.74 | 370,453.53 | 4.91 |
| 015/16 | 15,102.67 | 291,836.08 | 5.18 |
| 014/15 | 6,504.19 | 226365.3 | 2.87 |
| 013/14 | 9,263.86 | 209,926.28 | 4.41 |
| Mean |  |  | 4.13 |
| SD |  |  | 0.90 |
| CV |  |  | 21.78 |

(Source: Banking and Financial Statistics, NRB)

Above table shows the Investment made by all commercial banks and by EBL bank alone. From the above table it shows that portion of Investment made by EBL is fluctuating every year. In the FY 015/16 the ratio is almost $5.18 \%$, which is optimum. The mean ratio is $4.13 \%$ during the study period.

## c) Ratio of CBL Investment to Total Commercial Banks Investment

This ratio indicates the portion of Investment made by CBL to total Investment made by commercial banks of Nepal. It shows how much CBL is directly involved in Investment. And the ratio is derived by dividing Investment made by CBL by Total Investment made by commercial banks.

Table No. 4.6
Total Commercial Banks Investment to CBL Investment Ratio

| Fiscal Year |  |  | CBL Investment |
| :---: | :---: | :---: | :---: | | Total investment of |
| :---: |
| commercial banks |$\quad$ Ratio (\%) $\quad$ (Rsillions)

(Source: Banking and Financial Statistics, NRB)
Above table shows the Investment made by all commercial banks and by CBL bank alone. From the above table it shows that portion of Investment made by CBL is fluctuating every year but the amount is increasing. In the FY 017/18 the ratio is almost $1.82 \%$, which is optimum. The mean ratio is $1.21 \%$ during the study period.

Above tables shows that EBL covers more percentage than other 2 banks and CBL bank covers less percentage than other banks on investment made by total commercial banks. Mean of the ratios of EBL Investment is also higher than that of other banks. Similarly the standard deviation and coefficient of variation between the ratio of EBL Investment to total commercial bank Investment is comparatively higher that of other banks. It means there is more variability in Investment in EBL than others. It is due to
higher rate of fluctuations of Investment pattern in EBL Bank.

Figure No. 4.1
Total Commercial Banks Investment to Total Investment Ratio


### 4.1.1.5 Segregation of Investment

a) Segregation of Investment of NBBL Bank

NBBL invest its collected funds in different sectors. Mostly commercial banks are found to invest in government securities, share and debentures of other companies and NRB bonds. Here an attempt is made to segregate the Investment made by NBBL.

Table No. 4.7
Segregation of Investment of NBBL Bank
(Rs. In millions)

| Fiscal <br> Year | NBBL Investment | Gov. Sec. | \% |  <br> Debenture | \% | Others | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $017 / 18$ | 7995.00 | 3739.69 | 46.78 | 258.29 | 3.23 | 3997.02 | 49.99 |
| $016 / 17$ | $4,499.29$ | $2,535.52$ | 56.35 | 114.95 | 2.55 | 1848.82 | 41.09 |
| $015 / 16$ | $5,754.94$ | $1,173.75$ | 20.40 | 64.63 | 1.12 | 4516.56 | 78.48 |
| $014 / 15$ | $3,020.12$ | $2,521.10$ | 83.48 | 91.15 | 3.02 | 407.87 | 13.51 |
| $013 / 14$ | $3,104.02$ | $3,002.47$ | 96.73 | 91.15 | 2.94 | 10.4 | 0.34 |

(Source: Banking and Financial Statistics, NRB)

Above table show the Investment made by NBBL in different sectors. NBBL is found
to invest its fund in Government securities, shares and debenture of other industries, NRB bond and others. From the FY 2013/14 to 2017/18 investment in Government Securities and investment in share and debentures of other companies fluctuating trends but the investment in other sector is in increasing trends.

## b) Segregation of Investment of EBL Bank

EBL invest its collected funds in different sectors. Mostly commercial banks are found to invest in government securities, share and debentures of other companies, NRB bonds and other sector. Here an attempt is made to segregate the Investment made by EBL.

Table No. 4.8

## Segregation of Investment of EBL Bank

(Rs. In millions)

| Fiscal <br> Year | EBL <br> Investment | Gov. Sec. | \% |  <br> Debenture | \% | Others | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $017 / 18$ | 11964.56 | 8537.96 | 71.36 | 75.85 | 0.63 | 3350.75 | 28.01 |
| $016 / 17$ | $18,198.74$ | $10,361.77$ | 56.94 | 75.85 | 0.42 | 7761.12 | 42.65 |
| $015 / 16$ | $15,102.67$ | $8,587.73$ | 56.86 | 63.34 | 0.42 | 6451.6 | 42.72 |
| $014 / 15$ | $6,504.19$ | $2,544.74$ | 39.12 | 63.35 | 0.97 | 3896.1 | 59.90 |
| $013 / 14$ | $9,263.86$ | $6,988.31$ | 75.44 | 24.25 | 0.26 | 2251.3 | 24.30 |

(Source: Banking and Financial Statistics, NRB)
Above table show the Investment made by EBL in different sectors. EBL is found to invest its fund in Government securities, shares and debenture of other industries, NRB bond and others. From the FY 2013/17 to 2017/18 the investment in Government Securities, share and debentures of other companies and invest in other sectors have fluctuation trend.

## c) Segregation of Investment of CBL Bank

CBL invests its collected funds in different sectors. Mostly commercial banks are found to invest in government securities, share and debentures of other companies, NRB bonds and other sector.

Table No. 4.9

## Segregation of Investment of CBL Bank

| Fiscal <br> Year | CBL Investment | Gov. Sec. | \% |  <br> Debenture | $\%$ | Others | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $017 / 18$ | 6598.31 | 5128.04 | 77.72 | 180.64 | 2.74 | 1289.63 | 19.54 |
| $016 / 17$ | $4,584.37$ | $3,743.63$ | 81.66 | 79.47 | 1.73 | 761.27 | 16.61 |
| $015 / 16$ | $3,856.12$ | $1,990.66$ | 51.62 | 8.45 | 0.22 | 1857.01 | 48.16 |
| $014 / 15$ | $1,534.79$ | 896.50 | 58.41 | 8.55 | 0.56 | 629.74 | 41.03 |
| $013 / 14$ | $2,069.79$ | $1,713.94$ | 82.81 | 2.3 | 0.11 | 353.55 | 17.08 |

(Source: Banking and Financial Statistics, NRB)

Above table show the Investment made by CBL in different sectors. CBL is found to invest its fund in Government securities, shares and debenture of other industries. Most of its fund investment in government securities and less in share debenture of other industries.

### 4.1.2 Assets Management Ratios

The different assets management ratios are calculated and analyzed to know how well the assets are managed by the bank. The important items on the part of balance sheet are an assets and it includes cash and bank balance, money at call and short notice. Investment, loans and advances, fixed assets and other assets. Among them investment and loans and advances are the vital assets which are to be managed properly.

### 4.1.2.1 Loans and Advances to Total Deposit Ratio

This ratio actually measures the bank's ability to utilize the depositors fund to earn profit by providing loan and advances. This ratio is compute by dividing loan and advances by total deposit. A high ratio of loan and advances indicates better mobilization of collected deposits and vice-versa. But it should be noted that too high ratio might not be better from its liquidity point of view. Loans and advances to total deposit ratios are presented in the table no. 4.10 below.

