Loan Portfolio Management and NPA Analysis of Commercial Banks of Nepal (A Case Study of Everest Bank Limited and Nepal Investment Bank Limited)

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Recommendation
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has been prepared, as approved by this Department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.

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VIVA-VOCE SHEET

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and found the thesis to be original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirements of the Master in Business Studies (MBS)

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Declaration

I hereby declare that the work reported in this thesis entitle **LOAN PORTFOLIO MANAGEMENT AND NPA ANALYSIS OF COMMERCIAL BANKS OF NEPAL (A Case Study Of Everest Bank Limited and Nepal Investment Bank Limited)** submitted of office of the Dean, faculty of Management, Tribhuvan University, is my original work done in the from of partial fulfillment of the requirement for the Master's Degree in Business studies (MBS) under the supervision of Prof. Dr. Khagendra Acharya.

………………..

Sujita Pokharel

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ABBREVIATION

BOK	:	Bank of Kathmandu
CBs	:	Commercial Banks
EBL	:	Everest Bank Limited
FY	:	Fiscal Year
GDP	:	Gross Domestic Product
HBL	:	Himalayan Bank Limited
i.e.	:	That is
LBL	:	Lumbini Bank Limited
Ltd.	:	Limited
NABIL	:	Nepal Arab Bank Limited
NBL	:	Nepal Bangladesh Bank Limited
NBL	:	Nepal Bank Limited
NBL	:	Nepal Bank Limited
NCCBL	:	Nepal Credit and Commerce Bank Limited
NIBL	:	Nepal Investment Bank Limited
NICBL	:	Nepal Industrial & Commercial Bank Limited
NPA	:	Non Preference Assets
NRB	:	Nepal Rastra Bank
NSBIBL	:	Nepal State Bank of India Bank Limited
NSEL	:	Nepal Stock Exchange Limited
RBB	:	Rastriya Banijya Bank
Rs.		Rupees
SCBNL	:	Standard Chartered Bank Nepal Ltd.
T.U.	:	Tribhuvan University

CHAPTER- ONE

INTRODUCTION

1.1 Background of the Study

A bank is an organization, the major function of which is to deal in money and credit. The main business of a bank is to pool the scattered idle deposits in the public and channel it for productive use. It collects deposits and invests or lends to those who are in need of money. Modern day banks exhibit the trait more of a department store with a wide range of financial products to offer. The business of a modern day bank is not confined in borrowing deposits and lending advances only, it performs a host of other financial activities which has immensely contributed to achieve industrial and commercial progress of every country. Banks undertaking business with the objective of earning profits are commercial banks. Commercial Bank Act 1974 defines a commercial bank: ' A commercial bank means a bank which deals in exchanging currency, accepting deposits, giving loans and doing commercial transactions.' Commercial banks can be of various forms such as Deposit Banks, Saving Banks, Industrial Banks, Mixed Banks, Exim Banks etc. Commercial banks render a variety of services. In the absence of commercial banks, it will be impossible to meet the financial needs of the country.

Functions of commercial Banks: Primary Functions

1. Collect deposits in various types of accounts.
2. Provide credit in the form of various loans, overdraft, and co-financing to industry, commerce, agriculture, export and service.
3. Remit funds.

Subsidiary functions

1. Invest in government securities, treasury bills etc.

2. Deal in foreign exchange.

3. Provide agency function such as collection of cheques, bills, promissory notes etc.

4. Execute standing instructions such as payment of rent, insurance premium, income tax etc. on behalf of their customers.

5. Involve in collection of dividends and interest on shares and debentures.

6. Purchase or sale of securities.

7. Act as trustee when so nominated.

8. Act as a customer's correspondent or representative in dealing with other banks.

9. Underwrite shares floated by government bodies and public bodies.

10. Supply trade information and statistical data. Involve in LC and guarantee issuance, purchase or sale TC and Circular Notes etc.

11. Act as a referee with regard to the financial status of customers.

Bank is considered as the backbone in the development of the national economy. Financial institutions or banks are an integral part of the national financial system that functions on a continuous basis in the open social system. The basic mission or objective of every financial institution is to move scarce loan able funds from those who save to those who borrow to buy goods and services and to make investments in new equipment and facilities so that the national economy can grow and increase the standard of living enjoyed by its citizens. The name commercial implies that banks of this kind devote most of their time and resources in meeting the financial needs of the customers.

Commercial banks furnish credit to finance consumption and investment spending. Credit consists of a loan of funds in return for a promise of future payment. Basically, the principal business of commercial banks is to make loans to qualified

borrowers or at least to assist them to find credit from some other sources. Loans are among the highest yielding assets that a bank can add to its portfolio, and they often provide the largest portion of traditional banks' operating revenue. Therefore, the most challenging areas for the management of a commercial bank come in making new loan and managing those loans already on the books. This challenge arises because for many lending institution, as mentioned earlier, loans are their number one assets, and principal revenue source. Moreover, most of the bank's risk is concentrated in the loan portfolio.

1.1.2 Principle of Portfolio Management

There is always present of risk factor in loans and advances because every extended loan cannot be guaranteed of repayment. A bank should always maintain proper mixture of various natures of advances to minimize the risk of non repayment. A bank should extend its advances to various customers in various sectors of lending. This is to be noted that each sector has different capacity of loan repayment. This brings positive impact on minimization of credit risk. Bank should give proper attention to loan portfolio management to mobilize their capital thus minimizing the risk[1].

Keeping this in view Nepal Rastra Bank (NRB) has issued directive on Single Borrower Obligor Limit. As per the NRB directive No. 2:

A, B and C class licensed institutions may extend to a single borrower or group of related borrowers the amount of Fund Based loans and advances p to 25 percent of the Core Capital Fund and Non Fund Based off-balance sheet facilities like Letters of Credit (LC), Guarantees, Acceptances, Commitments up to 50 percent of its Core Capital Fund. Fixation of limit on credit and facilities to single borrower shall be made on the basis of Core Capital Fund as per the latest quarterly balance sheet certified by the Inter Auditor

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[1] Thapa B.B *Risk Asset Management,* Paper presentation at Everest bank Limited Biratnagar 2006, P 4

of concerned institution. The Fund based and Non-Fund based facilities are separate and accordingly the single borrower limit shall not be calculated by aggregating the both. For this purpose, the definition of Core Capital shall be as defined in the directive of Nepal Rastra Bank relating to capital fund[2].

The definition of the core capital includes the following balance sheet items:

a.   Paid Up Capital
b.   Share Premium
c.   Irredeemable Preference Share
d.   General Reserve Fund
e.   Accumulated Profit and Loss Account
f.   Capital Redemption Reserve
g.   Capital Equalization Reserve
h.   Other Free Reserve

The following items shall be deducted for calculation of Core Capital:

a.   Goodwill
b.   Excess amount of Investment in shares and debentures of organized institutions than prescribed by Nepal Rastra Bank.
c.   Entire amount of investment made in shares and debentures of organized institutions having a financial interest.
d.   Fictitious Assets.

1.1.3 Concept of Non-Performing Assets

Before we understand what Non Performing Assets (NPA) is, first of all we must understand what is Performing Assets? Loans and advances dominates the assets side of balance sheet if any commercial banks. Similarly earning from those assets occupies major space in income statement of the banks. Thus performing assets are those loans

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[2] Nepal Rastra Bank, *Directive No.2 dated 2005/06,* Nepal Rastra Bank, Kathmandu Nepal.

and advances that repay the interest as well as principal from the cash flow it generates[3]. Banks extends various types of loans depending upon the nature of requirement. For working capital financing banks may extend working capital facility and for acquiring fixed assets term loans can be provided. The borrowers must pay back the accrued interest as well as outstanding principal from the cash flow generated from the loan they have invested. However in few cases customer willingly or unwillingly fails to timely pay back the interest and principal to the bank. Since those assets are not giving any kind of return to the bank, those assets will be categorized under NPA.

Reduction of NPA has always been a significant problem for every commercial bank. Proper attention for the management of the NPA now has got the top priority. NPA has severe impacts on the financial institutions. On the one hand the investment becomes worthless as expected return cannot be realized and on the other hand due to the provision required for the risk mitigation the profitability of the bank is directly affected[4]. It is very important to be reminded that most of the banks failure in the world is due to shrinkage in the value of the loan and advances. Hence, loans are the risky assets. Risk of non- payment of loans is known as credit risk or default risk.

1.2 Objective of the Study

The main objective of the study is to analyze the loan management adopted by the sample bank with a view to provide workable suggestion which may be helpful to the formulation of lending policy. However, the specific objectives can be set as follows:

The main objectives of the study are:

1 To evaluate the status of the loan portfolio management of EBL and NIBL.

2 To evaluate problems and weakness of credit portfolio management of EBL and NIBL.

3 To evaluate the non performing assets of EBL and NIBL.

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[3] Sinkey, Joseph F, *Commercial Bank Financial Management*, Prentice Hall, New Jersey, USA 1998 P.17

[4] Ibid.

1.3 Focus of the study

Nowadays, almost all of the commercial banks currently operating in the kingdom have a written loan policy to individual loan decisions and shape their loan portfolio. A good written loan policy will contain a statement of the institution's goals, spell out who has authority to make loans, describe what procedure is to be followed in soliciting and evaluating each loan request and specify what documents must accompany a loan application before it is approved. A written loan policy might let the public to have financial services in an equitable manner.

Commercial banks generally look in to a number of things about the prospective borrowers before reaching at a decision to grant a loan. Banks analyze all those relevant aspects regarding the credit status of borrower through a number of formal and informal ways. Such analysis may include things like past payment records, (if the borrower has received any credit services before), cash flow or income (measured against debt and expenditures), collateral (accessibility, liquidity, and possession of the collateral), and condition of the respective industries, and economy as whole. In addition, they also prepare a maturity and repayment schedule that should protect lender and meet the borrowers' financial needs.

Along with these above mentioned newer and innovative credit services offered by the commercial banks, there is a growing concern today that business loans, particularly of the recreational variety, have become more risky for banks due to higher default rates. Being more specific, it is told that nation's largest industries are owned by a handful of entrepreneurs, and it's obscure that some of these industries are not functioning well. In such a situation, there should be a proper co-ordination and communication among the banks and the industries. However, conversely, these entrepreneurs are doing unfair with the banks. For instance: they receive the loan for one

purpose and use it for another purpose. Further, some do not make the required payment, and some paying borrowers also do not make it timely.

Naturally, banks should have the effective instruments to take necessary actions against these wrongdoing borrowers, but in reality things do not sound like that. Instead, there exists a sort of communication and co-ordination gap among the concerned government organs, and the commercial banks. Some believe that this issue could be ratified as government's unwillingness toward banks' any tough actions against the wrongdoing borrowers, as dissolving such large industries may affect national economy directly or indirectly. In addition, it's also heard that the other bank has also accepted the same collateral kept as a security by a bank as well. In relation to these aspects, bankers believe that's why the two government-owned giant banks still possess about sixty percent of their Non-Performing Assets (NPA), even after the management was handed over to the foreign experts.

Therefore, in order to prevent the upcoming disaster in the banking industry, and the financial system as a whole, bankers and the concerned government organs must work together effectively and efficiently. The central bank should establish a strong credit information system with the banks, and it should formulate and implement the sound effective and efficient regulatory and supervisory system to make banking system effective. In addition, bankers must realize the necessity of closely examining the quality, not just the quantity of their loans. Problem loans reduce bank loan revenues, raise operating expenses, and force bankers to examine their relationship with customers, redesign and renegotiate the terms they are offering on loan contracts, and ultimately invites the foreign consultants to sort out the problems.

Loan should be efficiently managed and controlled. If loan is not efficiently managed, it can cause inflation or deflation, recession and unemployment in the economy. Misleading of loan management can lead to misallocation of the available

resources and the economy is poorly concentrated amongst certain persons and against the social objective.

The banks take almost care in analyzing the creditworthiness of the borrowing customer to ensure that the interest and the principal amount on loans are timely recovered without much trouble and legal process for the recovery. A sound lending policy is essential for the good performances of the bank. Lending policy should be carefully analyzed and the banks should be careful while performing its credit creation effectively and to minimize the risk factor.

Since loan management is not satisfactory and its being a national issue and so to contribute towards the topic among several topics, the loan management topic is selected for the study. Thus the study aims to focus on the comparative loan management of the joint venture banks namely, Nepal Investment Bank and Everest Bank ltd.

1.4 Statement of the Problem

Loan management is the essence of commercial banking; consequently the formulation and implementation of sound lending policies are among the most important responsibilities of directors and management. Well conceived lending policies and careful lending practices are essential if a bank is to perform its credit function. Loan management affects on the company's profitability and liquidity so it is one of the crucial decisions for the commercial banks.

The need of financial resources in a developing country like Nepal is essential for the economic development of country. All the sectors from industrial and commercial to agriculture and infrastructure are in need of financing. Although the growth of industrial loans has not been encouraging in the recent years, there is sizable growth in the commercial and other short-term credits. Commercial banks are focusing loans on consumer loans like housing, vehicle, education loan etc. It is encouraging to explore new sector for loan management but it should also be considered that industrial loan should be given prime importance as the economy largely depends on this sector.

Lending policies are not systematic and no clear cut vision of policy is available on lending aspect. In Nepal it has been found that approval and lending decisions are made flexible to favor the personnel networks also. A new customer finds the loan

providing process being very complicated and sometimes the documents submitted for loan sanctioning being fraudulent and for formality purpose only.

In this perspective following are some problematic aspect of the study noted for the analysis:

i.   How effectively is the lending policy of selected sample bank being followed?

ii.   Whether the trend of the deposit and loans of the commercial banks are satisfactory.

iii.   How the sample bank measures the liquidity position and impact of deposit on liquidity?

iv.   What is the portion of lending between consumer and industrial loan?

v.   How the bank measures the lending performance in quality, efficiency, and contribution to profitability.

1.5 Significance of the Study

There are few researches done in loan management of commercial banks. Loan management is one of the most important aspects of a bank. In the economy of a country like Nepal, most portion of a bank's income comes from the interest, and commission generated through the lending and investments. Such conception to carry out the proposed study is believed to facilitate the achievement of the selected objectives successfully. The study on analysis of loan management of the chosen selected banks would be beneficial to the shareholders, banking professional, investors, teachers and students of banking management. Borrowers are the fund seekers in the economy who are believed to be involved in the economic transactions. They can receive the advantages from the study as well by acquiring the information about the brief procedures required by the banks before granting a loan request.

This study focuses in the qualitative measurement of the selected bank. Similarly, the finding of the study will equally be important to those who are interested in knowing about this particular bank. Last but not the least, it will provide relevant and pertinent literature for future research on the area of loan management of banks. Those related issues such as the percentage of NPA held by the commercial banks, diversification of their loan portfolios, in relation to the loan portfolios management strategies of the banks and challenges and benefits that arises due to the entry of Foreign Bank Branches in Nepalese Financial Sector might facilitate to advance the study ahead.

1.6 A Brief Profile of the Banks

In the initial period capital of the both banks are shown in the table.

