# CHAPTER –1

# INTRODUCTION

## 1.1   Background of the Study

Financial institution can be considered as the catalyst to the economic growth of a country. The development process of a country involves the mobilization and development of resources. Development of trade, commerce and industry are the prime requisite for the attainment of the economic political and social goals. To fulfill the purpose of planning, financial functions more often dominate the other functions. "There is always lack of finance in underdeveloped economy because natural resources are either underutilized or unutilized in productive sector or even other purpose i.e.; social welfare and so on. Likewise, underdeveloped countries are not deficient in land, water, mineral, forest or power resources, though they may be untapped; constituting only potential resources."[1] So in these countries for the rapid development of the economy, there should be proper mobilization of resources. Due to various difficulties or even ignorance of the people, such resources have not been properly utilized. Hoarding could be one of the reasons for this. So, banks and other financial institutions play a vital role to economic growth developing the banking habit among the people, collecting the small-scattered resources in one bulk and utilizing them in further productive purposes and rendering other valuable services to the country. Thus, this gives the individuals an opportunity to borrow funds against future income, which may improve the economic well being of the borrower.

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[1] K.K Dewett *Economic Theory* New Delhi: S.Chand and Co. Ltd, 1995, P.454.

Earlier banks were different from modern commercial banks in many respects. The banks, which operated in the past, combined central banking functions, such as issues of currency with commercial banking functions like accepting deposits and financing business. In course of time this practice was abandoned and specialized institutions for the central banking functions were created. Now a central bank can be easily distinguished from a commercial bank due to their objectives and unique functions.

Modern commercial banks can be identified by different names such as Business Banks, Retail Banks, Clearing Banks, Joint Venture Banks, and Merchant Banks etc. No matter what names we give to banks, they all perform the same basic function i.e., they provide a link between the lenders and the borrowers. Basically by charging a rate of interest to the borrowers slightly higher than they pay to the lenders, the banks make their profit. This is known as financial intermediations.

Commercial banks are the suppliers of finance for trade and industry and play a vital role in the economic and financial life of the country. By investing the saving in the productive areas, they help in the formation of capital. The qualitative credit policy ensures certain portion of the credit of bank invested in the productive and priority areas so that there may not be shortage of resources in such areas. In additional flexible monetary and credit policy improve the prevailing slow down in the economic activities to alleviate sluggish credit expansion to the private sector from the banking sectors. Rural people of underdeveloped countries like Nepal need various banking facilities. In most of the countries, the rural sector is neglected due to risk and low return. But the main source of national income of developing countries comes from the very rural sector. In fact the rural development is the key to the economic development without which other sectors of the economy cannot be flourished.

Proper financial decision-making is extremely important in banking transaction for efficiency and profitability. Most of the financial decisions of a

bank are concerned with current assets and current liabilities. The Working capital management of a bank different from other types of business enterprises. A bank plays a significant role to the requirement of working capital of other type of business enterprises. A bank plays a significant role to fulfill the requirement of working capital of other type of business enterprise. It also needs efficiently manage its own working capital. Investment in working capital of other business enterprises is a part of current assets of bank's working capital and we can consider deposits and short-term borrowings as a part of current liabilities.

## 1.2   Joint Venture banks

In global perspective, joint ventures are made up of trading through partnership and with negotiation between countries industries enterprises traders and mercantile to achieve mutual exchange of goods services and modern technology for sharing comparative advantages and benefit.

A joint venture bank is joining of forces between two and more enterprises for carrying out specific operation (industrial and commercial investment for production or trade.)[2]

HMG deliberate policy of allowing joint venture banks to operate in Nepal is basically targeted to encourage local traditionally run commercial banks to exchange their bankable capacity through competition, efficiency, modernization and mechanization via computerization and prompt customer service.

All the Nepalese joint venture Banks established under the commercial bank Act 2031, they are operated under the rules regulation and guidance of Nepal Rastra bank. Nepal Rastra Bank has issued a certain directive to those banks for an example regarding the mandatory credit allocation to the priority sector. The

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[2] D.P. Gupta   *The Banking System* .Its role in export development. The financing of exports from developing countries international trade center. UNCTAD/GATT .Geneva 1998,P.15

Nepal Rastra bank has directed to the government owned banks to invest 3% and the JVBs to invest 0.5% of their total outstanding credit to the poverty stricken community.

**Objectives of joint venture banks:**

⟩ To provide new services.

⟩ To create competitive investment.

⟩ To introduce new methods & technology in banking services.

⟩ To provide more resources for investment.

In order to achieve the above mentioned objectives, the JVBs should concentrate in their trust areas, viz; corporate banking, retail and private banking, investing banking credit cards and technology and at the same time they must maintain their asset quality by keeping intact their lending standards.

## 1.3 Profile of Sample Commercial Banks

In this study, performance of Everest Bank Limited and Nepal SBI Bank Limited and Himalayan Bank Ltd. are compared in the field of working capital management. Here, short glimpses of these joint venture banks are given below,

**A. Everest Bank Limited (EBL)**

Everest Bank Limited, a joint venture bank with Punjab National Bank of India, was established in 1994(2051 B.S). The bank started its operations from October 18, 1994(1$^{ST}$ Kartik 2051 B.S) with the objective of extending professionalized banking services at various parts of the society in the kingdom of Nepal and thereby contributes to economic development of the country.