Table No. 4.10
Loans and Advances to Total Deposit Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5 / 1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 84.37 | 80.19 | 74.87 | 72.51 | 71.79 | 76.75 | 4.82 | 6.28 |  |
| EBL | 81.27 | 72.5 | 65.57 | 76.6 | 75.18 | 74.22 | 5.18 | 6.98 |  |
| CBL | 99.12 | 80.74 | 84.54 | 84.62 | 79.11 | 85.63 | 7.08 | 8.27 |  |

Source: Appendix 10
From Table 4.10 reveals that all bank's loans and advances to total deposit ratios are in fluctuating trend. The ratio shows that all the banks have fully utilized the depositors fund to earn profit by providing loan and advances.CBL has highest average ratio of 85.63 , NBBL has 76.75 and EBL has lowest average of 74.22 which means CBL is fully utilizing the deposit fund to loan and advance. The coefficient of variation indicates NBBL has less variation relative to EBL and CBL.

### 4.1.2.2 Investment to Total Deposit Ratio

A commercial bank may mobilize it deposit by investing its fund in different securities issued by government and other financial and non-financial companies. Now the effort has been made to measure the extent to which the banks are successful in mobilize the deposits on investment. In the process of portfolio management of banks assets various factors such as availability of fund, liquidity requirement, central banks norms etc are to be considered in general. A high ratio is the indicator of high success to mobilize the banking fund as investment and vice versa.

Table No. 4.11
Investment to Total Deposit Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5 / 1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 12.58 | 19.41 | 18.18 | 10.47 | 16.05 | 15.34 | 3.36 | 21.91 |  |
| EBL | 18.29 | 11.28 | 17.01 | 11.75 | 17.39 | 15.15 | 3 | 19.78 |  |
| CBL | 16.53 | 14.52 | 14.47 | 6.96 | 13.24 | 13.14 | 3.27 | 24.85 |  |

[^0]From Table 4.11 shows that investment to total deposit ratio have fluctuating trend during the study period. The mean ratio shows NBBL has highest ratio of 15.34 and CBL has lowest of 13.14. It shows that NBBL seems to be strong to mobilize its total deposit as investment in comparison to EBL and CBL. On the basis of co- efficient of variation, we can say that EBL loan and advances is more consistent that of NBBL and CBL.

### 4.1.2.3 Total Investment to Total Assets Ratio

This ratio measures the proportion of the bank's total investment in risk free assets and risky assets. Total assets contain assets included in the balance sheet maintained by the bank. Thus, this ratio measures the proportion of investment in risk free area of the total assets of the bank. The ratios of the investment to total assets ratio is presented below in the table below.

Table No. 4.12
Total Investment to Total Assets Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5} / \mathbf{1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 14.05 | 9.64 | 14.58 | 9.78 | 14.24 | 12.46 | 2.25 | 18.05 |  |
| EBL | 10.27 | 15.98 | 15.23 | 9.23 | 14.09 | 12.96 | 2.71 | 20.9 |  |
| CBL | 12.62 | 13 | 12.67 | 6.04 | 11.36 | 11.14 | 2.61 | 23.42 |  |

Source: Appendix 11
From Table 4.12 shows the total investment to total assets ratios of all three banks NBBL, EBL and CBL are in satisfactory level. However, CBL has lowest average rate of $11.14 \%$ of total investment to total assets whereas EBL utilize its fund to highest average rate of $12.96 \%$. The coefficient of variation shows NBBL has less variation of $18.05 \%$ in relative to EBL and CBL.

### 4.1.2.4 Investment on Government Securities to Total Assets Ratio

This ratio measures the proportion of the bank's investment in risk free areas. Total assets contain assets included in the balance sheet maintained by the bank. Government securities have included NRB bonds, Treasury bills, and Development bonds issued by the NRB, which is safe for investment to the bank. Investment has
included investment on risky areas and investment in risk free areas. Thus this ratio measures the proportion of investment in risk free area of the total assets of the bank. The ratios of the investment on government securities to total assets ratio is presented below in the table no 4.13

Table No. 4.13
Investment on Govt. Securities to Total Assets Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5 / 1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 6.57 | 5.43 | 2.97 | 8.17 | 13.77 | 7.38 | 3.62 | 48.97 |  |
| EBL | 7.33 | 9.1 | 8.66 | 3.61 | 10.63 | 7.87 | 2.37 | 30.18 |  |
| CBL | 0 | 10.61 | 6.54 | 3.53 | 9.4 | 6.02 | 3.88 | 64.47 |  |

Source: Appendix 3
From Table 4.13 has showed the ratios calculated by dividing investment on govt. securities by total assets. The mean ratios for study period of NBBL, EBL and CBL are $7.38,7.87$ and 6.02 respectively. The risks of deviation the calculated ratio from the mean ratio were 3.62 of NBBL, 2.37 of EBL and 3.88 of CBL. The coefficient of variation shows CBL is highly risky in compare to NBBL and EBL.

### 4.1.3 Profitability Ratios

Profitability ratios are the best indicators of overall efficiency. These ratios are calculated to measure the operating efficiency and overall performance of the financial institution. Here, mainly those ratios represented and analyzed which are related with profit as well as fund mobilization. The following ratios are calculated under this profitability ratio topic:

### 4.1.3.1 Return on Loans \&Advances Ratio

This ratio measures the earning capacity of the commercial banks through its fund mobilization as loan and advances. A high ratio indicates greater success to mobilize fund as loan and advances and vice versa. This ratio calculated by dividing net profit by total amount of loan and advances. The following table shows the return on loan and advances ratio of NBBL, EBL and CBL of study period.

Table No. 4.14
Return on Loans \&Advances Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5 / 1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 3.25 | 3.75 | 3.21 | 3.98 | 6.08 | 4.06 | 1.05 | 25.96 |  |
| EBL | 2.6 | 2.55 | 2.89 | 3.26 | 3.39 | 2.94 | 0.34 | 11.6 |  |
| CBL | 1.65 | 0.76 | 1.02 | 1.28 | 0.98 | 1.14 | 0.3 | 26.73 |  |

Source: Appendix 4
From Table 4.14 shows that how much return had generated through utilization of fund from loan and advances. The mean ratios for study period of NBBL, EBL and CBL were 4.06, 2.94 and 1.14 respectively. It shows that NBBL has generated more return through loan and advances than EBL and CBL. But EBL return has in increasing trend comparing to NBBL and CBL. The CV shows the variations of ratios which were 25.96 of NBBL, 11.6 of EBL and 26.73 of CBL. It shows the return on loan and advances ratio of EBL is more stable and consistent than NBBL and CBL.