Table1.1

Capital Structures of NIBL   and EBL

Capital	NEPAL INVESTMENT BANK Limited	EVEREST BANK Limited
Authorized capital	Rs.60000000.00	Rs.240000000.00
Issued capital	Rs.30000000.00	Rs.120000000.00
Paid-up-capital	Rs.30000000.00	Rs.120000000.00
Par value	Rs.100.00	Rs.100.00
Paid-up-value	Rs.50.00	Rs.50.00

Source: Nepal Stock Exchange.

1.6.1NEPAL INVESTMENT BANK (NIBL)

Nepal Investment Bank is the first joint venture bank established in partnership bank with Dubai Bank of Dubai. It was established on 12th july 1984. the bank had initiated it business with authorized capital of Rs 60 Million and paid up capital of mere Rs 30 Million. The net worth of Bank by mid july 2005 was Rs 1658 Million. NIBL   international foreign partner holds 50% ,Nepal stock exchange holds 0.33% ,Rastriya Beema sasthan holds 9.67 and the general public holds 30% . Nepal Investment Bank is

one the leading joint venture banks of Nepal. The share holding patterns of bank is as follows:

Foreign partner	:	50%
NIDC	:	10%
Nepal stock exchange	:	0.33%
Rastriya Beema sasthan	:	9.67%
General public	:	30%

The bank's business policy seems to extend quality and personalized services to its customers as promptly as possible. In order to meet the changing customers' needs and requirements, bank has adopted newer and innovative banking technology. They believe they are treating their customers with utmost courtesy as valued clients.

The recent statistics published by central bank shows that the bank has made investment of Rs 5,144.4 million, and loans and advances of Rs 15,516 million for which it has maintained a loan loss provision of 23.7 million and non performing loan is 978.69 million rupees. Similarly, the net operating profit is Rs 513.8 million.

1.6.2 EVEREST BANK LTD(EBL)

Everest Bank limited(EBL) was registered under company act 1996 in 19th November 1993. And started banking transaction in 18th October 1994. this is the joint venture bank with Punjab national bank of India and Nepalese promoters. A team of professionals departed by Punjab national bank under the technical service agreement manages it, and managing director is the executive director depute by PNB. Under the technical service agreement manages it, and managing director is the executive director dispute by Punjab national Bank. Under this arrangement. Now the bank has 30 branches including main branch (i.e. head office in Nepal.

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An authorized capital of the bank had been Rs 240 million. Issued of Rs 120 million and paid up capital of Rs 117.5645 million in the beginning of the year 1994\1995.

The shareholding structure comprises of:

- Punjab national Bank holding 20% of the capital.

- Nepales promoters holding 50% of the capital.

- The general public holding 30% of the capital.

Strategic Objectives:

- To develop a customer oriented service culture with special emphasis on customer care and convenience.

- To increase market share by following a disciplined growth strategy.

- To leverage technology platform and open scalable systems to achieve cost-effective operations, efficient MIS, improved delivery capability and high service standards.

- To develop innovative products and services that attracts targeted customer and market segments.

- To continue develop products and services that reduce cost of funds.

- To maintain a high quality asset portfolio to achieve strong and sustainable returns and to continuously build shareholder's value.

- To explore new avenues for growth and profitability.

1.7 Limitation of the Study

As the study is being carried out in a partial fulfillment of the requirements for the degree of Masters of Business studies, it possesses a number of limitations of its own kind.

We have limited resources and it may be difficult to explore researches to find out new aspect. Reliability of statistical tools used and lack of research experience are the major limitations and some other limitations can be enlisted as follows:

   i.   This research is limited to the lending aspect mainly with the loan and advances only.

  ii.   The secondary data are used to analyze for result interpretations, so the accuracy of the finding depends on the reliability of available information.

 iii.   To some extent, the data published on the website of related banks will be taken.

  iv.   Due to time and resource factor only two commercial banks are taken for the study. The study covers the time period of 2001/02 to 2007/08 year that is only seven years data are taken into account due to time and cost constraint.

   v.   Simple statistical techniques have been used in the analysis for the period 2003/2004 to 2007/2008 year.

  vi.   Limited variables have been selected.

There could be many factors affecting loan management decision. However only those factors related with lending policy will be considered in this study.

1.8 Organization of the Study

This study has been organized into five chapters, each devoted to some aspects of loan management of joint venture commercial bank. The titles of each of these chapters are summarized and the contents of each of these chapters of this study are briefly mentioned here:

Chapter-I: Introduction

Chapter-II: Review of Literature

Chapter-III: Research Methodology

Chapter-IV: Data Presentation and Analysis

Chapter-V: Summary, Conclusion and Recommendations.

This first chapter deals with the subject matter consisting introduction, a brief profile of the banks, focus of the study, statement of the problem, objective of the study, significance of study, limitations of the study and chapter scheme of the study.

The second chapter is mainly focused with literature review that includes a discussion on the conceptual framework on loan management and review of major-studies relating with lending decision.

The third chapter describes the research methodology used to conduct the present research. It deals with research design, sources of data, data processing procedures, population and sample, period of the study, method of analysis and financial and statistical tools.

The fourth chapter is concerned with analytical framework. It includes the analysis of financial indicators, analysis of mean, correlation coefficient, regression analysis, trend analysis and financial analysis.

The fifth chapter includes the major findings and conclusion of the study which deals about the main theme of study and comparison of lending policy of the banks with recommendation for improvement of loan management of the selected banks.

The bibliography and annexes are also incorporated at the end of the study.

CHAPTER-TWO
REVIEW OF LITERATURE

Review of literature means reviewing research studies or other relevant proposition in the related areas of stiff so that all the past studies, their conclusions and deficiencies may be known and further research can be conducted. It is an integral and mandatory process in research work.

Research is a continuous process. The procedure of finding may change but it never ends. In literature review researcher reviews the books, journals magazine or any other type of studies, which are related to his/ her field study in order to analyze the data and to finding something new. Review of literature further helps to identify the problem to avoid unintentional replication of previous studies and also helps us to interpret the significance of researchers results in precise manner.

This chapter deals with theoretical aspect of the topic on "risk and return analysis of common stock investment in Nepal" In analytical and descriptive manner. Various journals, books and articles thesis of seniors, some research report related with the topic have been reviewed in this chapter.

According to J.B Shrestha[5] In this study he has pointed out some important trends to our capital market. He has mentioned in his article many unbalanced factors like political instability etc. are the main cause of decreasing share price. According to him current share price is on declining process. The fluctuation in NEPSE is due to availability of bonus, dividend etc. when we analyze our stock market we find that all the component of the market are lame, weak and investment and booker organization

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[5]Shrestha, J.B., 1992, *Nepal Ma Uydhog Vikash Ek Bibechhana* Kathmandu ISC and NIDC P-20-30.

is also unqualified and is a one- man show. In addition to this board always favors companies and not the investors.

Company and another acts relating to financial and industrial sector have provisioned rights of the shareholders as:

> ➢ Participation is general meeting.

> ➢ Right of getting information.

> ➢ Electing as a board of director.

> ➢ Participation in the profit and loss of the company.

> ➢ Transferring shares.

> ➢ Proxy representations.

The collective right of the shareholders is:

> ➢ Amend the internal by laws.

> ➢ Authorize the sales by laws.

> ➢ Enter to merger.

> ➢ Change amount of authorized capital.

There are many companies, which conduct the annual general meeting just to fulfill their desires and do not consider the voice of the majority of the shareholders. Similarly, managements involvement and governments intervention in the board election have brought a greater set back in the voting rights of the shareholders.

The article published in journal of finance on the title of "excepted return, realized return and asset pricing tests" is also relevant in this research. In this paper the writer has mentioned, "almost all of the testing I am aware of involved using

realized returns as proxy for excepted returns relies on a belief the information surprises trend to cancel out over the period of over the period of a study and realized returns are therefore an unbiased estimate of except return s. however, I believed that here is ample evidence that is belief is misplaced. There are periods longer than 10 years during which stock market realized returns are o average less than the risk free rate (1973to 1984).there are periods longer than 50 years in which risky long- term bonds on average under perform the risk free rate (1927 to 1981). Having a risky asset with an excepted return above the risk free rate is an extremely weak condition for realized returns to be an appropriate proxy for excepted returns and 10 and 50 is an awfully long time for such a week condition not goes be satisfied. In the recent pass united states has had a stock market return of higher than 30 percent year while Asian markets have had negative return".[6]

Finance from the investor's perspective is explained as; investors whether they are individual or institution such as pension funds, mutual funds hold portfolio that is they hold collection of different securities. Much of the innovation in investment research over the past 40 years has been the development of a theory of portfolio management, and his module is principally an introduction to those new methods. It will answer the basic question of what rate of return will investors demand to hold risky securities in their portfolio. To answer this question we first must consider what investors want how we define return and what mean by risk.

The article,' local return factors and turnover in emerging stock markets by K.Greet Rrouwenhorst is also relevant to this study.[7] This paper examines the sources of return variation in emerging stock markets. Compared to the developed markets

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[6] Edwin .J. Eltion, 1999, *Expected Return, Realized Returnand Assest Pricing Test*. Journal of Finance.P-30
[7] K.Greet Rrouwenhorst, 1999, *An Introduction to Introduction Theory, Where do Beats Computer From*? Mass: Yale School of Management. P-20

the correlation between most emerging markets and stock market has been historically low and until recently many emerging countries restricted investment by foreign investor. He attempts two sets of question to answer by his solution. Many emerging marks have firms with multiple shares classes are treated as single value weighted portfolio of the outstanding equity securities. He concludes that the return factors in emerging markets are qualitatively similar to these in developed markets. The low correlation between the country return factors suggests that the premiums have a strong local factor portfolio have increased, which suggest that factors responsible for the increase of emerging market country relation are separate from those that drive the differences between excepted return market shows that, unless one has stronger prior beliefs to the country, the empirical evidence factors the hypothesis that size, momentum and values strategies are compensated for excepted returns around the world. Finally the paper document the relationship between excepted return and share turnover examines the turn over characteristic of the local return factor portfolio. There it's no evidence of a relation between excepted return and turnover in emerging market. However, beta, size, momentum and value are positively cross section ally correlated with turnover in emerging markets. This suggest that the return premium don't a simply reflects compensation for liquidity.[8]

In the study the writers further added, "Of particular important is why this can occur in a seemingly efficient capital market. A natural objection to all candidates put forward to explain asset returns is that, with the exception of systematic risk, the actions of arbitrageurs should remove any such proposed influence on the market while this may be accurate for some factors, we do not believe that it is accurate with respect to asymmetric information. In a world with asymmetric information, a

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[8] K.G. Rouwenhorst , 1999, *Local Return Factors and Turnover in Emerging Markrts*. The Journal of Finance, Vol. LIV No 3 P-20-30

uniformed investor is always at a disadvantages cans result in the uniformed trader's portfolio holding too much of the stock; in good times the traders portfolio has too little of the stock. Holding many stocks cannot remove this effect because the uniformed do not know the proper weights of each asset to hold. In this sense, asymmetric information risk is systematic because, like market risk, it cannot be diversified away". Thus, this paper shows that the information is important factor while estimating the stock price and its return.

Some studies related to the topic of risk and return has been conducted for the fulfillment of master degrees in T.U. in this study only relevant subject matter are reviewed, which is as follows:

Gopal Prasad Bhatta (1995) has conducted a thesis in the title of "Assessment of the performance of listed companies in Nepal "[9]. In this topic Mr. Bhatta studies the performance of listed companies with reference to analyze risk and return, systematic risk and diversification of risk through portfolio context of the listed companies.

He concluded that Nepalese capital market is not efficient and Nepalese investors have not yet practiced it invest in portfolio of securities. Market risk and return have not represent reality, as stock price does not contain all the information relating to market and company, neither investor analyzes the overall relevant information of stock nor does the member of stock exchange try to disseminate the information. The analysis shows that most companies are facing problems of unsystematic or specific risk. It was observed that Nepalese stock market required except institutions for consultancy services to the investors to maximize their wealth through rational investment decision.

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[9] Bhatta, Gopal P. 1996, *Assement of the performance of Listed Company in Nepal*. Unpublished Master's Thesis, Central Department of Management, TU . Kritipur, P- 55

Jeet Bhahadur Sapkota[10] has conducted a research in 2000 in entitled "risk and return analysis in common stock investment". The main objective of the study is to analyze the risk and return of the common stock in Nepalese stock market; the study is focused on the common stock of commercial banks.

In his, banking industry is the biggest one in term of market capitalization and turnover. Excepted return on the common stock of Nepal bank Ltd. Is maximum (i.e.66.99%) and CS of Nepal SBI bank ltd. Was found minimum. in this regard CS of NBL is the most risky and CS of NBS is least risky. In the context of industries, excepted return of finance and insurance is found highest. Excepted return of banking industry is 60.83%.

Rana Kusum Gautam (2000)[11] conducted a thesis entitled "investment analysis of the finance companies in context of Nepal". He concludes that few finance companies have aggregated investment strategy as compared to most of the flowing conservative strategy. The main art of their lending was on consumer demands through hire purchase and housing financing. She has recommended a series of reforms such as consolidation of finance companies good relationship between finance companies, commercial banks, directing attention to venture capital financing appropriate risk and return off by linking credit to timely repayment schedule avoiding imperfections, allowing flexibility in lending, one window service from NRB, diversity scope of activities to see for finance companies, professional cultural with in finance companies are necessary to ensure better performance of the companies.

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[10] Sapkota, J. B. 2001 , " *Risk and Return Analysis in Common Stock Investment of Insurance Companies*" Unpublished Master's Thesis, Central Department of Management, TU. Kritipur,P-39

[11] Rana Kusum Gautam, 200 , *" Investment Analysis of the Finance Companies in Context of Nepal*" Unpublished Master's Thesis, Central Department of Management, TU. Kritipur,P-39

Pramina Panday (2000),[12] in her thesis paper, "risk and return analysis in common stock investment" concludes that among all the securities common stock is known to be most risky security. Higher the risk, higher will be the return. Most of the investors are attracted to common stock security because of its higher return."

As for the investor, it is important to analyze each investment, comparing potential return with the risk. In average potential returns from an investment should compensate for the level of risk undertaken. If proper allocation of asserts is performed it can reduce risk and even be eliminated if well diversified.

Parmila Tuladhar [13] conducted a thesis entitled " a study on risk and return analysis of common stock". The main objective of her study is to analyze risk and return of the common stock and their portfolio as well as to access the past and present state of investment of common stock. She has included 11 companies in her study out of 115 listed companies in NEPSE. She has selected 2 companies from banking sector, 2 from insurance and finance, and 1 from others. She has found out that Bangladesh bank is highest in return where as that of Bishal Bazaar Company is lowest. On it return is high in the beginning years but it is declining in recent years. Unilever (Nepal lever) limited is the most risky and Bishal Bazaar Company is the least risky. Nepal Bangladesh is best for investment as it has low CV where as yak and yeti hotel ltd. has highest CV. In her finding among 11 selected companies the excepted return of bank sector is trading sector is lowest.

Among the various review of journals pertaining to the study, the one contributing greatly to the study has been outlined below.