### 4.1.3.2 Return on Investment Ratio

Return in investment ratio are calculated from the fiscal year 2013/14 to 2017/18 study period, which has been presented in the Table No. 4.15

Table No. 4.15
Return on Investment Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5 / 1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 15.01 | 26.63 | 14.14 | 24.58 | 25.09 | 21.09 | 5.37 | 25.45 |  |
| EBL | 16.77 | 9.51 | 10.42 | 23.83 | 15.88 | 15.28 | 5.15 | 33.69 |  |
| CBL | 9.9 | 4.23 | 5.97 | 15.51 | 5.86 | 8.29 | 4.06 | 49.01 |  |

Source: Appendix 5
From table 4.15 all banks ratios are in fluctuating trend during the period under study. On the other hand, when mean ratios are observed, NBBL seems to have earned higher amount of interest on their outside assets in comparison to EBL and CBL i.e. $21.08>15.28>8.29$. It seems NBBL is collecting more average return on investment
than other two banks. CV of the return of investment ratio of the sample banks for the five year of the study period were $25.45 \%, 33.69 \%$ and $49.01 \%$ respectively, which shows EBL and CBL has highly variation in the mean ratios of return on investment in compare to NBBL.

### 4.1.3.3 Return on Total Assets Ratio

The total assets have represented the current, fixed, intangible factitious assets. Return on total assets ratio are calculated from the fiscal year 2013/14 to 2017/18 study period, which has been presented in the Table No. 4.16

Table No. 4.16
Return on Total Assets Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6} / \mathbf{1 7}$ | $\mathbf{1 5} / \mathbf{1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 2.11 | 2.57 | 2.06 | 2.4 | 3.57 | 2.54 | 0.55 | 21.53 |  |
| EBL | 1.72 | 1.52 | 1.59 | 2.2 | 2.24 | 1.85 | 0.31 | 16.49 |  |
| CBL | 1.25 | 0.55 | 0.76 | 0.94 | 0.67 | 0.83 | 0.24 | 29.38 |  |

Source: Appendix 6
Here, the mean ratio of NBBL, EBL and CBL were 2.54, 1.85 and 0.83 respectively which shows NBBL have higher average mean in compare to EBL and CBL. The standard deviations were $0.55,0.31$ and 0.24 respectively, which shows the risk of being deviation from the mean ratio. CV shows highly variation in the mean ratios of return on investment ratio. According to the above table EBL has less variation and more constant on return on assets than NBBL and CBL.

### 4.1.3.4 Return on Total Shareholder's Equity Ratio

Equity capital of any bank is its owned capital. The prime objectives of any bank is wealth maximization or in other words to earn high profit and thereby, maximizing return on its equity capital. ROE is the measuring the role of profitability of bank. It reflects the extent to which the bank has been successful to mobilize or utilize it equity capital. A high ratio indicates higher success to mobilize its owned capital (equity) and vice versa. This ratio is calculated by dividing net profit by total equity
capital including paid up capital, $\mathrm{P} / \mathrm{L}$ a/c, various reserves, general loan loss provision etc. This ratio has been shown in the following table.

Table No. 4.17
Return on Shareholders' Equity Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5 / 1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 9.52 | 12.5 | 10.23 | 12.53 | 14.7 | 11.9 | 1.85 | 15.54 |  |
| EBL | 15.91 | 18.06 | 19.78 | 26.15 | 27.77 | 21.53 | 4.63 | 21.49 |  |
| CBL | 6.86 | 5.58 | 7 | 7.84 | 5.13 | 6.48 | 0.99 | 15.27 |  |

Source: Appendix 7
Here, the mean ratio of NBBL, EBL and CBL were 11.9, 21.53 and 6.48 and standard deviations were $1.85,4.63$ and 0.99 respectively. The ratio shows EBL has constantly increasing the ratio whereas NBBL and CBL have fluctuation every year. The average rate of return of EBL higher than other two banks which shows the bank has efficiently used its fund to collect its equity. CV shows that $15.54 \%, 21.49 \%$ and $15.27 \%$ for NBBL, EBL and CBL respectively, which indicates CBL and NBBL have less variation relative to EBL.

### 4.1.3.5 Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to find the percentage of interest earned to total assets. This ratio reflects the extent to which banks are successful in mobilizing their assets to generate high income which are presented in the table no. 4.18 below.

Table No. 4.18
Total Interest Earned to Total Working Fund Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5} / \mathbf{1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3} / \mathbf{1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 6.86 | 5.58 | 7 | 7.84 | 5.13 | 6.48 | 0.99 | 15.27 |  |
| EBL | 5.79 | 4.44 | 5.04 | 7.35 | 7.51 | 6.03 | 1.22 | 20.32 |  |
| CBL | 8.56 | 6.83 | 7.21 | 7.34 | 6.89 | 7.37 | 0.63 | 8.52 |  |

Source: Appendix 8
From Table 4.18 shows the ratios of the interest income to total assets in terms of percentage. The major earning of the bank is interest on loan and advances and return
on investment on different components. The mean ratios for study period of NBBL, EBL and CBL were $6.48,6.03$ and 7.37 respectively. The risks of deviation the calculated ratio from the mean ratio were 0.99 of NBBL, 1.22 of EBL and 0.63 of CBL. The data shows CBL has less variation in relative to two other banks.

### 4.1.4 Risk Ratios

The possibility of risk makes bank's investment a challenging task. Bank has to take risk to get return on investment. The risk taken is satisfied by the increase in profit. A bank has to take high risk if the expects high return on its investment. So, the banks operating for high profit have to accept the risk and manage it efficiently. Here two ratios are computed regarding liquidity risk and credit risk.

### 4.1.4.1 Liquidity Risk Ratio

The liquidity risk of the bank defines its liquidity need for deposit. The ratio of cash and bank balance to total deposit is the indicator of bank liquidity needed. The cash and bank balance are the most liquid assets and they are considered as banks liquidity sources and deposits as the liquidity needed. A higher liquidity indicates less risk and less profitable bank and vice versa.

The bank should be able to pay the demanded cash by their customers so the bank should maintain its liquidity position. If the bank couldn't be able to pay the deposited money to the depositors on demand on time the bank has to face serious problem. So this risk is a prime risk that bank should consider. The liquidity risk ratio is presented below in the table no 4.19.

Table No. 4.19
Liquidity Risk Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5 / 1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 24.74 | 23.23 | 21.8 | 31.49 | 28.57 | 25.97 | 3.57 | 13.73 |  |
| EBL | 22.49 | 24.66 | 30.23 | 21.21 | 19.43 | 23.6 | 3.72 | 15.78 |  |
| CBL | 10.76 | 13.41 | 11.28 | 19.67 | 20.38 | 15.1 | 4.12 | 27.32 |  |

Source: Appendix 14

From Table 4.19 shows that the mean cash and bank balance to total deposit ratio of NBBL, EBL and CBL are 25.97 percent, 23.6 percent and 15.1 percent respectively. CBL has the lowest liquidity ratio i.e. 15.1 percent than NBBL and EBL, which indicates that CBL operates with higher risk for higher profit. Whereas NBBL has the highest average rate which it operates lower rick for higher profit. On the other NBBL has the lowest C.V. i.e. $13.73<15.78<27.32$ percent than EBL and CBL. This indicates that NBBL is more consistent with reference to liquidity risk ratio than EBL and CBL.

### 4.1.4.2 Credit Risk Ratio

It shows the ability of a bank to channelize its assets in the form of loan and advances to earn higher profits. A high ratio indicates better mobilization of fund as loan and advances and vice-versa. Total Loans and advances to total assets ratios are calculated from the fiscal year 2013/14 to 2017/18 study period, which are presented in the table below.

Table No. 4.20
Total Loans and Advances to Total Assets Ratio (\%)

| Banks | Fiscal year |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 7 / 1 8}$ | $\mathbf{1 6 / 1 7}$ | $\mathbf{1 5} / \mathbf{1 6}$ | $\mathbf{1 4 / 1 5}$ | $\mathbf{1 3 / 1 4}$ | Mean | S.D. | CV (\%) |  |
| NBBL | 64.79 | 68.49 | 64.16 | 60.38 | 58.76 | 63.32 | 3.44 | 5.43 |  |
| EBL | 66.34 | 59.67 | 54.95 | 67.53 | 66.01 | 62.9 | 4.83 | 7.68 |  |
| CBL | 75.69 | 72.26 | 74.07 | 73.45 | 67.86 | 72.67 | 2.65 | 3.64 |  |

Source: Appendix 12
Between the study periods, ratio of CBL is in increasing trend. Total loans and advances to total assets ratio of NBBL is also in increasing trend. But in FY 2017/18 it was decreased whereas, ratio of EBL has highly fluctuating. The average mean for NBBL, EBL and CBL were $63.32 \%, 62.9 \%$ and $72.67 \%$ respectively, which shows the ability of a bank to channelize its assets in the form of loan and advances to earn higher profits is very satisfactory level. The CV shows CBL has less variation in compare to EBL and NBBL.

### 4.1.5 Growth Rates

The growth rates are calculated by using the five year of the study period. Growth rate of each item is calculated by considering the current year's as future value and first study period value as present value. The calculated values are presented in the tabular form as below.

Table No. 4.21
Growth rates of Different Items

| Particular | Growth rates (\%) |  |  |
| :--- | :---: | :---: | :---: |
|  | NBBL | EBL | CBL |
| Total Deposit | $25.10 \%$ | $13.29 \%$ | $26.55 \%$ |
| Total Investment | $26.68 \%$ | $6.60 \%$ | $33.76 \%$ |
| Loan and <br> Advances | $30.26 \%$ | $15.52 \%$ | $33.89 \%$ |
| Net Profit | $11.43 \%$ | $8.06 \%$ | $52.47 \%$ |

Source: Appendix 16
Here total deposit of the bank has been increasing by $25.10 \%$ for NBBL13.29\% for EBL and $26.55 \%$ for CBL. Under the competitive situation of the banking sector this rate is satisfactory growth rate. However, CBL has highest growth rate of total deposit relative to NBBL and EBL. Similarly, growth rate of total investment during the five years of the study period has been around $26.68 \%$ for NBBL, $6.60 \%$ for EBL and $33.76 \%$ CBL. There is comparative less growth of investment for EBL which $-6.60 \%$ it shows that the bank is investing less than in compare with NBBL and CBL. Loan and advances as a part of total investment has shown positive increase in the growth rate which is around $30.26 \%$, $15.25 \%$ and $33.89 \%$ for NBBL, EBL and CBL respectively. Here growth rate of net profit has also shown the positive growth rate of $11.43 \%$ for NBBL, $8.06 \%$ for EBL and $52.47 \%$ for CBL. So it is also a satisfactory one.

### 4.2 Statistical Analysis

Under this topic, some statistical tools such as co-efficient of correlation analysis between different variables, trend analysis of deposits, loan and advances, investment and net profit are used and done to achieve the objectives of the study. They are as follows:

### 4.2.1 Coefficient of Correlation Analysis

Under this topic, Karl's person coefficient of correlation is used to find out the relationship between deposit and loan and advances, total deposit and total investment, Investment and net profit, loan and advances and net profit.

### 4.2.1.1 Co-efficient of Correlation between Investment and Net profits

The correlation between Investment and net profit describe the degree of relationship between these two items. How a unit increased in investment impact in the volume of net profit is measured by this correlation. Here, Investment is the independent variable and the net profit is the dependent variable.

Table No. 4.22
Correlation between Investment and Net profit

| Bank | Correlation Coefficient (r) | P.Er. | 6*P.Er. | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| NBBL | 0.65 | 0.17316 | 1.03895 | $\mathrm{r}<6 *$ P.E. (r) <br> not significant |
| EBL | 0.32479 | 0.26983 | 1.61895 | $\mathrm{r}<6 *$ P.E. (r) <br> not significant |
| CBL | 0.79113 | 0.11285 | 0.67709 | $\mathrm{r}>6 *$ P.E. (r) <br> significant |

Source: Appendix 17
From Table 4.22 has showed that the correlation coefficient (r) between total investment and net profit of the NBBL is 0.65 and Probable error multiplied by six is found to be 1.03895. Since $r<6 *$ P.E. (r), $r$ is positive and insignificant one (Details in Appendix). It can be inferred that there is moderate degree of positive correlation between investment and net profit of the bank during the study period. For EBL the correlation coefficient (r) between investment and net profit of the bank is 0.32479 and Probable error multiplied by six is found to be 1.61895. Since $r<6 *$ P.E. ( $r$ ), $r$ is positive and insignificant one (Details in Appendix). It can be inferred that there is moderate degree of positive correlation between investment and net profit of the bank during the study period. For EBL the correlation coefficient (r) between investment and net profit of the bank is 0.79113 . Since $r>6 *$ P.E. ( $r$ ), $r$ is positive and significant.

It can be inferred that there is high degree of positive correlation between investment and net profit of the bank during the study period.

### 4.2.1.2 Co-efficient of Correlation between Loan and Advances and Net Profit

The correlation between loans and advances and net profit describe the degree of relationship between these two items. How a unit increased in loan and advances impact in the volume of net profit is measured by this correlation. Here, loans and advances is the independent variable and the net profit is the dependent variable.

Table No. 4.23
Correlation between Loan and Advances and Net profit

| Bank | Correlation Coefficient (r) | P.Er. | 6*P.Er. | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| NBBL | 0.89 | 0.0606 | 0.36363 | $\mathrm{r}>6 *$ P.E. (r) <br> significant |
| EBL | 0.96253 | 0.02218 | 0.13311 | $\mathrm{r}>6^{*}$ P.E. (r) <br> significant |
| CBL | 0.92356 | 0.04435 | 0.26612 | $\mathrm{r}>6 *$ P.E. (r) <br> significant |

Source: Appendix 17
From Table 4.23 has showed that the correlation coefficient (r) between loan and advances and net profit of the NBBL, EBL and CBL were 0.89, 0.96and 0.92and Probable error multiplied by six is found to be $0.36,0.13$ and 0.713 respectively. Since $r>6 *$ P.E. (r), $r$ is positive and nearby 1 . It can be inferred that there is high degree of positive correlation loan and advances and net profit of the bank during the study period.

### 4.2.1.3 Co-efficient of Correlation between Deposit and Loan and Advances

The correlation between total deposits and loans and advances describe the degree of relationship between these two items. How a unit increased in deposits impact in the volume of loans and advances is measured by this correlation. Here, deposit is the independent variable and the loans and advances is the dependent variable.