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[12] Pandey, Pramina 2000, *"Risk and Return Analysis of Common Stock Investment"* Unpublished Master's Thesis, Central Department of Management, TU. Kritipur,P-40

[13] Tualadhar, Parmila 2003 *"Risk and Return Analysis of Common Stock Investment*" Unpublished Master's Thesis, Central Department of Management, TU. Kritipur,P-40

Nepal Rastra Bank,[14] as a regulating and supervising authority, is keeping tight vigil in the banking industry through issuing directives. Off-site supervision is being carried out on the basis of regulatory reports submitted by banks. Through this, early warning system (EWS) is developed and that model attempts to estimate the likelihood of failure or financial distress over a fixed time horizon. Besides this, on-site supervision and CAMELS rating provide in-depth knowledge for the detection of financial position of banks. Nepal Rastra Bank is using various mechanisms to assess the financial status and trying its best to fulfill needs of considerably increasing regulatory and supervisory role. As an apex institution of financial sector, it has made every effort to establish healthy, strong and sustained financial market.

Despite the efforts of NRB and with the complexities arising from rapid growth of financial sector, the Nepalese financial system has been facing troubles. In the system, the two commercial banks, government and semi-government owned, account majority of the financial market. They have had wider network in almost all districts in the past and still as well. But these banks had been gone through ill practices of banking norms due to various factors in the past and then, started to experience hard- hitting days with the increased competition right from the adoption of liberal policy. Some of the private sector banks have also failed in adopting modern banking cultures and such various lapses led them towards problem after the short period from their establishment.

All the said banks were found problematic due to the combination of various factors. But problems with credit have become common in majority of the case. Credit management could not be seen sufficiently robust to prevent poor lending practices, excessive loan concentration, excessive risk taking and overriding existing

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[14] NRB,2003 *Banking and Financial Statistics* Volume no 41:68

policy and procedures. As a result quality of assets started to deteriorate, profitability ratio reduced, liquidity crunched, capital position deteriorated and finally turned to problematic. Apart from these there were other contributing factors that led some other banks to expose in the high-risk category and ultimately failed to discharge their function. The degree of exposure might have varied from institution to institution, but these all had created alarming situation in the industry.

According to Mr. Rajaram Khadka[15] in his article " A Study in Investment Policy of Nepal Arab Bank Ltd in Comparison to Nepal SBI Bank Limited," reveal that the mushrooming growth of financial institutions beyond market capacity is harmful in connection with competition, quality lending, and compliance of NRB regulation and in terms of other financial disorders. In Nepalese market where corporate sector is limited, the business situation is deteriorating day by day. No one is interested to take risk for investing fund in any new sector. As a result, the commercial banks have very limited business ground to play. In this backdrop, it is obvious that the possibility of involvement in dirty competition, avoidance of central bank's regulation and inferior lending would be high.

In small market, normally there are handful corporate houses, which have high bargaining power at the time of financial dealing with the banks. Generally the bankers come under the influence of these houses so deeply that make them to ignore the systematic credit analysis before funding. Why it is because all the banks want to invest their fund among the top business groups any how as if their business never goes down.

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[15] Khadka, Raja Ram ,1998, *A Study in Investment Policy of Nepal Arab Bank Ltd in Comparison to Nepal SBI Bank Limited*, An Unpublished Thesis, Shankar Dev Campus, T.U. P 50

Of late the Nepalese financial institutions, besides a few of them, are suffering from the traditional malignancy of "WWW" concept of credit analysis and that have been the major factors to influence any credit decision. The WWW means, WHO are the promoters behind the business? WHAT is the value of collateral? And under which group does the business fall? Should any valuable project that does not fall under any one of three 'W', come across the bankers, it may not be considered as good as that. The project either it is profitable or high potential, may be worthless for the bankers just because of not falling under their three 'W' criteria. This concept almost discourages to the new talents of business sector and is a hurdle of development. Is this practice called a good Credit analysis in real sense? Certainly not, but the above factors cannot be ruled out at the time of analysis This procedure of credit analysis creates high risks to the financial institution but gives benefit to those business houses who have their own name in the market. Similarly it would not be helpful to expand the business area due to financial barriers for new comers.

The lending portfolio of the bank will also be high within the limited business groups that certainly increase the concentration risk of the bank. Beside some commercial banks, almost all others more than 75% lending goes among top groups. This is in fact nothing but a name lending which does not scan business virus. And this is not only harmful for the lender but also for the business houses in the long run.

According to Surendra Man Pradhan[16] in his article "'Responsibilities and Challenges in the Regulatory and Supervisory Role of NRB" has stated that the internal factors like poor credit culture, lack of oversight at policy level, lack of competencies in the board of directors to monitor risk, limited supervision by the bank itself and weak internal control system in the bank, insider abuse and fraud in

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[16] Pradhan Surendra Man 2008 *Responsibilities and Challenges in the Regulatory and Supervisory Role of NRB* NRB, Baluwatar, Kathmandu, P 78

lending and recovery and lack of good corporate governance has been found to be the key reasons behind the increase of NPAs in the banks. Similarly other external factors contributing towards NPL can be quoted as deterioration in economic growth rates and activities since last few years, poor regulative and supervisory capacity of the central bank in the past, security problems and conflicts in the economy and lack of judicial support to the banks in recovery process. It has been observed that small and medium size borrowers do not have influence over elite groups of the society. Relatively they are honest and have fear of bank's action against non-payment of loan.

Accordingly they do not have enough fund to cover the court fees and solicitation cost whereas big borrowers have tried to influence the cases and banks through court orders. Lack of financial discipline within borrowers, lack of corporate culture, diversion of borrowed funds, poor legislative regime in the system specially governing financial system and poor implementation issues, lack of Bankruptcy law, lack of commitment on enforcement action on the part of NRB and GON, lack of effective and professional Notary public office in order to eliminate problems associated with bills purchased, lack of secured transaction office to register movable properties, lack of credit rating agencies facilitating the rating risk grades, lack of asset management corporation assisting the financial institutions to manage the distressed loans and lack of other financial advisory services.

Radhesh Pant[17] (President-Nepal Banker's association and CEO-Bank of Kathmandu) explains: The commercial banks in Nepal lack appropriate procedure and policies to properly manage their NPA's. A rule-based approach which is generally followed by many Nepali Commercial Banks precludes reasonable

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[17] Interview with Radhesh Pant Publication In Kantipur 2008 Bhadra 26

application of mind. Evaluation of project idea and management is something that most of the banks are least equipped for. This has lead to bank acting too liberal on all projects insisting on collateral from everyone without taking into consideration any other competencies of the entrepreneur. Constant monitoring of major economic indicators which bear direct impact on the business is another area which is completely overlook by Nepali commercial banks. Banks with high NPAs' have not been able to properly assess the impact of economic indicators on the growth and sustainability of the business.

Nepal is over banked. Aggressive lending as well as large exposure of the financial sector to real estate could harm the financial health of the country, warned a visiting International Monetary Fund (IMF) team led by Brian j Aitken, Deputy Division Chief of IMF's Asia and Pacific department.[18]

"There are 160 deposit taking institutions. Aggressive lending practices of many of these institutions expose depositors to excessive risk. This underscores the urgency of significantly ramping up Nepal Rastra Banks' (NRB) regulatory enforcement," Aitken said that NRB may find it tough to supervise the increasing number of financial institutions. "NRB's supervisory capacity has to be increased," he added.

IMF has also shown serious concerns over the rapidly growing real estate price. "The biggest short-run concern is rapidly growing real estate price. Given the large exposure of the financial sector to real estate, a decline in real estate prices would have negative effects on banks and ultimately on output growth," said the IMF team

The IMF blames the loose monetary policy for this development in the real estate market. "Development in the real estate market has been fuelled in part by a

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[18] Brian j Aitken in article publication in Nepal Rastra Bank Samachar, 2066 P 147

loose monetary policy," IMF said. "However, NRB recognizes the risks and has recently taken some modest steps to tighten monetary policy but more tightening may be needed.

The Central Bank has announced a cautious Monetary Policy-that was a regular Seventh Policy- for the fiscal year 2008-09 on September 29. NRB has claimed that it has brought a rigid Monetary Policy that has increased the cash reserve ratio (CRR) by half a percentage point to 5.5%. The CRR has been 5% since 2004.

CHAPTER- THREE

RESEARCH METHODOLOGY

Research methodology depends on the various aspects of the research project. The size of the project, the objective of the project, impact, importance of the project, time frame of the project, impact of the project in various aspects of the human life etc. determine the research methodology of the particular project.

This chapter is designed to reflect light on the methodology used to undertake this research which aims at studying and analyzing the lending aspect of the selected commercial banks i.e. NIBL and EBL.

In the very first two chapters, the researcher establishes a way for research topic and reviewed the research of the former researcher. During this chapter the tools, methods, and procedure for entire research work would be decided and application of same would be determined. In this stage the researcher actually gathers the information that is required to decide the research, determine the sources of data, and determine the period of study, determines the data processing procedures, determines the financial and statistical tools, and think logically about presentation of the so collected information in an attractive and conclusive manner. Research methodology is the process to solve the research problems systematically.

Research methodology refers to various sequential steps to be adopted by the researcher in studying the problem with certain objectives in view. Therefore this chapter deals with the following aspects of methodology:

- Research Design,
- Population and Sample,

- Sources of Data,

- Data Collection Procedure,

- Data Processing, and

- Analytical Tools.

3.1   Research Design

Research design is planned structure and strategy of investigation conceived to obtain answer to research objective through analysis of data. The first step of the study is to collect necessary information and data concerning the study. Therefore, research design means the definite procedure and technique, which guides the study and propounds ways of doing research. In this way a descriptive and analytical survey will be done. The justification for the choice of these methods is preferred because it includes reliable data and information covering a long time and avoids complex variables.[19]

The research covers the two major joint venture commercial banks in Nepal particular in their loan management practice. The research has its basic objective to figure out the problem there in and provide them with some recommendation. The literature has been reviewed specially from the past thesis conducted and the same aspects of the commercial banks. The data for the research are of secondary types. The research is designed to conduct approximately within 60 working days.

Suggestions from the guide, teacher as well as other faculty member have been incorporated in the research study to make it more attractive and impressive.

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[19] Joshi, P.R. 2002, Research Methodology, 2nd Edition, Kathmandu, Buddha Acemadic Publisher and Distributor Pvt Ltd p-56

3.1.1 Sources of Data

The data presented in the study are of secondary type. The annual reports of the concerned banks are the major sources of the data for the study. However, besides the annual reports of the subjected banks the following sources of data shall also be used in the respective corner of the study.

1. NRB reports

2. Various publications dealing in the subject matter of the study

3. Various articles published in the News papers

Besides the above, any kind of other sources such as assertions, interviews, remarked by the specialist of those that are capable of improvising valuable data and conclusion, shall be considered in the study.

3.1.2 Data Collection Procedures

The Annual Report of concerned bank was obtained from field visiting of these banks especially from their corporate offices, NRB publications such as Quarterly Economic Bulletin, Banking and financial statistics, Economic Report, Annual Report of NRB etc. has been collected from the personal visit of concerned department of NRB at Baluwatar. The data on some aspect of these banks was obtained from the website www.nepalstock.com.np. of Nepal stock exchange.

3.2   Selection of the Banks as the Sample from the total Population

There are 26 commercial banks operating in the country. Due to the time limitation, to study all the banks will take a long time. In our study two banks each from the public and joint venture are taken as sample.

3.2.1 Population

All the commercial banks in Nepal are the population of the study. The commercial banks are as follows.

Table 3.1

Lists of Commercial Banks in Nepal

The sample taken from the commercial banks are follows

Total population	Sample taken
26 commercial banks	Everest Bank Ltd
	Nepal Investment Bank Ltd.

3.3   Method of Data Analysis

For the analysis of the data the financial and statistical tools relevant to the topic are used. They are as follows.

3.3.1 Financial Tools

Ratio Analysis

A ratio analysis is simply one number expressed in terms of another and as such it express the quantitative relationship between any two numbers. Ratio can be expressed in terms of percentage, proportion and as coefficient. The technique of ratio analysis is a part of the whole process of analysis of financial statements of any business of industrial concern especially to take output and credit decision. Through this technique, a comparative study can be made between different statistics concerning varied facts of a business unit. Just as blood pressure, pulse and temperatures are the measures of the health of an individual, so does ratio analysis measure the economic financial health of a business concern? Thus, the technique of

ratio analysis is of considerable significance in studying the financial stability, liquidity profitability and the quality of the business and industrial concerns.

For the study period following ratios are analyzed.

1) Current Ratio

2) Liquid fund to Total Deposit Ratio

3) Total Assets to Total Liability Ratio

4) Loans and Advances to Total Assets Ratio

5) Loans and Advances and Investment to Total Deposit Ratio

6) Loans and Advances to Shareholders Equity

7) Interest Income to Total Income Ratio

8) Interest Expenses to Total Deposit Ratio

9) Interest Income to Interest Expenses Ratio

10) Growth Rate of Total Deposit

11) Growth Rate of Loans and Advances

12) Growth Rate of Total Investment

13) Growth Rate of Net Profit.

3.3.2 Statistical Tools

Statistical tools are an indispensable tool in the hand of researcher. These tools are used in research in order to draw the reliable conclusion through the analysis of financial data. Statistic is the method of decision making in fact of uncertainty on the

basis of numerical data and calculated risk. It involves variety of methods and techniques to arrive at the conclusion by analyzing data collected for the purpose.

3.3.2.1 Arithmetic Mean

An average is a single value selected from a group of values to represent them in the same way, which is supposed to stand for whole group of which it is a part as typical of the values in the group. Out of various measures of the central tendency, arithmetic mean is one of the useful tools applicable here. It is easy to calculate and understand and based on all observations.

Arithmetic mean of a given set of observations is their sum divided by the number of observation. In general, if X_1, X_2, X_3, X_4, X_5......... X_n are the given observations, and then arithmetic mean usually denoted by X is given by;

$$\overline{x} = \frac{\sum x}{n} = \frac{x_1 + x_2 + x_3 \cdots + x_n}{n}$$

Where, n = number of observations.

3.3.2.2 Coefficient of Variation

According to Prof. Karl Pearson, coefficient of variation is the percentage variation in mean, standard deviation being considered as the total variation in mean. It is one of the relative measures of dispersion that is useful in comparing the amount of variation in data groups with different mean.

Coefficient of variation, denoted by C.V. is given by;

$$C.V. = \frac{\sigma}{\overline{x}} \times 100$$

Where, σ = standard deviation

For comparing the variability of two distributions, we compute the coefficient of variation for each distribution. A distribution with smaller C.V. is said to be more homogeneous or uniform or less variable than other. Conversely, a series with greater C.V. is said to be more variable or heterogeneous

3.3.2 Correlation Coefficient Analysis

The analysis identifies and interprets the relationship between two or more variables. Karl-Pearson's Correlation Coefficient has been used to find out relationship between the variables in order to know the effect of one variable on other correlated variable. In our study co-efficient of correlation has been used to find out the relationship between the following variables.

- Correlation Analysis between Deposit and Loans and Advances

- Correlation Analysis between Investment and Loans and Advances

- Correlation Analysis between Total Income and Loans and Advances.

- Correlation Analysis between Interest Income and Net Profit.