Table No. 4.24
Correlation between Deposits and Loans and Advances

| Bank | Correlation <br> Coefficient (r) | P.Er. | 6*P.Er. | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| NBBL | 0.99 | 0.30165 | 0.01974 | $\mathrm{r}>6 *$ P.E. (r)significant |
| EBL | 0.93486 | 0.03802 | 0.22812 | $\mathrm{r}>6 *$ P.E. (r)significant |
| CBL | 0.98182 | 0.01087 | 0.06521 | $\mathrm{r}>6 *$ P.E. (r)significant |

Source: Appendix 17
From Table 4.24 has showed that the correlation coefficient (r) between deposits and loans and advances of the NBBL, EBL and CBL were $0.99,0.93$ and 0.98 and Probable error multiplied by six is found to be $0.0197,0.228$ and 0.0652 respectively. Since $r>6 *$ P.E. (r), $r$ is positive and nearby 1 . It can be inferred that there is high degree of positive correlation deposits and loans and advances of the bank during the study period.

### 4.2.1.4 Co-efficient of correlation between deposit and Total investment

The correlation between total deposits and total investment describe the degree of relationship between these two items, how a unit increased in deposits impact in the volume of total investment is measured by this correlation. Here, deposit is the independent variable and the total investment is the dependent variable.

Table No. 4.25
Correlation between Deposits and Total Investment

| Bank | Correlation Coefficient (r) | P.Er. | 6*P.Er. | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| NBBL | 0.82 | 0.09677 | 0.58062 | $\mathrm{r}>6^{* P . E . ~(r) ~}$ <br> significant |
| EBL | 0.78715 | 0.11474 | 0.68846 | $\mathrm{r}>6^{* P . E . ~(r) ~}$ <br> significant |
| CBL | 0.94066 | 0.03474 | 0.20844 | $\mathrm{r}>6^{* P . E . ~(r) ~}$ <br> significant |

Source: Appendix 17

From Table 4.25 has showed that the correlation coefficient (r) between deposits and total investment of the NBBL, EBL and CBL were $0.82,0.787$ and 0.94 and Probable error multiplied by six is found to be $0.58,0.688$ and 0.208 respectively. Since $r>$ 6*P.E. (r), r is positive and nearby 1 . It can be inferred that there is high degree of positive correlation deposits and loans and advances of the bank during the study period.

### 4.2.2 Trend Analysis

The objective of this topic is to analysis trend of deposit collection, its utilization, net profit of NBBL, EBL and CBL. Under this topic trend value of deposits, loan and advances, investment, net profit are forecasted for the next five years more than the study period. Trend values of different important terms are calculated using following equation i.e. $\mathbf{Y}=\mathbf{a}+\mathbf{b x}$

The projections are based on the following assumption
a) The main assumption is that other thing will remain unchanged.
b) The forecast will be true only when the limitation of least square method is carried out.
c) The bank will run in present stage.
d) The economy will remain in the present stage.
e) Nepal Rastra Bank will not change its guidelines to commercial banks.

### 4.2.2.1Trend Value of Total Deposits

Trend values of total deposits are calculated on the basic of the five years of the study period. Trend values have been forecasted for the fiscal year 2018/19 to 2022/23.

Table No. 4.26

## Trend Values of Total Deposit

| Fiscal year | Trend value (Rs. In million) |  |  |
| :---: | :---: | :---: | :---: |
|  | NBBL | EBL | CBL |
| $2013 / 14$ | $17,845.16$ | $57,720.46$ | $15,633.15$ |
| $2014 / 15$ | $25,706.91$ | $62,108.14$ | $22,049.29$ |
| $2015 / 16$ | $33,832.70$ | $83,093.79$ | $26,656.42$ |
| $2016 / 17$ | $39,874.23$ | $93,735.48$ | $31,564.02$ |
| $2017 / 18$ | $43,713.19$ | $95,094.46$ | $40,095.73$ |
| $2018 / 19$ | 51965.452 | 110263.068 | 44731.689 |
| $2019 / 20$ | 58555.79 | 120900.602 | 50575.678 |
| $2020 / 21$ | 65146.128 | 131538.136 | 56419.667 |
| $2021 / 22$ | 71736.466 | 142175.67 | 62263.656 |
| $2022 / 23$ | 78326.804 | 152813.204 | 68107.645 |

Source: Appendix 18
Under this topic, an effort has been made to calculated the trend values of deposits of NBBL, EBL and CBL for five years on the basis of the available trend values from the 2014 to 2018 and trend values are forecasted for five years from 2019 to 2023. The above table has shown the trend values of deposits for ten years.

Figure No. 4.2
Trend values of Total Deposits of NBBL, EBL and CBL


The above presented figure has shown the increasing trend of the total deposit of the NBBL, EBL and CBL, which is a good sign for the bank to grow. The trend analysis shows all three selected sample banks have increasing trend value of total deposit.

### 4.2.2.2 Trend value of Loans and Advances

Trend values of Loans and Advances are calculated on the basic of the five years of the study period. Trend values have been forecasted for the fiscal year 2018/19 to 2022/23 (Details in Appendix )

Table No. 4.27
Trend values of Loans and Advances

| Fiscal year | Trend value (Rs. In million) |  |  |
| :---: | :---: | :---: | :---: |
|  | NBBL | EBL | CBL |
| $2013 / 14$ | $12,810.15$ | $43,393.19$ | $12,367.37$ |
| $2014 / 15$ | $18,640.71$ | $47,572.02$ | $18,657.19$ |
| $2015 / 16$ | $25,330.82$ | $54,482.46$ | $22,534.20$ |
| $2016 / 17$ | $31,975.20$ | $67,955.11$ | $25,485.56$ |
| $2017 / 18$ | $36,879.93$ | $77,287.76$ | $39,744.72$ |
| $2018 / 19$ | 43569.577 | 84589.777 | 42232.729 |
| $2019 / 20$ | 49716.982 | 93407 | 48391.036 |
| $2020 / 21$ | 55864.387 | 102224.223 | 54549.343 |
| $2021 / 22$ | 62011.792 | 111041.446 | 60707.65 |
| $2022 / 23$ | 68159.197 | 84589.777 | 66865.957 |

Source: Appendix 17

Figure No. 4.3
Trend Values of Loan and Advances of NBBL, EBL and CBL


Under this topic, an effort has been made to calculated the trend values of Loans and Advances of NBBL, EBL and CBL for five years on the basis of the available trend values from the 2013/14 to 2017/18 and trend values are forecasted for five years from 2018/19 to 2022/23. The above table has shown the trend values of Loans and Advances for ten years. The above presented figure has shown the increasing trend of loan and advances of the NBBL, CBL, which is a good sign for the bank to grow. However the trend value of loan and advance of EBL is increasing at first and start to decrease after 2018/19.

### 4.2.2.3 Trend Values of the Total Investment

Trend values of total investment are calculated on the basic of the five years of the study period. Trend values have been forecasted for the fiscal year 2018/19 to 2022/23.