Probable Error or P.E. (r) $= 0.6745 \dfrac{1-r^2}{\sqrt{n}}$

3.3.3 Trend Analysis

Trend analysis is a very useful and commonly applied tool to forecast the future event in quantitative term, on the basis of tendencies in the dependent variables in the past period. The straight-line trend implies that irrespective of seasonal and cyclical as well as irregular fluctuation, the trend value increases or decreases by

absolute amount per unit of time. The linear trend values form a series in arithmetic progression.

Mathematically, $Y = a + bx$

Where,

    Y = the value of dependent variable

    a = Y-intercept

    b = slope of the trend line

    X = value of the dependent variable i.e. time

      = Year- 2002/03 (with regard to the data used in the study)

Normal equations fitting above equation are:

$$\sum Y = na + b\sum X$$

$$\sum XY = a\sum X + b\sum X^2$$

Since, $\sum X = 0$

$$a = \frac{\sum Y}{n}, b = \frac{\sum XY}{\sum X^2}$$

Trend Analysis is done to analyze the sample firm's financial ratio over time used to estimate the likelihood of improvement or deterioration in its financial condition.

It is important to analyze trend in ratios as well as their absolute level, for trends give clues as to whether a firm's financial condition is likely to improve or to deteriorate. In our study the trend of following are studied.

- Trend analysis of Loans and Advances and Total deposit Ratio.

- Trend analysis of Investment and Total Deposit Ratio.

3.3.4 Analysis of Primary Data

A structured interview will be taken with the banks credit department official of Himalayan Bank Limited and Nepal Investment Bank Limited to get information about the loan management i.e. lending policy, practices of the bank. The information obtained from the interview will be analyzed and presented.

CHAPTER -FOUR

DATA PRESENTATION AND ANALYSIS

In this chapter, all the efforts have been made to analyze and present the collected data from the various sources. This chapter determines the quality of the study because the collected data are presented and analyzed with the help of various financial and statistical tools, tables, graphs etc to make it meaningful and clear. This chapter attempts to know the clear picture of the loan management of the sample commercial banks.

4.1   Measuring the Liquidity Position of the Bank

To determine the liquidity position of the two banks the following measures of liquidity ratios have been calculated and a brief analysis of the same has been conducted below.

4.1.1 Current Ratio

This is a crude measurement of liquidity ratio. It measures the ratio between total current assets and total current liabilities. The current assets include cash and bank balance with cheques in hand, balance with NRB, money at call and short notices, investment in government securities, bills purchased and loans and advances and other current assts. Similarly, current liability includes borrowing from other banks, deposit, bills payable, and other current liabilities.

Table no 4.1
Current Ratio

Banks	Fiscal Year (Mid July)					
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean
EBL	0.7032	0.8096	0.7806	0.7180	0.8036	0.7630
NIBL	0.9818	0.9199	0.8770	0.9252	0.8630	0.9134

Source: Annex 1.

The combined mean ratio is 0.8382, if we measure the performance of these banks based in this mean, the performance of NIBL is weak and the EBL has maintained better liquidity than NIBL . The mean current ratio of NIBL is 0.7630 and EBL has 0.9134 which implies EBL is in high liquidity position.

Table measures the current ratio of two banks of five consecutives years. The ratio has been ranged from 0.7032 to 0.8096 of NIBL . It shows that the current ratio of EBL is ranged from 0.8770 to 0.9818. The overall trend of current ratio is not stable, it represents there is mixed trend.

4.1.2 Liquid Fund to Current Liability Ratio

Table no 4.2
Liquid fund to Current Liability Ratio Fiscal Year (mid July)

Banks	Fiscal Year (Mid July)					
	2003/04	2004/05	2005/06	2006/07	2007/08	Mean
EBL	0.1536	0.0653	0.0594	0.0775	0.0961	0.0904
NIBL	0.8052	0.8786	0.7640	0.9217	0.8577	0.8454
Combined mean						0.4679

Source: Annex 2

Since the current ratio gives only the short and crude idea of liquidity position of a firm, measuring its liquidity ratio depending on liquid fund is more significant. Liquid fund comprises of those assets, which can be converted into cash within a short period without decline in their value. Cash in hand, balance with NRB, balance with other banks and money at call are included in calculating the liquid fund. The ratio measures a banks ability to discharge its current liability in an adverse condition without undergoing its liquidity risk.

Table 4.2 explains that the ratio has been ranged from 0.1536 of EBL in FY 2003/04 to 0.0961 in FY 2007/2008. The ratios of EBL of first two years have in decreasing trend, and then it is increased in FY 2005/06 and then again increases in FY 2007/08. The ratio has been ranged from 0.8052 of NIBL in FY 2003/2004 to 0.8577 in FY 2007/2008. The ratios of NIBL of first year have in increasing trend but it has fallen in FY 2005/06 and then again it has increased and decreased in year FY 2006/2007 and 2007/2008 respectively. Unlike current ratio, the liquid fund to current liability ratio has been changed, this change in two banks has caused due to high degree of increase in investment and decreased or lower level of increase in placement.

4.1.3 Liquid Fund to Total Deposit Ratio

The deposit constitutes the major part of the banks' liability. Flow of this liability is always uncertain in the bank's fund management. Hence, the ratio of liquid fund to total deposit indicates the banks' strength to meet uncertain flow of deposit.

Table no 4.3

Liquid Fund to Total Deposit Ratio

Banks	Fiscal year (Mid July)					Mean
	2003/04	2004/05	2005/06	2006/07	2007/08	
EBL	0.1635	0.0694	0.0623	0.0807	0.0997	0.0951
NIBL	0.1089	0.1168	0.1135	0.1432	0.1262	0.1217
Combined Mean						0.1084

Source: Annex 3.

Table explains that the ratio has ranged from 0.1635 in FY 2003/04 to 0.0997 in FY 2007/08 of EBL . The trend of this ratio of EBL seems to be decreased in the first two years as compared to previous year and has started to increase from FY 2006/07 .The ratio of NIBL has ranged from 0.1089 in FY 2003/2004 to 0.1262 in FY 2007/08.NIBL also shows mixed trend during the period. The trend of this ratio has not deviated from liquid fund to current liability ratio and the up and down in this ratio has caused by the some reason.

The combined mean ratio of these two banks is 0.1084. The mean ratio of EBL is 0.0951 and NIBL is 0.1217 and this is higher than of NIBL.

4.2   Measuring the Lending Strength

The lending strength of these two banks is measured in relative measure in this section. The relationship between various assets and liabilities of the balance sheet has been established to show the active strength of lending of each bank comparatively. An attempt is made to determine the lending strength in absolute figure of each bank, since these two banks are comparable in volume of deposit, loans and advances and other variables also.

4.2.1 Total Asset to Total Liabilities Ratio

The ratio of Total Assets to total liabilities measures the volume of total liability in total assets of the firm. Then banking organization creates credit by way of lending activities and multiplies their assets many items, than their liability permits. Thus, this ratio measures the bank's ability to multiply its liability into assets. It is always recommended to have higher ratio of total assets to total liabilities since it signifies overall increase of credit and overall development of the organization. The higher the ratio, the higher the productivity and higher the assets conversion and vice versa.

<div align="center">

Table no 4.4

Total Assets to Total Liabilities Ratio

</div>

Banks	Fiscal year (Mid July)					Mean
	2003/04	2004/05	2005/06	2006/07	2007/08	
EBL	1.0971	1.1209	1.0917	1.0816	1.0777	1.0938
NIBL	1.0768	1.0785	1.1317	1.0580	1.0672	1.0825
Combined Mean						1.0882

Source: Annex no 4.

Table 4.4 explains that one unit of liabilities of concerned bank has tabulated value of assets in respective years. All these banks have high degree of similarity in maintaining this ratio. The overall trend of this ratio is alternately increasing and decreasing. The ratio has been ranging from 1.0777 of EBL   to 1.0672 of NIBL in FY 2007/08.

The combined mean ratio of these two banks over the period is 1.0882. The mean ratio of EBL   is 1.0938 and this is the highest than that of NIBL. Taking the standard of mean ratio the performance of EBL   is the best and the ratio of NIBL is below the mean. However, the ratio of these two banks represents a poor performance. The ratio should not be below 2 times in the developing country like Nepal. This represents that these two banks have not successfully converted their liability into asset. Looking at this fact, it can be concluded that these banks are not utilizing their fund efficiently and effectively to the extent their liability permits them. As comparing among the banks the performance of EBL   can be regarded the best.

4.2.2 Loans and Advances to Total Deposit Ratio

Loans and advances are the major area of fund mobilization of commercial Banks. Loans and Advances is the first type of application of funds, which has more risk. Loans and advances to total deposit ratio indicates the firm's fund mobilization power in gross. The main sources of bank's lending are its deposit. Thus, this ratio measures how well the deposit has been mobilized. This ratio measures the ability of a bank in generating income from bank's deposit liability.

High ratio means the greater use of deposit for investing in loans and advances. But very high ratio shows poor liquidity position and risk in loans. On the contrary, too low ratio may be the cause of idle cash or use of fund in less productive sector.

Table 4.5 explains the relation between a unit of deposit with the tabulated value of loans and advances of concerned banks in given years. The ratios have been ranged from 0.9189 of EBL in FY 2003/04 to 0.6831 of NIBL in FY 2003/04. EBL has the highest ratio for the whole period.

Table no 4.5

Loans and Advances to Total Deposit Ratio

Banks	Fiscal year (Mid July)					Mean
	2003/04	2004/05	2005/06	2006/07	2007/08	
EBL	0.9189	0.9762	0.9338	0.9862	0.9200	0.9470
NIBL	0.6831	0.7262	0.7188	0.6951	0.7466	0.7140
Combined Mean						0.8305

Source: Annex 5.

The combined mean ratio of these two banks is 0.8305. From this analysis, EBL can be concluded as the best performer in utilizing its deposit irrespective of the area of its utilization.

4.2.3 Loans and Advances and Investment to Total Deposit Ratio

Loans and Advances and Investment are the major area of fund mobilization of commercial banks. Loans and Advances is the first type of application of funds, which has more risk as compared to Investment and gives more returns. Investment is a cushion against the liquidity risk and at the same time it gives return. Loans and advances and investment to total deposit ratio indicates the firm's fund mobilizing power in gross. The main sources of bank's lending and investment is its deposit. Thus, this ratio measures how well the deposits have been mobilized. This ratio measures the ability of a bank in generating income from bank's deposit liability.

Table 4.6 explains the relation between a unit of deposit with the tabulated value in loans and advances and investment of concerned banks in given years. The ratios have been ranged from 0.9934 of EBL in FY 2003/04 to 0.7559 of NIBL in FY 2001/02. EBL has the highest ratio for the whole period. NIBL has the lowest ratio throughout five years.

Table no 4.6
Loans and Advances and Investment to Total Deposit Ratio

Banks	Fiscal year (Mid July)					Mean
	2003/04	2004/05	2005/06	2006/07	2007/08	
EBL	0.9934	1.0189	0.9873	1.0645	0.9932	1.0115
NIBL	0.7559	0.7824	0.7344	0.7743	0.7856	0.7665
Combined Mean						0.8890

Source: Annex 6.

The combined mean ratio of these two banks is 0.8890. The overall performance of EBL   seems the best with mean ratio 1.0115. NIBL has the mean ratio of 0.7665. From this analysis EBL can be concluded as the best performs in utilizing its deposit irrespective of the area of its utilization.

4.2.4 Loans and Advances to Shareholders Equity

Shareholders' equity is consisted of share capital, share premium, reserves and retained earnings. The ratio between loans and advances to shareholders' equity provides the measure regarding how far the shareholders equity has been able to generate assets to multiply its wealth. The shareholders equity refers to the net shareholders in take in the business. Thus, the ratio measures size of the business and their success in covering liabilities into assets.

Table no 4.7
Loans and Advances to Shareholders Equity

Banks	Fiscal year (Mid July)					Mean
	2003/04	2004/05	2005/06	2006/07	2007/08	
EBL	9.4624	8.9656	8.2628	9.6819	11.0275	9.4800
NIBL	8.3258	7.9156	8.4612	9.2976	8.9162	8.5200
Combined Mean						9.0000

Source: Annex 7.

Table 4.7 explains that the overall ratio of these two banks has ranged from 9.4624 of EBL   in FY 2003/04 to 8.3258 of NIBL in 2003/04. The combined mean ratio of these two banks is 9.0000 and mean ratio of EBL   is 9.4800 and mean ratio

of NIBL is 8.5200 respectively. This indicates that EBL having small volume of capital in business has been successful in generating proportionately higher volume of loan.

4.3 Analysing The Lending Efficency

4.3.1 Interest Income to Total Income Ratio

Income is one of the most important parts of any business organization. Interest income occupies a greater portion of the total income in a banking business. This ratio measures the volume of interest income in total income. It helps to measure the banks performance on other fee-based activities also. The high ratio indicates the high contribution made by lending and investment whereas low ratio indicates the low contribution made by lending and investment and high contribution by other fee based activities in total income. The ratio measures the volume of interest income in total income of the bank. This ratio helps to measures the banks performance on how well they are mobilizing their fund for the purpose of income generation.

Table no 4.8
Interest Income to Total Income Ratio (%)

Banks	Fiscal year (Mid July)					Mean
	2003/04	2004/05	2005/06	2006/07	2007/08	
EBL	0.7009	0.7076	O.7631	0.7799	0.8165	0.7500
NIBL	0.8372	0.8374	0.8471	0.8249	0.8353	0.8400
Combined Mean						0.8000

Source: Annex 8

The above table shows that NIBL has the highest ratio than that of EBL. The ratio of these two Banks has ranged from 0.7009 of EBL in FY 2003/04 to 0.8372 of NIBL in FY 2003/04.

The combined mean ratio of these two banks is 0.8000. Mean ratio of EBL is 0.7500 and mean ratio of NIBL is 0.8400 NIBL has higher ratio which indicates that it is largely dependent on lending activities and low ratio indicates it has low dependency on lending activity and high dependency on other fee based activities.

4.3.2 Interest Expenses to Total Deposit Ratio

This ratio measures the cost of total deposit in relative term. The commercial banks performance depends upon its ability to generate cheaper funds. More the cheaper fund more will be the profitability in generating loans and advances and vice-versa. The high ratio indicates of costly fund and this adversely affects its lending performance.

Table no 4.9

Interest Expenses to Total Deposit Ratio (%)

Banks	Fiscal year (Mid July)					Mean
	2003/04	2004/05	2005/06	2006/07	2007/08	
EBL	0.0200	0.0167	0.0185	0.0238	0.0236	0.0205
NIBL	0.0392	0.0241	0.0291	0.0284	0.0264	0.0294
Combined Mean						0.0250

Source: Annex 9.

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The above table shows that the ratio of EBL   and NIBL is not in a uniform trend. The ratio ranges from minimum of 0.0167of EBL   in FY 2004/05 to maximum of 0.0392 of NIBL in FY 2003/04.The combined mean ratio of these two banks is 0.0250. The mean ratio of EBL   is 0.0205 and mean ratio of NIBL is 0.0250. The mean ratio of EBL is higher than that of EBL   which indicates that due to lack of lending opportunities, the supply of the fund is exceeding the demand of the fund in EBL .