Table No. 4.28
Trend Values of Total Investment

| Fiscal year | Trend value (Rs. In million) |  |  |
| :---: | :---: | :---: | :---: |
|  | NBBL | EBL | CBL |
| $2013 / 14$ | 3104.02 | 9263.86 | 2069.79 |
| $2014 / 15$ | 3020.12 | 6504.19 | 1534.79 |
| $2015 / 16$ | 5754.94 | 15102.67 | 3856.12 |
| $2016 / 17$ | 4499.29 | 18198.74 | 4584.37 |
| $2017 / 18$ | 7995.00 | 11964.56 | 6625.96 |
| $2018 / 19$ | 8253.013 | 17335.589 | 7382.782 |
| $2019 / 20$ | 9379.126 | 19045.184 | 8598.974 |
| $2020 / 21$ | 10505.239 | 20754.779 | 9815.166 |
| $2021 / 22$ | 11631.352 | 22464.374 | 11031.358 |
| $2022 / 23$ | 12757.465 | 24173.969 | 12247.55 |

Source: Appendix 17

Figure No. 4.4
Trend Values of Total Investment of NBBL, EBL and CBL


Under this topic, an effort has been made to calculated the trend values of total investment of NBBL, EBL and CBL for five years on the basis of the available trend values from the 2014 to 2018 and trend values are forecasted for five years from 2019 to 2023. The above table has shown the trend values of total investment for ten years. The above graph has shown the trend values plus forecasted value using least square method. It has shown the fluctuating figure during the study period. Forecasted value of EBL is highly fluctuating but forecasted value of NBBL and CBL is less fluctuating but is in increasing trend.

### 4.2.2.4 Trend Values of Net Profit

Trend values of net profit are calculated on the basic of the five years of the study period. Trend values have been forecasted for the fiscal year 2013/14 to 2022/23

Table No. 4.29
Trend Values of Net profit

| Fiscal year | Trend value (Rs. In million) |  |  |
| :---: | :---: | :---: | :---: |
|  | NBBL | EBL | CBL |
| $2013 / 14$ | 778.65 | $1,471.12$ | 121.33 |
| $2014 / 15$ | 742.34 | $1,549.70$ | 238.1 |
| $2015 / 16$ | 813.98 | $1,574.35$ | 230.02 |
| $2016 / 17$ | $1,198.30$ | $1,730.21$ | 193.73 |
| $2017 / 18$ | $1,200.38$ | $2,006.25$ | 655.78 |
| $2018 / 19$ | 1336.556 | 2041.557 | 595.151 |
| $2019 / 20$ | 1466.498 | 2166.634 | 697.604 |
| $2020 / 21$ | 1596.44 | 2291.711 | 800.057 |
| $2021 / 22$ | 1726.382 | 2416.788 | 902.51 |
| $2022 / 23$ | 1856.324 | 2541.865 | 1004.963 |

Source: Appendix 17

Figure No. 4.5
Trend Values of Net Profit of NBBL, EBL and CBL


Under this topic, an effort has been made to calculated the trend values of net profit of NBBL, EBL and CBL for five years on the basis of the available trend values from the 2014 to 2018 and trend values are forecasted for five years from 2019 to 2023. The above table has shown the trend values of net profit for ten years. The above figure has shown the value of net profit of the NBBL, EBL and CBL. The above presented figure has shown the increasing trend of net profit of the NBBL, EBL and CBL,

### 4.3 Major Findings of the Study

The major finding of the study of the investment policy of the NBBL, EBL and CBL are derived on the basis of financial and statistical data of both banks, which are presented below.

### 4.3.1 Liquidity Ratio

1 The mean current ratios of all three banks were lower than the standard current ratio of $2: 1$ but from the banking point of view it is satisfactory. Ratios are not homogenous.

2 The mean ratio of cash and bank balance to total deposits ratio of both banks were above than $15 \%$. Bank has maintained its cash reserve ratio in satisfactory liquidity position.

3 The mean ratio of investment on government securities to current assets ratio is 8.46, 9.19 and 6.9 of NBBL, EBL and CBL, which were not satisfactory. On the basis of calculated CV , it is concluded that the ratios are more volatile and inconsistent.

4 Findings from ratio of Sample banks to Total Commercial banks: Mean ratio of EBL Investment to total commercial banks investment is $4.13 \%$ which is higher than that of other banks to total commercial banks. The portion of CBL Investment is increasing every year in the total investment of commercial banks. The ratio of CBL is $1.21 \%$ which is less than other banks.

5 Findings from the Investment pattern of Sample banks CBL had invested most of their fund in government securities than other banks. Likewise NBBL had started to invest in other sector from FY 2015/16and FY 2017/18 respectively. All the banks had invested fewer funds to share and capital of other company. The commercial banks mostly invest on government securities, NRB bond and share and debentures of other company.

### 4.3.2 Assets Management Ratio

The assets management ratios of all three banks reveal the following major finding from the calculated ratios, which show how well assets are managed.

1 The mean ratio of investment to total deposit ratio of the NBBL, EBL and CBL were $15.34,15.15$ and 13.14 respectively. Since the positive average rate shows the mobilization of deposits on investment is satisfactory.

2 The mean ratio of loan and advances to total deposit ratio of NBBL, EBL and CBL were $76.75 \%, 74.22 \%$ and $85.63 \%$ respectively. The ratio shows all banks highly utilize the depositors fund to earn profit by providing loan and advances.

3 The mean ratio of the total investment to total assets ratio of NBBL, EBL and CBL were $12.46 \%, 12.96 \%$ and $11.14 \%$ respectively. Since, the average ratio were positive of all three banks hence it seems to be satisfactory level.

4 The mean ratios of investment on govt. securities to total assets of NBBL, EBL and CBL were $7.38,7.87$ and 6.02 respectively.

### 4.3.3 Profitability Ratio

The profitability ratio of NBBL, EBL and CBL explains the following findings which are considered as major from the viewpoint of the investment policy followed by the bank.

1 The mean ratio of return on loan and advances of NBBL is around 4.06, EBL has 2.94 and for CBL is 1.14. There is slight variability occurred in the ratio calculated of NBBL than the ratio calculated of EBL and CBL.

2 The mean ratio of return on investment ratio of NBBL, EBL and CBL were 21.08, 15.28 and 8.29 respectively. The ratios are highly variable and inconsistent.

3 The mean ratio of return on total assets of the NBBL, EBL and CBL were 2.54, 1.85 and 0.83 respectively.CV shows highly variation in the mean ratios of return on investment ratio.

4 The mean ratio of return on shareholders' equity is $11.9,21.53$ and 6.48 for NBBL, EBL and CBL respectively. CV were $15.54 \%, 21.49 \%$ and $15.27 \%$ for NBBL, EBL and CBL respectively. The average rate of return of EBL higher than other two banks, which shows the bank has efficiently used its fund to collect its equity.

5 The mean ratio of interest income to total working fund of the NBBL is 6.48, EBL is 6.03 and 7.37 of CBL. The interest income is the major portion of the banks earning. The risks of deviation the calculated ratio from the mean ratio were 0.99 of NBBL, 1.22 of EBL and 0.63 of CBL.

### 4.3.4 Risk Ratio

The major risk ratio is calculated and found the major finding of the study which are as follows.

1 By considering risk ratio, we can be found that the liquidity risk ratios of all three banks were more than $15 \%$. The mean liquidity ratio of NBBL, EBL and CBL were $25.97 \%, 23.6 \%$ and $15.1 \%$ respectively. NBBL has maintain highest liquidity position.
2 The average mean for NBBL, EBL and CBL were $63.32 \%, 62.9 \%$ and $72.67 \%$ respectively, which shows the ability of a bank to channelize its assets in the form of loan and advances to earn higher profits is very satisfactory level.

### 4.3.5 Growth Rates

The growth rates of different components of the NBBL, EBL and CBL which are important from the viewpoint of investment policy is calculated and from that calculation following result had been found out.

1 The Growth rate of the total deposit from the first year of the study period to the current year of the study period is $25.10 \%, 13.29 \%$ and $26.55 \%$ of NBBL, EBL and CBL respectively. The average growth rate of deposit of CBL is highest than NBBL and EBL. It indicates that CBL seems better in collecting deposits in the comparison of NBBL and EBL.

2 The Growth rate of total investment from the first year of the study period to the current year of the study period $26.68 \%$ for NBBL, $6.60 \%$ for EBL and $33.76 \%$ CBL.

3 The Growth rate of the net profit from the first year of the study period to the current year of the study period is $11.43 \%, 8.06 \%$ and $52.47 \%$ of NBBL, EBL and CBL respectively.

4 The Growth rate of the loan and advances from the first year of the study period to the current year of the study period were $30.26 \%, 15.25 \%$ and $33.89 \%$ for NBBL, EBL and CBL respectively. The average growth rate of loan and advances of CBL is the highest than NBBL and EBL. It indicates that CBL has provided more funds in loan and advance in the comparison of EBL.

### 4.3.6 Coefficient of Correlation Analysis

Coefficient of correlation analysis between different variables of NBBL, EBL and CBL reveals that.

1 Coefficient of correlation between investment and net profit of all three banks has positive value of $0.65,0.32$ and 0.79 for NBBL, EBL and CBL respectively. The 6*P.E. value for NBBL and EBL were greater than correlation value which is not significant. However, coefficient correlation of CBL is greater than 6*P.E. value which is significant. Since, coefficient of correlation between investment and net profit of all three banks has positive value it indicates increase in investment directly increase the net profit of bank.

2 Coefficient of correlation between loan and advances and net profit has positive values which were $0.89,0.96$ and 0.92 of NBBL, EBL and CBL respectively. It has found that EBL and CBL have high degree of positive correlation between the loan and advances and net profit of the bank. The increase and decrease of total loan and advances of the bank strong affects the volume of net profit.
3 Co-efficient of correlation between deposit and loan and advances of both banks has positive value and near to 1 . The value of ' $r$ ' of EBL is slightly lower than that of NBBL and CBL. In case of both banks it has been found that there is significant relationship between deposit and loan and advances. The increase and decrease of total deposit of the bank strong affects the volume of loan and advances.

4 Coefficients of correlation between deposits and total investment of all three banks have positive value of $0.82,0.78$ and 0.94 . The increase and decrease deposit affect the volume of total investment. And it has found that there is high degree of positive correlation between deposits and total investment of CBL. The increase and decrease deposits of CBL strong affect the volume of total investment.

### 4.3.7 Trend Value Analysis

Trend analysis of deposits, loans and advances, total investment, net profit and projection for next five years of NBBL, EBL and CBL shows that;

1 Trend values of total deposit of the NBBL, EBL and CBL were found to be in increasing trend. The trend values of total deposits in case of NBBL, EBL and

CBL will be $78326.804,152813.204$ and 68107.645 million at the end of forecasted year.

2 Trend values of loan and advances of the NBBL, EBL and CBL were found to be in increasing trend. But, the data shows trend value of EBL will decrease at the end of 2018. The trend values of loan and advances in case of NBBL, EBL and CBL will be $68159.197,84589.777$ and 66865.957 million at the end of forecasted year.

3 Trend values of total investment of the NBBL and EBL is found to be in fluctuating trend but for CBL it is going to be increasing trend for study periods as well as forecasted years. The trend values of total investment in case of NBBL, EBL and CBL will be $12757.465,24173.969,12247.55$ million at the end of forecasted year.
4 Trend values of net profit of the NBBL, EBL and CBL were found to be in increasing trend. The trend values of net profit in case of NBBL, EBL and CBL will be $1856.324,2541.865$ and 1004.963 million at the end of forecasted year.

## CHAPTER - 5

## CONCLUSION

This chapter highlights some selected actionable conclusions and recommendations on the basis of the main findings, which are derived from the analysis of NBBL, EBL and CBL. In order to carry out this study, data have been basically obtained by the secondary sources. The analysis is performed with the help of financial tools and statistical tools. The analysis is associated with comparison and interpretation. Under financial analysis, various financial ratios related to the investment function of commercial banks. They are liquidity ratio, profitability ratio, asset management ratio, risk ratio and growth ratios. Under statistical analysis, some relevant statistical tools are used. They are coefficient of correlation, trend analysis.

### 5.1 Discussion

In first chapter, the introduction chapter covers background of the study, statement of the problem, objectives of the study, significance of the study, limitations of the study and organization of the study. The main purpose of this study is to analyze the impact of investment policy on his profitability of NBBL, EBL and CBL. The specific objectives are: to evaluate the liquidity, asset management, profitability, risk position and growth of the banks under study, to find out relationship between total deposits and investment, loans \& advances, interest earned, and net profit, net profit to outsides assets and total working fund, loan and advances to interest paid \& compare them, to analyze the trend of deposits, investment, net profit and loan and advances, for next five years of EBL, NBBL \& CBL., to evaluate the empirical relationship of the total investment, deposit \& loan and advance.

The second chapter focuses on review of literature, relevant thesis, journals, articles, related websites etc. It contains the conceptual review and review of related research study on investment policies.

The third chapter deals with the research methodology to be adopted for the study consisting research design, sources of data, data gathering procedure, population and sample size, research variables and data processing procedures.

In fourth chapter, the data collected from various sources are recorded systematically and presented in the appropriate forms of the tables, charts and appropriate statistical and graphical tools have been applied to analyze the data. To achieve the objectives of the study, the required data and information have been collected through annual report and other relevant sources. The financial statements of five years (from 2013/14 to 2017/18) were selected for the purpose evaluation. Statistical and mathematical tools have been used to analyze the data, and produce the findings and results.

### 5.2 Conclusion

After study and analysis of given data we conclude that banking is one of business sector. All the banks are running in profit. They invest different sector. Most of the sample banks well investing in the risk free assets like in government securities. CBL is investing most of its investment in government securities however NBBL has managed to invest their investment in shares and debentures and other investment sectors.

From this study we can be concluded that the profitability ratios of all three banks NBBL, EBL and CBL, have positive relationship shows the efficiency of the lending. There is positive relationship between loan and advances and net profit. All three banks are successful to mobilize their deposit in proper way as loan and advance. The assets management ratios of all three banks are positive. The mean ratio of loan and advances to total deposit ratio of NBBL, EBL and CBL were $76.75 \%, 74.22 \%$ and $85.63 \%$ respectively. This shows all banks highly utilize the depositors fund to earn profit by providing loan and advances. Investment to total deposit ratio positive average rate shows the mobilization of deposits on investment is satisfactory. The study shows all three banks are emphasizing on investment on private sector rather than government securities. The liquidity ratios of all three banks were more than $15 \%$, it shows the liquidity position satisfactory level. The study shows the growth rates of different components of the NBBL, EBL and CBL are positive level which
reflects the fund mobilization and investment management of bank satisfactory level. The data shows growth rates of CBL is impressive in compare to other two bank. The study shows the co-efficient of correlation between investment and net profit of all three banks has positive value it indicates increase in investment directly increase the net profit of bank. Likewise, the study shows that EBL and CBL have high degree of positive correlation between the loan and advances and net profit of the bank. The increase and decrease of total loan and advances of the bank strong affects the volume of net profit. Similarly, correlation between deposit and loan and advances of both banks has positive value and near to 1.It can be inferred that there is high degree of positive correlation deposits and loans and advances of the bank during the study period. The correlation coefficient (r) between deposits and total investment of the NBBL, EBL and CBL were $0.82,0.787$ and 0.94 and Probable error multiplied by six is found to be $0.58,0.688$ and 0.208 respectively. Since $r>6 *$ P.E. (r), $r$ is positive and nearby 1 .