4.3.3 Interest Income to Interest Expenses Ratio

The ratio of interest income to interest expenses measures the difference between interest rates offered and interest rate charged. The spread between the interest income and interest expenses is the main foundation for the profit of the bank. NRB had restrictions on the interest rate spread of the commercial banks. The interest offered and the interest charged should not be more than 5 percent. The commercial banks are free to fix interest rate on deposit and loans. Interest rate on all types of deposit and loans should be published in the local newspapers and communicated to Nepal Rastra Bank quarterly and immediately when revised. Deviation of 0.50 percent from the published rate is allowed on all types of loans and deposit. However with the new financial ordinance 2061 it has again empowered NRB to interfere in rate fixation but it does not specify the conditions that would oblige NRB to do so.

Table no 4.10

Interest Income to Interest Expenses Ratio

Banks	Fiscal year (Mid July)					Mean
	2003/04	2004/05	2005/06	2006/07	2007/08	
EBL	3.5399	4.3894	3.6678	2.8572	2.6301	3.4169
NIBL	2.0775	2.4011	2.2506	2.2127	2.4402	2.2764
Combined Mean						2.8467

Source: Annex 10.

From the above table we can analyze that the ratio of EBL is higher than the ratio of NIBL over five years. The ratio ranged from 3.5399 of EBL in 2003/04 to 2.0775 of NIBL in 2003/04. . This shows that the performances of both the banks are satisfactory as the interest income is more than twice that of interest expense.

The combined mean of these two banks is 2.8467. Mean ratio of EBL is 2.4169 and the mean ratio of NIBL is 2.2764 it is lower than that of EBL .

4.4 Analysis of Growth Rate

Growth analysis of the banks involves of growth in deposit, loans, investments and net profit. Growth analysis ascertains how much growth in deposit liability is supported by growth in assets. The analysis also concerns which asset portfolio has significant increment corresponding to the increment in deposit liability.

To examine and analyze the expansion and growth of the banking business, following growth ratios are calculated in this part of the study. The higher ratios represent better performance of the bank. Growth ratios are directly related to the fund mobilization and investments decision of the bank. This ratio represents how well the commercial banks are maintaining their economic and financial position.

These ratios can be calculated by dividing the last period figure by the first period figure and then by referring to the compound interest tables. Under these topic four types of ratios namely growth ratios of total deposit, loans and advances, total investment, and net profit of NIBL and EBL for the study period have been analyzed.

4.5   Correlation Coefficient Analysis

Correlation coefficient is the measure of correlation between two variables that summarizes correlation in one figure. If the change in the value of one variable is accompanied by the charge in the value of the other, the variables are said to be correlated. Analysis of correlation coefficient explains to what extent two variables are correlated. In this analysis Karl Pearson's Correlation Coefficient has been used to find out the relationship between variables. Correlation analysis describes the relationship between variables i.e. positive or negative. It helps to determine the following.

- A positive on negative relationship exists.

- The relationship is significant on insignificant.

- Establish cause and effect relation if any.

The statistical tool-correlation analysis is used in the study to measure the relationship between variables in determining whether the relationship is significant or not. For the purpose of decision making interpretation are based on the following terms.

1.   When, r = 1, there is perfect positive correlation.

2.   When, r = -1, there is perfect negative correlation.

3.   When, r = 0, there is no correlation.

4. When, 'r' lies between 0.7 to 0.999 (-0.7 to 0.999), there is high degree of positive (or negative) correlation.

5. When, 'r' lies between 0.5 to 0.6999 there is moderate degree of correlation.

6. When, 'r' is less than 0.5, there is low degree of correlation.

4.5.1 Correlation Coefficient between Deposit and Loans and Advances of NIBL and EBL

Table no 4.17

Evaluation Criterion

Banks	Correlation Coefficient	r^2	P.Er.	6×P.Er.
EBL	0.9951	0.9902	0.0030	0.0180
NIBL	0.9584	0.9185	0.0245	0.1470

Source: Annex 11& 12.

The above table shows the Correlation Coefficient between deposit and loans and advances of EBL and NIBL is 0.9951 and 0.9584 respectively. There is high degree of positive relationship between deposit and loans and advances of both the banks. But comparatively the deposit and loans and advances of NIBL have lower degree of relationship.

The value of (r) above explains that a percentage increase in deposit likely generates the same percentage of change in the value of loans and advances. Thus there is highest probability of being so in EBL .

4.5.2 Correlation Coefficient between Total Investment and Loans and Advance

This correlation measures the degree of relationship between investment and loans and advances. These measures of correlation explain whether the banks have a rigid policy to maintain a consistent relationship between two assets or other factors such as seasonal opportunity, economic demand, NRB directives etc. has an impact on the volume of these two variables. Since the volume of investment does not have impact on loans and advance as every bank has first priority on loans and advances. Loan and advances directly reduces or increases the level of idle fund and this idleness of fund increases the investments.

Table 4.18 reveals the fair relationship between investment and loans and advance. There is high degree of positive relationship between these two variables of EBL. This implies that EBL   has maintained a steady ratio between investment and loans and advances as compared to NIBL. The value of r is EBL   suggests that it does not have rigid policy to maintain and fixed and consistent ratio between these assets and the volume of these assets in EBL   is highly of seasonal character than that is explained by the value of r in NIBL.

Table 4.12

P.Er. and 6×P.Er. between Investment and Loans and Advances

Banks	Correlation Coefficient	r^2	P.Er.	6×P.Er.
EBL	0.9437	0.8906	0.0330	0.1980
NIBL	0.8764	0.7681	0.0699	0.4197

Source: Annex 13& 15

Through the above table, we can conclude that EBL has the good opportunity of lending and investment than NIBL due to highest degree of positive correlation.

4.5.3 Correlation Coefficient between Total Income and Loans and Advances

The correlation between total income and loans and advances measures the degree of relationship between these two variables. The value of r explains whether a percentage change in loans and advances brings the same change in total income. Loan and advance is an independent variable and total income is dependent variable.

Table no 4.13

Correlation Coefficient between Total Income and Loans and Advances

Banks	Correlation Coefficient	r^2	P.Er.	6×P.Er.
EBL	0.9989	0.9978	0.0007	0.004
NIBL	1	1	0	0

Source: Annex 15 & 16.

Tale 4.19 presented above has shown the hight degree of positive correlation of EBL . The value of r in EBL is significant as it is greater than six times of probable error. This explains that a percentage change in loans and advances is most likely to change the same percentage of income. Comparatively NIBL has perfect degree of correlation than EBL . Still it does not mean that EBL has poor correlation between loan and advances and total income.

4.5.4 Correlation Coefficient between Interest Income and Net Profit

The correlation between Interest Income and Net profit measures the degree of relationship between these two variables. The interest income contributes a major

portion of total volume of commercial banks income. In this analysis, interest income is independent variable and net profit is dependent variable.

Table 4.14

P.Er. and 6×P.Er. between Interest Income and Net Profit

Banks	Correlation Coefficient	r^2	P.Er.	6×P.Er.
EBL	0.9518	0.9059	0.0284	0.1703
NIBL	0.9973	0.9946	0.0016	0.0097

Source: Annex 17 &18.

The table explains that the value of r of NIBL has high degree of correlation than EBL. There is a significant role of 'r' of the two banks as 'r' is more than 6 times of P.Er.

4.6 Trend Analysis of Deposit Utilization

The main objective of this analysis is to analyze the trend of deposit utilization in terms of loans and advances and investment of EBL and NIBL under five years of study period. A commercial bank may grant loans and advances and invest some of the funds in government securities and share and debenture of other companies to utilize its deposit.

4.6.1 Trend Analysis of Loans and Advances to Total Deposit Ratio

The trend analysis of loans and advances to total deposit ratio of EBL and NIBL for less than five years study period has been calculated and projection of trend for the next five years is made.

The following table describes the trend value of loans and advances to total deposit ratio of the bank for 5 years.

Table no 4.15

Trend Analysis of Loans and Advances to Total Deposit Ratio of EBL   and NIBL

Fiscal Year (Mid July)	EBL (Trend Value)	NIBL(trend Value)
2000/01	21059.2923	-1797.0603
2001/02	21059.2739	-1793.0712
2002/03	21059.2549	-1791.7415
2003/04	21059.2359	-1790.4118
2004/05	21059.2169	-1789.0821
2005/06	21059.1979	-1787.7524
2006/07	21059.1789	-1786.4226
2007/08	21059.1599	-1785.0929
2008/09	21059.1409	-1783.7632
2009/10	21059.121	-1782.4335

Source: Annex 20 & 21

The above table shows that the total loans and advances and deposit ratio of NIBL and EBL is in fluctuating trend. NIBL has the highest trend value of 4046.13 in the year 2009/10 and EBL   has the highest trend value of 6848.35 in the year 2009/10. The increasing trend of loans and advances and total deposit ratio of both

banks shows the good performance of the selected banks is providing loans and advances in deposit in profit earning sector.

4.6.2 Trend Analysis of Investment and Total Deposit Ratio

The trend analysis of investment and total deposit ratio of NIBL and EBL shows the trend values of five years. Over the study period the analysis makes projection for the next five years. The following table describes the trend values of total investment to total deposit ratio of the selected commercial banks.

Table no 4.22

Trend Analysis of Investment and Total Deposit Ratio of EBL   and NIBL

Fiscal Year (Mid July)	EBL (Trend Value)	NIBL (Trend Value)
2000/01	-22.2006	-1586.0393
2001/02	-19.2593	-1583.9136
2002/03	-16.3180	-1581.7879
2003/04	-13.3767	-1579.6622
2004/05	-10.4354	-1577.5365
2005/06	-7.4941	-1575.4108
2006/07	-4.5528	-1573.2851
2007/08	-1.6115	-1571.1594
2008/09	1.3298	-1569.0337
2009/10	4.2711	-1566.9080

Source: Annex 19.

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The above table shows that the total investment and total deposit of NIBL and EBL   is in increasing trend. NIBL has the highest trend value of 4590.54 in the year 2009/10 and the EBL   has the highest trend value of 8221.13 in the year 2009/10. The increasing trend of investment and total deposit ratio of both banks shows the good performance of the selected bank on investing the deposit in profit earning sectors.

4.7   Major Findings of the Study

In the research data mainly secondary data are used and the analysis is computed with the help of different financial and statistical tools. In financial tools ratio analysis has been used and on statistical tools correlation coefficient, and trend analysis has been used. A primary data analysis is done from the information collected from structured interview with the concerned banks officials. This chapter focuses on the major findings from analysis of Everest Bank Limited and Nepal Investment Bank Limited from the year 2003/04 to 2007/08.

The major findings of the financial and statistical analysis are presented below serially.

Measuring the liquidity position of the Bank

Total Assets to total liability ratio of EBL   and NIBL has the highest ratio.

1.   Current ratio of both banks showed slightly fluctuating trend. Both of the banks could not maintain the conventional standard of 2:1. However, the average of the ratios appeared higher in NIBL, which signifies that NIBL is more capable of meeting immediate liabilities in contrast to EBL. The ratio was found more consistent

2.   Liquid fund to current liability ratio of NIBL and EBL in fluctuating trend. After analyzing the ratio we can conclude that both the sample banks do not differ significant with respect to this ratio. Liquid fund to total deposit ratio of banks. NIBL and EBL are in fluctuated trend. Mean ratio appeared marginally greater in EBL, which means that EBL has maintained greater portion of fixed deposit as liquid asset. The ratio has maintained loss consistency in EBL Hypothesis test showed that the mean ratio of two banks does not differ significantly.

3.   Total assets to total liability ratio of NIBL is highest than that of NIBL. The highest ratio of NIBL and EBL is 1.0971 and 1.0768 in year 2003/04 respectively. The mean ratio of EBL is greater than NIBL. The ratio remained more consistency in EBL . Hypothesis test showed that the man ratio of the sample banks does not differ significantly.

4.   Loans and advances to total Assets ratio of EBL and NIBL is in fluctuating trend. The mean ratio of EBL is higher than that of NIBL. The overall performance of EBL seems the best with the higher mean ratio. Loans and Advances and investment to total deposit ratio of appeared significantly higher in EBL. It indicates the better utilization of loans and advances and investment in EBL than NIBL. The ratio remained more uniform in NIBL. As depicted by higher loans and advances and investment to total deposit in NIBL. NIBL seems more successful to utilize the despite fund in investment.

5.   The ratio of loans and advances to shareholders equity has gained the significant importance in measuring the capital fund and contribution in loans and advances. The analysis explains that the ratio of EBL is more than NIBL. This

indicates that the EBL having small volume of capital in business have been succeeded in generating proportionately higher volume of loans and advances due to the entire business in future.

6.   Interest income to total income ratio of NIBL is greater than EBL over the year 2003/04 to 2007/08 which reveals the NIBL invested the fund rise from more successfully to earn the interest. Interest expenses to total deposit ratio, or an average lower in EBL than NIBL which reveals that EBL invested the fund from more successfully to earn the interest from total deposit. Interest income to interest expenses ratio of NIBL is lower than that of EBL which signifies that NIBL invested the fund remove from more successfully to earn to interest rather than paying the interest for debt.

7.   Growth ratio of total deposit of NIBL is higher that of EBL by analysis over the study period, so it seems better performance of NIBL in total deposit. Growth ratio of loans and advances of EBL is higher than that of NIBL over the study period. It has a significant growth of EBL than NIBL and explains its aggressiveness. Growth ratio of total investment of EBL is higher than that of NIBL. The highest value increase in total investment of EBL explains it aggressiveness. The growth ratio of net profit of EBL and NIBL is in increasing trend. So the increasing trend of net profit of EBL and NIBL explains its aggressiveness.

8.   Correlation coefficient between total deposit and loans and advances were found positively correlated of NIBL and EBL. EBL and NIBL have high degree of positive correlation shows the significant relation between net deposit and loans and advances. Correlation coefficient between investment and loans advances were found positively correlated of NIBL and EBL. EBL and NIBL have high

degree of positive correlation shows the significant relation between net deposit and loans and advances.

9.   Correlation coefficient between investment and loans and advances were found positively correlated in EBL and NIBL. The high degree positively correlation coefficient of NIBL and EBL shows significant relationship between investment and loans and advance. This shows that the banks have succeeded in contribution of significant proportion both investment and loans and advances. Correlation coefficient between interest income and net profit of NIBL and EBL shows high degree of correlation. Due to high degree of positive correlation NIBL and EBL shows signifies relationship between interest income and net profit.

10.   Trend analysis of loans and advances and total deposit ratio of EBL   is decreasing trend, then NIBL shows increasing trend. The analysis concludes the good performance of NIBL in deposit utilization in relation to loans and advances. Trend analysis of investment and total deposit of EBL   is highly increasing trend then NIBL. The analysis concludes the good performance of EBL   in deposit utilization in relation to investment.

CHAPTER - FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter highlights some selected actionable conclusions and recommendation on the basis of the major findings of the study derived from the comparative analysis of NIBL and EBL . The study has covered 5 years data from the year 2003/04 to 2007/08. The major findings of the study based on financial and statistical analysis listed in chapter-4, of this report in order to carry out this study mainly secondary data are used. The analysis of the data is carried out with the help of various financial and statistical tools. The findings of the study are summarized and conclusion and some recommendation drawn as below:

5.1   Summary

Lending is one of the most important functions of a commercial bank and the composition of loans and advances directly affects the performance and profitability of the bank. There is intense competition in banking business with limited market and less investment opportunities available. A study on the liquidity position, loans and advances, profitability, deposit position of NIBL and EBL   is analyzed and the banks lending strength lending efficiency and its contribution in total profitability has been measured.

In this study, the financial tools-ratio analysis viz. asset management ratios and profitability ratios are calculated to find out the lending strength of this commercial bank. Also growth ratios, statistical tools like mean Correlation Coefficient and trend analysis conducted for analysis and interpretation of the data. The data used in this research is mainly secondary nature and extracted from the annual reports of the concerned bank and website of Nepal stock exchange. The financial statements of five years (2003/04 to 2007/08) were selected for the study purpose. And Analysis of

primary data structured interview done with the concerned bank official has also presented.

The mean of current ratio of those two banks over the five year Period is 0.7630 and 0.9134 respectively and it is consistent over the years. Although the current ratio of 2:1 is considered as standard, acceptability of the value depends 1:1 or above would be considered acceptable. Therefore the liquidity position of NIBL and EBL   is normal.

Mean of liquid fund to current liability ratio of these two banks over the five years period is 0.2634 and 0.8454 respectively and it is less consistent analyzing this ratio we can conclude that both the sample banks do not differ significant with this ratio.

Mean of liquid fund to total deposit ratio of NIBL and EBL   is 0.1217 and 0.22006 respectively and it is less consistent. The ratio measure how well the deposits are being mobilized. The ratios of these two banks are in fluctuating trend. Here, none of the ratios is above 1, which refers that some deposit is idle and there is not maximum utilization of the funds.

The Analysis of Lending Strength

The mean ratio of NIBL and EBL   is 1.0938 and 1.0842 respectively and it is consistent over the years. After analyzing the assets to total liabilities it can be concluded that these two banks are not utilizing their fund efficiently and effectively to extent their liability permits them.

Mean ratio of loans and advances to total deposit NIBL and EBL   is 0.7665 and 1.01146 respectively and it is less consistent. The ratio measures how well the deposit are being mobilized and in the income generating sector. The ratios are in

fluctuating trend. Here own of the ratios is above 1, which refers that some deposit is idle and then it is not maximum utilization of the funds. But in the year 2003/04 the ratio of NIBL is nearly equal to 1, which refers that there is very less deposit which is remained idle in utilization of funds.

Means ratio of loans and advances and investment to total deposit ratio of NIBL and EBL   is 0.7665 and 1.0115 respectively and is less consistent. This ratio measures how well the deposit are being mobilized and in the income generating sector. There is fluctuating trend of ratio. Here the ratio of NIBL has above 1 in year 2004/05 which refers that deposit is not idle and there is maximum utilization of the funds in this year.

Loans and advances to shareholders equity ratio of NIBL and EBL   over the five year period has mean ratio of 8.5833 and 9.4812 respectively and is less consistent. The ratio shows how well the investment made by the investor. It also measures the success of converting liability into assets and measures size of the business. The higher ratio of NIBL in the year 2005/06, 2006/07 and 2007/08 shows that the book has been successful in generating proportionately higher volume of loans and advances in the year 2006/07 and 2007/08.

Lending efficiency and its contribution in total profitability

Interest income to total income ratio of NIBL over the study period is in mixed trend but the ratio of EBL is in increasing trend. Lower ratio of NIBL shows low contribution made by lending and investment and high contribution by other fee based activities in total income. But higher ratio of NIBL shows high contribution made by lending and investment and low contribution by other fee based activities in total income.

Interest expenses to total deposit ratio of the banks over the study period are in decreasing trend with consistent values. This indicates the decrease in cost of fund. Interest income to interest expenses ratio of NIBL and EBL over the study period are in decreasing trend. This indicates the decrease in profit of the banks.

The growth ratio of NIBL and total deposit of EBL   is in increasing trend. The growth ratio of loans and advances during the study period is found to be increasing trend in every year. The growth ratio of total investment of during the study period is found to be fluctuating. The growth ratio of Net profit of NIBL is increasing trend but the ratio of EBL   is in fluctuating trend.

The correlation analysis shows that the correlation coefficient 'r' between deposit and loans and advances of EBL   is high degree of positive correlation and NIBL has also the some positive correlation. The correlation of EBL   has significant relationship between deposit and loans and advances and the bank is mobilizing the deposit as loans and advance successfully. Similarly the analysis shows high degree positive correlation of EBL   and NIBL   between investments and loans and advances. The correlation coefficient between total income and loans and advances of EBL   and NIBL is high degree of positive correlation shows good fund mobilization and then there is high degree of positive correlation of EBL   and NIBL between income and loans and advances.

The correlation coefficient between total income and loans and advances of EBL   and NIBL shows positive correlation. So, the value of 'r' is significant. But the correlation coefficient between total income and loans and advances of both the banks shows high degree of positive correlation. From trend analysis of deposit utilization and its projection for next 5 years.

NIBL and EBL have the increasing trend in loans and advances to total deposit and also increasing trend in total investment to total deposit.

5.2 Conclusions

1.   The overall performance of Nepal Investment Bank Limited is satisfactory then Everest Bank Limited. The liquidity position of EBL   is better than that of NIBL. As loans and advances of EBL   is increasing trend deposit is also increasing trend during the study period.

2.   There is increasing trend in profit of EBL shows that improvement in performance and success of the firm. Purpose wise loan classification show that the EBL   and NIBL bank have given priority to industrial and commercial sector lending as well as priority and deprived sector lending.

3.   EBL   has higher lending portion in these sectors than NIBL. From the selected bank EBL   has performed well in increasing growth ratio of deposit, loans and advances, investment and profit.

4.   EBL   has good lending procedure, preliminary screening is done of all the loan application, credit appraisal and financial position of the business and cash flows of the proposal is given high importance, which is essential criterion for loan approval. There is proper control mechanism like delegation of authority, follow up visits and books of accounts inspection of the client, which results in good performance of the bank.

5.   The banks follow NRB guidelines of loans classification and provisioning which makes strong financial position of the bank instead of holding high volume of non-performing assets. After comparatively study of EBL and NIBL banking performance. It can be concluded that EBL has better performance than that of NIBL.

6. There is proper control mechanism like delegation of authority, follow up visits and books accounts inspection of the client, which results in good performance of the banks.

7. The correlation of EBL has significant relationship between deposit and loans and advances and the bank is mobilizing the deposit as loan and advance successfully. Similarly the analysis shows high shows high degree positive correlation of EBL and NIBL between investment and loans and advances.

8. The correlation coefficient between total income and loan and advances of EBL and NIBL is high degree of positive correlation shows good fund mobilization and then there is high degree of positive correlation of EBL and NIBL between income and loans and advances.

9. The correlation coefficient between total income and loans and advances of EBL and NIBL shows positive correlation, so the value of 'r' is significant. But the correlation coefficient between total income and loans and advances of both the banks shows high degree of positive correlation.

5.3 Recommendations

Based on above findings and conclusion the following recommendations have been forwarded.

1. As the liquidity position of these two banks is found to be high, they are recommended to look upon the new area of lending and investment. The rural economy has always been realizing the credit needs; the dominancy of non-organized moneylender in this area has been prevailing. To compromise between the liquidity and credit need of rural economy, these banks are highly fund in business and at the same time contribute to the national economy also.

2.	The ratio of loans and advances and Investment to total deposit of NIBL is the lowest and this has result in the highest ratio of interest expenses to total deposit. At the same time total deposit to total fund utilized is below the average and there is high propensity of growth in deposit as compare to loans and advances. Hence this bank is suggested to reduce the interest rate. Consequently the volume of interest bearing deposit in its deposit mix reduces; increase the gap between consequent assets the liquidity arising from high prosperity of deposit.

3.	NIBL's contribution in loans and advances is the lowest and this has low degree of variation and low growth rate as compare to EBL and NIBL since the entire economy is largely dependent on the proper execution of lending performance of all the banks in long run due to its paradox how level of lending constitutes the low level of investment, resulting in low level of productive and employment generation and this causes slack in economy.

4.	This slackness in economy adversely effects the funding as well as non-funding activities of banking business. Thus, especially NIBL is recommended to give more priority on productive and priority sector loan.

5.	As examined by interest income to interest expenses ratio, the interest gap in EBL and NIBL is highly unfavorable for the national development since this gap is not existed due to credit creation power of these banks, as the total loans and advances to total deposit ratio is not even 1:1, this gap has its reason with high interest charged and low interest offering.

6.	This ratio has clearly indicating that the bank has not followed that the NRB directives to maintain overall 5% gap in interest charged and interest offered. Thus bank is recommended to lower this gap by charging low interest in lending

lowering this gap results in high volume of loans and advances and helps in increasing the sustainable lending practice.

7.   The high volume of liquidity shows that the high degree of lending strength has been prevailing in all of these banks. The lack of reliable lending opportunities and fear of losing the principle in rural sector has been keeping these banks to less orient toward the lending function. Hence, the government should take appropriate action to initiate these directives does not create long term healthy lending practices unless the commercial banks are not self motivated to flow credit in this sector. "But in view of the risk element in lending, the banker still prefers to have a negative outlook in handling proposals. This attitude requires to be changed among the bankers and any proposal coming to them should be processed to conform to banking norms so that it can be sanctioned for alignment for production or approved social objectives.

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Annex 1
ANALYSIS OF CURRENT RATIO (In Rs 000)

Year	Current Assets		Current Liabilities		Ratio	
	NIBL	EBL	NIBL	EBL	NIBL	EBL
2003/04	1070.41	10571.41	1090.20	15034.14	0.9818	0.7032
2004/05	1234.57	12557.86	1342.02	15511.63	0.9199	0.8096
2005/06	1797.93	15832.35	2050.20	20281.77	0.8770	0.7806
2006/07	2614.08	17457.65	2825.50	24313.77	0.9252	0.7180
2007/08	3044.19	26594.95	3527.30	33095.56	0.8630	0.8036

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 2
Analysis of Liquid Fund to Current Liability Ratio(IN RS 000)

Year	Liquid Fund		Current Liabilities		Ratio	
	NIBL	EBL	NIBL	EBL	NIBL	EBL
2003/04	877.84	2309.06	1090.20	15034.14	0.8552	0.1536
2004/05	1179.16	1012.20	1342.02	15511.63	0.8786	0.0653
2005/06	1566.39	1205.44	2050.20	20281.77	0.7640	0.0594
2006/07	2604.39	1884.74	2825.50	24313.77	0.9217	0.0775
2007/08	3025.51	1381.23	3527.30	33095.56	0.8577	0.0961

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 3
Analysis of Liquid Fund to Total Deposit Ratio(IN RS 000)

Year	Liquid Fund		Total Deposit		Ratio	
	NIBL	EBL	NIBL	EBL	NIBL	EBL
2003/04	877.84	2309.06	14119.03	8063.90	0.1089	0.1635
2004/05	1179.16	1012.20	14586.61	10097.70	0.1168	0.0694
2005/06	1566.39	1205.44	19347.40	13802.40	0.1135	0.0623
2006/07	2604.39	1884.74	23342.28	18186.20	0.1432	0.0807
2007/08	3025.51	1381.23	31915.05	23976.30	0.1262	0.0997

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 4
Analysis of Total Assets to Total Liability Ratio(IN RS 000)

Year	Total Assets		Total Liabilities		Ratio	
	NIBL	EBL	NIBL	EBL	NIBL	EBL
2003/04	9608.57	16745.49	8923.25	15263.80	1.0768	1.0971
2004/05	11732.52	17064.08	10878.70	15223.69	1.0785	1.1209
2005/06	15959.28	22329.97	14102.44	20454.98	1.13817	1.0917
2006/07	2143.57	27253.39	20257.84	25196.34	1.0580	1.0816
2007/08	27149.34	37132.76	25228.10	34455.56	1.0762	1.0777

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 5
Analysis of Loans and Advances to Total Deposit Ratio(IN RS 000)

Year	Loan and Advances		Total Deposit		Ratio	
	NIBL	EBL	NIBL	EBL	NIBL	EBL
2003/04	6095.84	14025.94	14119.03	8063.90	0.6831	0.9189
2004/05	7900.01	14861.70	14586.61	10097.70	0.7262	0.9762
2005/06	10136.25	19101.08	19347.40	13802.40	0.7188	0.9338
2006/07	14082.7	24848.33	23342.28	18186.20	0.6951	0.9862
2007/08	18836.40	31699.23	31915.05	23976.30	0.7466	0.9200

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 6
Analysis of Loans and Advances and Investment to Total Deposit(IN RS 000)

Year	Loans and Advances and Investment		Total Deposit		Ratio	
	NIBL	EBL	NIBL	EBL	NIBL	EBL
2003/04	6095.84	14025.94	14119.03	8063.90	0.7559	0.9934
2004/05	7908.01	14861.70	14586.61	10097.70	0.7824	1.0189
2005/06	10136.25	19101.08	19347.40	13802.40	0.7344	0.9873
2006/07	14082.07	24848.33	23342.28	18186.20	0.7743	1.0645
2007/08	18836.40	31699.23	31915.05	23976.30	0.7856	0.9932

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 7
Analysis of Loans and Advances to Share holders Equity(IN RS 000)

Year	Loans and Advances		Shareholder Equity		Ratio	
	NIBL	EBL	NIBL	EBL	NIBL	EBL
2003/04	6095.84	14025.94	732.16	1481.68	8.3258	9.4624
2004/05	7900.01	14861.70	998.03	1657.64	7.9156	8.9656
2005/06	10136.25	19101.08	1197.97	2310.08	8.4612	8.2686
2006/07	14082.7	24848.33	1514.60	2566.47	9.2976	9.6819
2007/08	18836.40	31699.23	2112.60	2874.57	8.9162	11.0275

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 8
Analysis of Interest Income to Total Income Ratio(IN RS 000)

Year	Interest Income		Total Income		Ratio	
	NIBL	EBL	NIBL	EBL	NIBL	EBL
2003/04	657.25	1001.62	785.10	1429.05	0.8372	0.7009
2004/05	719.30	1069.00	859.00	1510.68	0.8374	0.7076
2005/06	903.41	1310.00	1066.50	1716.67	0.8471	0.7631
2006/07	1144.41	1587.80	1370.70	2035.87	0.8349	0.7799
2007/08	1543.66	1979.00	1848.10	2423.86	0.8359	0.8165

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 9
Analysis of Interest Expenses to Total Deposit Ratio(IN RS 000)

Year	Interest Expenses		Total Deposit		Ratio	
	NIBL	EBL	NIBL	EBL	NIBL	EBL
2003/04	316.37	282.95	14119.03	8063.90	0.0392	0.0200
2004/05	299.57	243.54	14586.61	10097.70	0.0241	0.0167
2005/06	401.40	357.16	19347.40	13802.40	0.0291	0.0185
2006/07	517.20	555.71	23342.28	18186.20	0.0284	0.0238
2007/08	632.60	753.44	31915.05	23976.30	0.0264	0.0236

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 10
Analysis of Interest Income to Interest Expenses Ratio(IN RS 000)

Year	Interest Income		Interest Expenses		Ratio	
	NIBL	EBL	NIBL	EBL	NIBL	EBL
2003/04	657.25	1001.62	316.37	282.95	2.0775	3.5399
2004/05	719.30	1069.00	299.57	243.54	2.4011	4.3899
2005/06	903.41	1310.00	401.40	357.16	2.2506	3.6678
2006/07	1144.41	1587.80	517.20	555.71	2.2127	2.8572
2007/08	1543.66	1979.00	632.60	753.44	2.4402	2.6266

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 11
Correlation Coefficient between Deposit and Loans and Advances

Everest Bank Limited

Let, X be Deposit and Y be loans and advances respectively.