The trend value of total deposit, loan and advance of NBBL, CBL and EBL have increasing trend which is a good sign for the bank to grow. However, the trend value of loan and advance of EBL is increasing at first and start to decrease after 2018/19. The trend value of total investment is fluctuating figure during the study period. Forecasted value of EBL is highly fluctuating but forecasted value of NBBL and CBL is less fluctuating but is in increasing trend. Similarly, the trend value of net profit is increasing trend with fluctuating rate.

### 5.3 Implications

On the basis of analysis and finding of the study, following recommendations have been made to overcome the weakness and in-effectiveness in the existing investment policies of NBBL, EBL and CBL.
1 CBL has invested its more funds only in government securities so it is recommended that it should invest in other different sector.

2 Profitability ratio of CBL is comparatively lower than other two banks it is recommended that bank should emphasize on strong investment policy in upgrade its profitability.
3 Assets management ratio of CBL is relatively lower than NBBL and EBL it is
recommended that bank should use strong investment policy to increase mobilization of their assets.

4 Growth ratio of loan and advance of EBL is lower than that of other banks so it is recommended that it should increased its loan and advance.
5 All that of banks invested fewer funds in share and debenture of other companies, so it is recommended that they should increase their investment in share and debenture.

6 All banks have invested their funds only in government securities and share and debentures of other companies so it is recommended that they should invest other sector also.

7 The commercial banks have been established gradually after the commercial banks act 2031 B.S. With the passage of time so many commercial banks, as a joint venture, have been established gradually because of the liberal and market friendly economic policy of government of Nepal. But banks should provide some social response by expanding their operation in rural areas rather than urban areas. And banks can give response to poor and disadvantage groups. By establishing the branches in rural areas, minimum amount for opening accounts and interest rate should be reduced for creditors.
8 In the light of growth competition in the banking sectors, the business of the banks should be customer oriented. It should focus not only towards big clients but also towards small clients.

9 Diversification of investment is highly suggested to the selected bank as they have given priority to invest in government securities only. All banks seem risk avoider as they have invested highest amount in risk free securities. Higher the risk higher will be the profit. Hence, all banks are recommended to diversify their investment in NRB bond, govt. non financial institution, other non-financial institution etc.

10 Majority of commercial banks have been found to be profit oriented ignoring their social responsibility, which is not a proper strategy to sustain in long run. So all the banks are suggested to render their serves even in the rural areas providing special loans to the deprived and priority sectors, which might further intensify the goodwill of the banks in future.
11 The Economic Liberalization policy adopted by Nepal government has created an
environment of strict competition even in the banking sectors. In the context, all the banks are suggested to formulate and implement some sound and attractive financial; and non-financial strategies to meet required level of profitability as well as the social responsibility.
12 All three banks should support the social welfare event to promote the business. The bank should formulate new strategies of serving customers in a convenient way.

## REFERENCES

Acharaya, A. (2007). Investment Policy Analysis of Commercial Bank: a Comparative Study of NIBL with EBL and NABIL Bank. Kala Publishers and Distribution, Kathmandu.

Andu, K. \& Kruttli, M.\& Mcabe S. (2018). "The Shift from Active to Passive Investing: Potential Risks to Financial Stability?", Federal Reserve Bank of Boston's Risk and Policy Analysis Unit, Working Paper PRA 18-04, Boston, USA.

Bajracharya, B.C. (2061). Business Statistic, M. K. Publishers and Distribution, Kathmandu.

Bhattarai, B.P. (2018). Impact of Bank Specific and Macroeconomic Variables on Investment of Commercial Banks in Nepal, International Journal of Management and Applied Science.

Bhattarai, R. (1978). Lending Policy of Commercial Banks in Nepal, An Unpublished Master Degree's Thesis, T.U.

Joshi, J.R. (2009). Investment Practices of Joint Venture Commercial Banks. An Unpublished Master's Degree Thesis, T.U., Kathmandu.

Kerlinger, F.N. (1986). Fundamental of Behavioural Research, Vikash Publishing House, New Delhi.

Khadka, R.R. (1998). Study on Investment Policy of Nepal Arab Bank Limited, in Comparison to other Joint Venture Banks Ins. Nepal. An Unpublished Master's Degree Thesis, T.U., Kathmandu.

Kothari, C.R. (1989). Research Methodology; Methods and Techniques, Willey Eastery Limited, New Delhi.
Krishna, C.N.\& Ritchken, P.H. \& Thomson, J.B. (2005).Journal of Finance, Publication of Finance Association.

Manandhar, G.R.(2003).A Comparative Study in Investment Policies of Finances Companies in the Context of Nepal. An Unpublished Master Degree Thesis, Shankar Dev Campus, T.U., Kathmandu.

Muiruri, K.J \& Ngari M.J. (2014). Effects of Financial Innovations on the Financial Performance of Commercial Banks in Kenya, International Journal of Humanities \& Social Science

Pradhan, R.S. \& Yadav, M.P. (2002).Role of Saving, Investment and Capital Formation in Economic Development: A case study of Nepal,Tribhuvan University.

Raya, T.K. (2008). Investment Policy and Analysis of Commercial Banks in Nepal.An Unpublished Master's Degree Thesis, T.U. Kathmandu.

Sharpe, W. F. \& Alexander, K. \& Gordon, J. \& Jeffery V. (2000). Investment, (4 ed.), Prentice-Hall of India Pvt. Ltd, New Delhi.

Shrestha, M.K. (1980). Financial Management, Curriculum Development Center, Tribhuwan University.

Shrestha, S. (1993).Investment Planning of Commercial Banks in Nepal, PhD. Thesis, Tribhuvan University.

Someshwar, P. (2015).An Investment Pattern of Scheduled Commercial Banks in India, National Monthly Refereed Journal of Research in Commerce \& Management, India.

Thirumalia, K.S. \& Chandra, U. (2014), Investment Policy By Commercial Banks, Department of Management Studies, Periyar Maniammai University, Tamil Nadu, India.

Wolf, Howard K. \& Pantha P. R. (2003). Social Science Research and Thesis Writing. Buddha Academic Enterprises Pvt. Ltd: Kathmandu.

## Annual Report:

Annual report of Civil Bank Limited 2014-2018
Annual report of Everest Bank Limited 2014-2018
Annual Report of Nepal Bangladesh Bank 2014-2018
Annual Bank Supervision Report 2014-2018
Monetary Policy FY 2017/18

## Websites:

https://www.nrb.org.np/.


[^0]:    Source: Appendix 9