Year	X	Y	$x = X-\overline{X}$	$y = Y-\overline{Y}$	x^2	y^2	xy
2003/04	14119.03	14025.94	-6543.05	-6881.32	42811503.30	47352564.94	45024820.83
2004/05	14586.61	14861.70	-6075.47	-6045.56	36911335.672	36548795.71	36729618.41
2005/06	19347.40	19101.08	-1314.68	-1806.18	1728383.50	3262286.19	2375448.72
2006/07	23342.28	24848.33	2680.20	3941.07	7183472.04	15532032.74	10562855.81
2007/08	31915.05	31699.23	11252.97	10791.97	126629333.8	116466616.5	121441714.70
N = 5	$\sum$**X** = **103310.37**	$\sum$**Y** = **104536.28**			$\sum$**X²** = **215264028.4**	$\sum$**Y²** = **219162296.1**	$\sum XY$ = **316133620.50**

Mean ($\overline{X}$) $= \dfrac{\sum X}{n}$ Mean ($\overline{Y}$) $= \dfrac{\sum Y}{n}$

$\qquad\qquad = \dfrac{103310.37}{5}$ $\qquad\qquad = \dfrac{104536.28}{5}$

$\qquad\qquad = 20662.08$ $\qquad\qquad = 20907.26$

Correlation Coeff. (r) $= \dfrac{\sum xy}{\sqrt{\sum x^2}\ \sqrt{\sum y^2}} = \dfrac{316133620.5}{\sqrt{215264028.4}\sqrt{219162296.1}} = 0.9951$

P.Er. $= 0.6745\ \dfrac{1-r^2}{\sqrt{n}} = 0.6745 \times \dfrac{1-(0.9951)^2}{\sqrt{5}} = 0.0030$

If r > 6. PE   Significant

Here r (0.9951) > 6 PE (0.0180), so the condition is significant.

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Correlation Coefficient between Deposit and Loans and Advances

Annex 12

Nepal Investment Bank Limited

Let, X be Deposit and Y be loans and advances respectively.

Year	X	Y	$x = X-\overline{X}$	$y = Y-\overline{Y}$	x^2	y^2	xy
2003/04	8063.90	6095.84	-6749.15	-5314.40	45551025.72	37159265.31	35867682.76
2004/05	10097.70	7900.01	-4715.35	-3510.23	22234525.62	12321714.65	16551963.03
2005/06	13802.40	10136.25	-1010.65	-1273.99	1021413.42	1623050.53	1287557.99
2006/07	18186.20	14082.7	3373.15	2672.46	11378140.92	7142042.45	9014608.45
2007/08	23915.05	18836.40	9102.00	7426.16	82846404.00	55147852.35	67592908.32
N = 5	$\sum$**X =** **74065.25**	$\sum$**Y =** **57051.20**			$\sum$**X^2** **= 163031509.7**	$\sum$**Y^2** **= 113393925.3**	$\sum XY$ **= 130314720.6**

Mean $(\overline{X})$ $= \dfrac{\sum X}{n}$ Mean $(\overline{Y})$ $= \dfrac{\sum Y}{n}$

$= \dfrac{74065.25}{5}$ $= \dfrac{57051.20}{5}$

$= 14813.05$ $= 11410.24$

Correlation Coeff. (r) $= \dfrac{\sum xy}{\sqrt{\sum x^2}\ \sqrt{\sum y^2}}$ $= \dfrac{130314720.6}{\sqrt{163031509.7}\ \sqrt{113393925.3}}$

$= \dfrac{130314720.6}{12768.38 \times 10648.66} = \dfrac{130314720.6}{135966137.4} = 0.9584$

P.Er. $= 0.6745\ \dfrac{1-r^2}{\sqrt{n}} = 0.6745 \times \dfrac{1-(0.9584)^2}{\sqrt{5}} = 0.0245$

If r > 6. PE Significant

Here r (0.9584) > 6 PE (0.0245), so the condition is significant

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 13

Everest Bank Limited

Let, X be Total Investment and Y be Loans and Advances respectively.

Year	X	Y	$x = X - \overline{X}$	$y = Y - \overline{Y}$	x^2	y^2	xy
2003/04	5835.95	14025.94	-1197.408	-6881.316	1433785.92	47352509.89	8239742.83
2004/05	4267.23	14861.70	-2766.128	-6045.556	7651464.11	36548747.35	16722781.73
2005/06	6178.53	19101.08	-854.828	-1806.176	730730.91	3262271.74	1543969.82
2006/07	8945.31	24848.33	1911.952	3941.074	365556.45	15532064.27	7535144.32
2007/08	9939.77	31699.23	2906.412	10791.974	8447230.71	116466702.08	31365922.74
n = 5	$\Sigma X=$ 35166.79	$\Sigma Y=$ 104536.28			$\Sigma x^2=$ 21918772.10	$\Sigma y^2=$ 219162296.1	$\Sigma xy=$ 65407561.44

Mean ($\overline{X}$) $= \dfrac{\sum X}{n}$

$= \dfrac{35166.79}{5}$

$= 7033.358$

Mean ($\overline{Y}$) $= \dfrac{\sum Y}{n}$

$= \dfrac{104536.28}{5}$

$= 20907.256$

Correlation Coeff. (r) $= \dfrac{\sum xy}{\sqrt{\sum x^2}\ \sqrt{\sum y^2}}$ $= \dfrac{65407561.44}{\sqrt{21918772.10}\sqrt{219162296.1}} = 0.9437$

P.Er. $= 0.6745 \times \dfrac{1-r^2}{n}$ $= 0.6745 \times \dfrac{1-(0.9951)^2}{5} = 0.030$

If r> 6PE significant

Here r (0.9951) >6PE (0.0180), so the condition is significant.

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Correlation Coefficient between Total Investment and Loans and Advances

Nepal Investment **Bank Limited**

Let, X be Total Investment and Y be Loans and Advances respectively.

Year	X	Y	$x = X - \overline{X}$	$y = Y - \overline{Y}$	x^2	y^2	xy
2003/04	2535.66	6095.84	-1246.78	-5314.40	1554460.37	28242847.36	6625887.63
2004/05	2128.93	7900.01	-1653.51	-3510.23	2734095.32	12321714.65	5804200.41
2005/06	4201.32	10136.25	418.88	-1273.99	175660.45	1623050.52	-533648.93
2006/07	4985.10	14082.70	1202.66	2672.46	1446391.08	7142042.45	3214060.74
2007/08	5061.20	18836.40	1278.76	7426.16	1635227.14	55147852.35	9496276.36
N = 5	ΣX= 18912.21	ΣY= 57051.20			Σx²= 7545634.36	Σy²= 104477507.3	Σxy= 24606776.21

Mean ($\overline{X}$)
$$= \frac{\sum X}{n}$$
$$= \frac{18192.21}{5}$$

Mean ($\overline{Y}$)
$$= \frac{\sum Y}{n}$$
$$= \frac{57051.20}{5}$$

= 3782.442

= 11410.24

Correlation Coeff. (r) = $\dfrac{\sum xy}{\sqrt{\sum x^2}\ \sqrt{\sum y^2}}$ $= \dfrac{24606776.21}{\sqrt{7545634.36}\sqrt{104477507.3}} = 0.8764$

P.Er. $= 0.6745 \times \dfrac{1-r^2}{n} = 0.6745 \times \dfrac{1-(0.8745)^2}{5} = 0.0699$

If r> 6PE significant

Here r (0.8764) >6PE (0.4197), so the condition is significant.

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Correlation Coefficient between Total Income and Loans and Advances

Annex 15

Everest Bank Limited

Let, X be Total Income and Y be Loans and Advances respectively.

Year	X	Y	$x = X-\bar{X}$	$y = Y-\bar{Y}$	x^2	y^2	xy
2003/04	1429.05	14025.94	-394.176	-6881.316	155374.719	47352509.89	2712449.62
2004/05	1510.68	14861.70	-312.546	-6045.556	97685.002	36548747.35	1889514.35
2005/06	1716.67	19101.08	-106.556	-1806.176	11354.181	3262271.74	192458.89
2006/07	2035.87	24848.33	212.644	3941.074	45217.471	15532064.27	838045.74
2007/08	2423.86	31699.23	600.634	10791.974	360761.202	116466702.8	6475184.40
N = 5	$\sum X=$ 9116.13	$\sum Y=$ 104536.28			$\sum x^2=$ 670392.58	$\sum y^2=$ 2199162296.1	$\sum xy=$ 12107653.00

Mean ($\bar{X}$)
$$= \frac{\sum X}{n}$$
$$= \frac{9116.13}{5}$$
$$= 1823.226$$

Mean ($\bar{Y}$)
$$= \frac{\sum Y}{n}$$
$$= \frac{104536.28}{5}$$
$$= 20907.256$$

Correlation Coeff. (r) $= \dfrac{\sum xy}{\sqrt{\sum x^2}\,\sqrt{\sum y^2}}$ $= \dfrac{12107653.00}{\sqrt{670392.58}\sqrt{2199162296.1}} = 0.9989$

P.Er.$= 0.6745 \times \dfrac{1-r^2}{\sqrt{n}}$ $= 0.6745 \times \dfrac{1-(0.9989)^2}{\sqrt{5}}$ $= 0.0007$

Now, testing significance

If r > 6PE significance

Here, r (0.9989) > 6PE (0.004), so the condition is significant.

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Correlation Coefficient between Total Income and Loans and Advances

Annex 16

Nepal Investment Bank Limited

Let, X be Total Income and Y be Loans and Advances respectively.

Year	X	Y	$x = X - \overline{X}$	$y = Y - \overline{Y}$	x^2	y^2	xy
2003/04	785.1	6095.84	-400.78	-5314.40	160624.61	27189967.36	2129905.23
2004/05	859.0	7900.01	-326.88	-3510.23	106850.53	12321714.65	1147423.98
2005/06	1066.5	10136.25	-119.38	-1273.99	14251.58	1623250.52	152088.93
2006/07	1370.7	14082.70	184.82	2672.46	34158.43	7142042.45	493924.06
2007/08	1848.1	18836.40	662.22	7426.16	438535.33	55147852.35	4917751.68
n = 5	$\Sigma X=$ 5929.40	$\Sigma Y=$ 57051.20			$\Sigma x^2=$ 754420.48	$\Sigma y^2=$ 103424627.3	$\Sigma xy=$ 8841093.88

Mean ($\overline{X}$)
$$= \frac{\sum X}{n}$$
$$= \frac{5929.40}{5}$$
$$= 1185.88$$

Mean ($\overline{Y}$)
$$= \frac{\sum Y}{n}$$
$$= \frac{57051.20}{5}$$
$$= 11410.24$$

Correlation Coeff. (r) $= \dfrac{\sum xy}{\sqrt{\sum x^2}\sqrt{\sum y^2}}$ $= \dfrac{8841093.88}{\sqrt{754420.48}\sqrt{103424627.3}} = 0.999$

P.Er. $= 0.6745 \times \dfrac{1-r^2}{\sqrt{n}}$ $= 0.6745 \times \dfrac{1-(0.999)^2}{\sqrt{5}}$

= 0.001

Now, testing significance

If r > 6PE significance

Here, r (0.999) > 6PE (0.006), so the condition is significant.

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 17

Everest Bank Limited

Let, X be Interest Income and Y be Net Profit respectively.

Year	X	Y	$x = X - \bar{X}$	$y = Y - \bar{Y}$	x^2	y^2	xy
2003/04	1001.62	455.32	-387.864	-150.91	150438.48	22773.83	58532.56
2004/05	1069.00	520.10	-320.484	-86.13	102709.99	7418.38	27603.29
2005/06	1310.00	635.30	-79.484	29.07	6317.71	845.065	-2310.59
2006/07	1587.80	673.96	198.316	67.73	39329.23	4587.35	13431.94
2007/08	1979.00	746.47	589.516	140.24	347529.11	19667.26	82673.72
n = 5	$\sum X =$ 6947.42	$\sum Y =$ 3031.15			$\sum x^2 =$ 646324.52	$\sum y^2 =$ 55291.885	$\sum xy =$ 179930.92

Mean ($\bar{X}$) $= \dfrac{\sum X}{n}$ Mean ($\bar{Y}$) $= \dfrac{\sum Y}{n}$

$= \dfrac{69.4247}{5}$ $= \dfrac{3031.15}{5}$

$= 606.23$

$= 1389.484$

Correlation Coeff. (r) $= \dfrac{\sum xy}{\sqrt{\sum x^2}\,\sqrt{\sum y^2}}$ $= \dfrac{179930.92}{\sqrt{64324.52}\,\sqrt{55291.885}} = 0.9518$

P.Er. $= 0.6745 \times \dfrac{1 - r^2}{\sqrt{n}}$ $= 0.6745 \times \dfrac{1 - (9518)^2}{5} = 0.0284$

Now, testing significance

If r > 6PE significance

Here, r (0.9518) > 6PE (0.1703), so the condition is significant.

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 18

Nepal Investment BankLimited

Let, X be Interest Income and Y be Net Profit respectively.

Year	X	Y	$x = X-\overline{X}$	$y = Y-\overline{Y}$	x^2	y^2	xy
2003/04	657.25	143.57	-336.356	-116.302	113135.36	13526.16	39118.88
2004/05	719.30	170.81	-274.3060	-89.062	75243.78	7932.04	34430.24
2005/06	903.41	237.38	-90.1960	-22.492	8135.32	505.89	2028.69
2006/07	1144.41	296.40	150.8040	36.528	22741.85	1334.29	5508.87
2007/08	1543.66	451.20	550.054	191.328	302559.40	36606.40	105240.73
n = 5	∑X= 4968.03	∑Y= 1299.36			∑x²= 521815.71	∑y²= 59904.78	∑xy= 176327.41

$$\text{Mean } (\overline{X}) = \frac{\sum X}{n} \qquad\qquad \text{Mean } (\overline{Y}) = \frac{\sum Y}{n}$$

$$= \frac{4968.03}{5} \qquad\qquad\qquad = \frac{1299.36}{5}$$

$$= 993.606 \qquad\qquad\qquad = 259.872$$

$$\text{Correlation Coeff. (r)} = \frac{\sum xy}{\sqrt{\sum x^2}\ \sqrt{\sum y^2}} \quad = \quad \frac{176327.41}{\sqrt{521815.71}\sqrt{59904.78}} = 0.9973$$

$$\text{P.Er.} = 0.6745\,\frac{1-r^2}{\sqrt{n}} \qquad = 0.6745 \times \frac{1-(0.9973)^2}{\sqrt{5}} = 0.0016$$

Now, testing significance

If r > 6PE significance

Here, r (0.9973) > 6PE (0.0097), so the condition is significant.

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 19

Trend Analysis of Total Investment and Total Deposit Ratio.

Everest Bank Limited

Year	X	Y	$x = X - \overline{X}$	$y = Y - \overline{Y}$	x^2	y^2	xy
2003/04	5835.95	14119.03	-1197.408	-6543.05	1433785.92	42811503.30	7834700.41
2004/05	4267.23	14586.61	-2766.128	-6075.47	7651464.11	36911335.72	16805527.68
2005/06	6178.53	19347.40	-854.828	-1314.68	730730.91	1728383.50	1123825.28
2006/07	8945.31	23342.28	1911.952	2680.20	3655560.45	7183472.04	51234413.75
2007/08	9939.77	31915.05	2906.412	11252.97	8447230.22	126629333.8	32705767.04
N = 5	∑X= 35166.79	∑Y= 103310.37			$\sum x^2 =$ 21918771.60	$\sum y^2 =$ 215264028.4	∑xy= 63594234.16

∑X= 18912.21   ∑Y=103310.37

$\sum x^2$ = 21918771.60

$\sum y^2$ = 215264028.40

∑xy = 63594234.16

Y = a + bx ……………… (i)

∑y = na + b∑x ……………….. (ii)

∑xy = a∑x + b∑x^2 ……………….. (iii)

Substituting the value of x and y in equation (ii) and equation (iii) we get,

103310.37= 5a + 35166.79 b ………….……. (iv)

63594234.16= 35166.79a + 21918771.60 ………….…… (v)

Here, dividing equation(v) by 7033.358 and then subtracting from (iv), we have

103310.37 = 5a + 35166.79b

9041.80   = 6685.29a + 3116.40b

--.

94268.57 = 32050.39 b

or   b = $\dfrac{94268.57}{32050.39}$ ∴   b = 2.9413

Now, substituting the value of b in equation (iv), we get

103310.37 = 5a + 35166.79 × 2.9413

or,   5a = 103436.079 − 103310.37

or,   a = $\dfrac{-125.7094}{5}$ ∴a = -25.1419, b= 2.9413

Year	Trend Value		
2000/01	Y = a + bx =	-25.1419 + 2.9413 × 1	-22.2006
2001/02	$Y = a + bx_1 =$	-25.1419 + 2.9413 × 2	-19.2593
2002/03	$Y = a + bx_2 =$	-25.1419 + 2.9413 × 3	-16.3180
2003/04	$Y = a + bx_3 =$	-25.1419 + 2.9413 × 4	-13.3767
2004/05	$Y = a + bx_4 =$	-25.1419 + 2.9413 × 5	-10.4354
2005/06	$Y = a + bx_5 =$	-25.1419 + 2.9413 × 6	-7.4941
2006/07	$Y = a + bx_6 =$	-25.1419 + 2.9413 × 7	-4.5528
2007/08	$Y = a + bx_7 =$	-25.1419 + 2.9413 × 8	-1.6115
2008/09	$Y = a + bx_8 =$	-25.1419 + 2.9413 × 9	1.3298
2009/10	$Y = a + bx_9 =$	-25.1419 + 2.9413 × 10	4.2711

Trend analysis of investment and total Deposit Ratio

Nepal Investment Bank Limited

Year	X	Y	$x = X- \overline{X}$	$y = Y- \overline{Y}$	x^2	y^2	xy
2003/04	4628.40	8063.90	-3093.04	-6761.40	9566896.44	45716529.96	20913280.66
2004/05	5234.80	10097.70	-2486.64	-4727.60	6183378.49	22350201.76	11755839.26
2005/06	6785.50	13802.40	-935.94	-1022.90	875983.68	1046324.41	957373.03
2006/07	9878.30	18186.20	2156.86	3360.90	4652045.06	11295648.81	7248990.77
2007/08	12080.20	23976.30	4358.76	9151.00	18998788.74	83740801.00	39887012.76
N = 5	∑X= 38607.20	∑Y= 74126.50			∑x^2= 40277092.41	∑y^2= 164149505.9	∑xy= 80762496.48

∑X= 38607.20   ∑Y= 74126.50

∑x^2=40277092.41

∑y^2= 164149505.9

∑xy=80762496.48

y = a + bx ……………… (i)

∑y = na + b∑x ……………….. (ii)

∑xy = a∑x + b∑x^2 ……………….. (iii)

        Substituting the value of x and y in equation (ii) and equation (iii) we get,

        74126.50= 5a + 38607.20b ………………… (iii)

        80762496.48 = 38607.20a + 40277092.4b………………… (iv)

Multiplying equation (iii) by 7721.44 and then subtracting equation (iv) from it, we get,

        572363322.2 = 38607.20a + 271538259b

        80762496.48 = 38607.20a + 40277092.41b

    -              -   - .

        491600825.7 = 231261166.6b

or $b = \dfrac{491600825.7}{231261166.6}$ $\therefore$ $b = 2.1257$

Now, substituting the value of b in equation (iii), we get

       $74126.50 = 5a + 38607.20b$

or, $74126.50 = 5a + 38607.20 \times 2.1257$

or $74126.50 = 5a + 82067.3250$ or $5a = -7940.8250$

or, $a = \dfrac{-7940.8250}{5}$ $\therefore a = -1588.165,\ b = 2.1257$

Year	Trend Value		
2000/01	$y = a + bx =$	$-1588.165 + 2.1257 \times 1$	-1586.0393
2001/02	$y = a + bx_1 =$	$-1588.165 + 2.1257 \times 2$	-1583.9136
2002/03	$y = a + bx_2 =$	$-1588.165 + 2.1257 \times 3$	-1581.7879
2003/04	$y = a + bx_3 =$	$-1588.165 + 2.1257 \times 4$	-1579.6622
2004/05	$y = a + bx_4 =$	$-1588.165 + 2.1257 \times 5$	-1577.5365
2005/06	$y = a + bx_5 =$	$-1588.165 + 2.1257 \times 6$	-1575.4108
2006/07	$y = a + bx_6 =$	$-1588.165 + 2.1257 \times 7$	-1573.2851
2007/08	$y = a + bx_7 =$	$-1588.165 + 2.1257 \times 8$	-1571.1594
2008/09	$y = a + bx_8 =$	$-1588.165 + 2.1257 \times 9$	-1569.0337
2009/10	$y = a + bx_9 =$	$-1588.165 + 2.1257 \times 10$	-1566.9080

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL

Annex 20
Trend Analysis of Loans and Advances and Total Deposit Ratio
Everest Bank Limited

Year	X	Y	$x = X - \overline{X}$	$y = Y - \overline{Y}$	x^2	y^2	Xy
2003/04	14025.94	14119.03	-6881.316	-6543.04	47352509.89	42811372.44	45024725.80
2004/05	14861.70	14586.61	-6045.556	-6075.46	36548747.35	36911214.21	36729533.66
2005/06	19101.08	19347.40	-1806.176	-1314.67	3262271.74	1728357.21	2374525.40
2006/07	24848.33	23342.28	3941.074	2680.21	7183525.64	7183525.64	10562905.95
2007/08	31699.23	31915.05	10791.974	11252.98	116466702.8	126629558.9	121441867.6
N = 5	∑X= 104536.28	∑Y= 103310.37			∑x²= 210813757.4	∑y²= 215264028.4	∑xy=21613358.5

∑X=104536.28	∑Y= 103310.37
∑x² =210813757.4	∑xy = 21613358.5
∑y²= 215264028.4	∑y = Na + b∑x ……………….. (ii)
y = a + bx ……………… (i)	
∑xy = a∑x + b∑x² ……………….. (iii)	

Substituting the value of x and y in equation (ii) and equation (iii) we get,

103310.37= 5a + 104536.28 b ………………… (iv)

21613358.5= 104536.28a + 210813757.4 b ……………… (v)

Multiplying equation (iv) by 2090.656 and then subtracting equation (v) from it, we get,

216133558.5 = 104536.28a + 210813757.4b

2159866444.9 = 104536.28a + 218549401.0b

-      -   -   .

147113,60 = -7735643.60b

or $b = \dfrac{147113.60}{-7735643.60}$ ∴   b = -0.0190

Now, substituting the value of b in equation (iv), we get

103310.37 = 5a + 104536.28 ×(-0.0190)

or,   25319.16 = 5a – 1986.1893   or   25319.16 + 1986.1893 = 5a

or, $a = \dfrac{105296.5593}{5}$ ∴a = 21059.3119, b = -0.0190

Year	Trend Value		
2000/01	y = a + bx =	21059.3119 - 0.0190 x 1	= 21059.2923
2001/02	y = a + bx₁ =	21059.3119 - 0.0190 x 2	= 21059.2739
2002/03	y = a + bx₂ =	21059.3119 - 0.0190 x 3	= 21059.2549
2003/04	y = a + bx₃ =	21059.3119 - 0.0190 x 4	= 21059.2359
2004/05	y = a + bx₄ =	21059.3119 - 0.0190 x 5	= 21059.2169
2005/06	y = a + bx₅ =	21059.3119 - 0.0190 x 6	= 21059.1979
2006/07	y = a + bx₆ =	21059.3119 - 0.0190 x 7	= 21059.1789
2007/08	y = a + bx₇ =	21059.3119 - 0.0190 x 8	= 21059.1599
2008/09	y = a + bx₈ =	21059.3119 - 0.0190 x 9	= 21059.1409
2009/10	y = a + bx₉ =	21059.3119 - 0.0190 x 10	= 21059.1219
Source: Annual Report 2003/04 to 2007/08 EBL			

Trend Analysis of Loans and Advances and Total Deposit Ratio

Nepal Investment Bank Limited

Year	X	Y	$x = X-\overline{X}$	$y = Y-\overline{Y}$	x^2	y^2	xy
2003/04	6095.84	8063.90	-5314.40	-6749.15	37158265.31	45551025.72	35867682.76
2004/05	7900.01	10097.70	-5310.23	-4715.35	12321714.65	22234525.62	16551963.03
2005/06	10136.25	13802.40	-1273.99	-1010.65	1623050.53	1021413.42	1287557.99
2006/07	14136.25	18186.20	2672.66	3373.15	7142042.45	11378140.92	9014608.45
2007/08	18836.04	23915.05	7426.16	9102.00	551647852.35	82846404.00	67592908.32
N = 5	$\sum X=$ 57051.20	$\sum Y=$ 74065.25			$\sum x^2=$ 113393925.3	$\sum y^2=$ 163031509.7	$\sum xy=$ 130314720.6

$\sum X= 57051.20$ $\qquad\qquad\qquad$ $\sum Y= 74065.25$

$\sum x^2 = 113393925.3$

$\sum y^2 = 163031509.7$

$\sum xy = 130314720.6$

$y = a + bx$

$\sum y = na + b\sum x$ ……………….. (i)

$\sum xy = a\sum x + b\sum x^2$ ……………….. (ii)

$\qquad$ Substituting the value of x and y in equation (i) and equation (ii) we get,

$\qquad$ $74065.25 = 5a + 57051.20b$ ………………… (iii)

$\qquad$ $130314720.6 = 57051.20a + 113393925.3\ b$…….. (iv)

$\qquad$ Multiplying equation (iii) by 11410.24 and then subtracting equation (iv) from it, we get,

$\qquad$ $845102278.2 = 57051.20a + 650967884.3b$

$\qquad$ $130314720.6\ \ = 57051.20a + 113393925.3b$

$\qquad$ _____

$\qquad$ $714787557.6 = 537573959.0b$

or $\qquad$ b $=$ $\dfrac{714787557.6}{537573959.0}$ $\qquad$ $\therefore$ b =1.3297

Now, substituting the value of b in equation (iii), we get

$\qquad$ $74065.25\ = 5a + 57051.20 \times 1.3297$

$\qquad$ or $\qquad$ $-1795.7306 = 5a$

or, $\qquad$ a $=$ $\dfrac{-1795.7306}{5}$ $\qquad$ $\therefore$ a = -359.1461, b = 1.3297

Year	Trend Value			
2000/01	y = a + bx =	-1795.7306 + 1.3297 × 1	=	= -1797.0603
2001/02	y = a + bx$_1$ =	-1795.7306 + 1.3297 × 2	=	= -1797.0712
2002/03	y = a + bx$_2$ =	-1795.7306 + 1.3297 × 3	=	= -1791.7415
2003/04	y = a + bx$_3$ =	-1795.7306 + 1.3297 × 4	=	= -1790.4118
2004/05	y = a + bx$_4$ =	-1795.7306 + 1.3297 × 5	=	= -1789.0821
2005/06	y = a + bx$_5$ =	-1795.7306 + 1.3297 × 6	=	= -1787.7524
2006/07	y = a + bx$_6$ =	-1795.7306 + 1.3297 × 7	=	= -1786.4226
2007/08	y = a + bx$_7$ =	-1795.7306 + 1.3297 × 8	=	= -1785.0929
2008/09	y = a + bx$_8$ =	-1795.7306 + 1.3297 × 9	=	= -1783.7632
2009/10	y = a + bx$_9$ =	-1795.7306 + 1.3297 × 10	=	= -1782.4335

Trend analysis of Interest expenses and interest Income   deposit

Everest Bank Limited

Year	X	Y	$x = X-\bar{X}$	$y = Y-\bar{Y}$	X^2	Y^2	XY
2003/04	282.95	1001.62	-155.61	-387.864	24214.47	150438.48	60355.55
2004/05	243.54	1069	-195.02	-320.484	38032.80	102709.99	62500.79
2005/06	357.16	1310	-81.40	-79.484	6625.96	6317.71	6470
2006/07	555.71	1587.80	117.15	198.316	13724.12	39329.23	23232.72
2007/08	753.40	1979	314.88	589.516	99149.41	347529.11	185595.31
Total	∑X= 2192.80	∑Y=			∑x^2=	∑y^2=	∑xy= 338154.37

Now we know equation of trend line
Y= a+bX …………………… (i)
so multiplying equation (i) by   ∑ and ∑X respectively, we get
∑y = na +b∑x ……………..(ii)
∑xy= a∑x+b∑x^2 …………..(iii)
Now substituting the values of ∑x, ∑y, ∑x^2 and ∑xy in Equation (ii) and (iii) , we get
Or, 6947.42 = 5a + 2192.80 b ……………(iv)
Or, 338154.37 = 2192.80 a +181746.76b …….(v)
Now, multiplying   equation (iv) by 438.56 and subtract equation (v)
3046860.52 = 2192.80a + 961674.37 b
338154.37 = 2192.80 a +181746.76b

_ -   -   -

2708705.63 =   779927.61 b

or b=   3.4730

Now putting the value of b in equation (4) we get,
6947.42 = 5a + 2192.80 X 3.4730
Or a = -133.62
Now again putting the value of a and b in equation of trend line,
Y= -133.62+3.4730X

Source: Annual Report 2003/04 to 2007/08 NIBL and EBL