Everest Bank Limited (EBL) has been promoted by well established business/ industry house of Nepal as joint venture with the Punjab National Bank

(PNB), one of the largest commercial banks in India with more than 440 branches and over 200 foreign correspondents around the globe. PNB is providing top management services to EBL under a Technical services Agreement signed in 1997.

**(a)    Capital Structure:**

| | | |
|---|---|---|
| **Authorized Capital:** | | **Rs 75,00,00,000/-** |
| 60,00,000 ordinary shares of Rs.100/- each | Rs.60,00,00,000/- | |
| 15,00,000 irredeemable preference share of Rs.100/- each | Rs15,00,00,000/- | |
| **Issued Capital:** | | **Rs.46,50,00,000/-** |
| 31,50,000 ordinary shares of Rs.100/- each | Rs.31,50,00,000/- | |
| 15,00,000 irredeemable preference share of Rs.100/- each | Rs15,00,00,000/- | |
| **Paid up Capital:** | | **Rs.45,50,00,000/-** |
| 31,50,000 ordinary shares of Rs.100/- each | Rs.31,50,00,000/- | |
| 14,00,000 irredeemable preference share of Rs.100/- each | Rs.14,00,00,000/- | |

**b)     Shareholders:**

Punjab National Bank (INDIA)    -    20%

Nepalese Promoters         -    50%

General Public Shareholders    -    30%

Everest Bank Limited has one of the largest networks among the private sector banks in Nepal having 16 branches across the kingdom. The main office is situated at New Baneshwore, Kathmandu. The Major branches are connected through Any Branch Banking System (ABBS) through which clients can initiate banking transactions from any branch connected by ABBS.

**(c)**    **Product and Services:**

Everest bank is the pioneer and front-runner in retail lending introducing

- Direct Housing Finance
- Vehicle Loan Scheme
- Education Loan Scheme
- Loan against Future Lease Rentals and Scheme for Professionals
- Loan against Lease Rentals of the Properties

The bank also provides other commercial banking services such as:

- Loan and Advances
- Deposits
- Trade Credit
- Bank Guarantees
- Locker Facility
- Foreign Exchange
- Remittance Facilities
- ATM Facility

**B)**    **Nepal SBI Bank Ltd. (NSBL):**

Nepal SBI Bank Ltd. (NSBL) is the first Nepal –India joint venture bank in the country. Institutional promoters of this bank are state bank of India. Karmachari Sanchaya Kosh, (Employees Provident Fund) and Agricultural Development Bank. The memorandum of undertaking was signed on 17 July 1992; NSBL became operational on 8 July 1993. The bank was registered under company Act 2021 on 2050/1/16 (28.04.1993) by the Department of Industry, HMG/N under the company Act 2021 and Commercial Bank Act 2031. The certificate of commencement of business was received on the 30th june, 1993 and the license from Nepal Rastra bank on the 6th july, 1993. The formal inauguration

programmed was held on 7 July 1993 and the operation was commenced on 2050/3/24 (8 July 1993). The Memorandum and Articles of Association of the bank show the capital structure of the bank at present as:

## (a) Capital Structure

| Authorized capital | 1,00,00,000 shares of Rs.100/- each | Rs.100,00,000,000/- |
|---|---|---|
| Issued Capital | 50,00,000 shares of Rs.100/- each | Rs.50,00,00,000/- |
| Paid-up Capital | 42,51,573 share of Rs.100/-each | Rs.42,51,57,300/- |

## (b) Shareholders

| | | |
|---|---|---|
| State Bank of India | - | 50.80% |
| Karmachari Sanchaya Kosh (EPF) | - | 15.24% |
| Agricultural Development Bank | - | 5.08% |
| General Public of Nepal | - | 28.88% |

The bank has been providing services through a head office, 17 branches across the kingdom. The head office is situated at Hattisar, Kathmandu.

## (c) Product and Services

NSBL has been providing full-fledged commercial banking services to its client's facilities provided by the bank be as follows:

- Loan and advances
- Deposit
- Trade Finance (Export and Import)
- Bank Guarantees
- Remittances
- SWIFT facility for remittances and letter of credit.
- Hire Purchase Loan
- Housing Loan

〕 Education Loan

〕 Automated Teller Machine (ATM) Facility

## C) Himalayan Bank limited (HBL)

In the process of establishment of modern banks and in the open liberalization concept with national and foreign joint venture the Himalayan Bank Limited- established and promoted in 1993 by a group of prominent business man, bankers and financial institution with Habib Bank of Pakistan. The bank's loan portfolio, comprising a healthy mix diversified sectors stands at 20.18 billion where as the deposit portfolio of the bank stands at 31.84 million which is one of the biggest portfolio vis-a-vis other private sector commercial banks in the country.

### (a) Capital Structure

| Authorized capital | 20,000,000 shares of Rs.100/- each | Rs.2,000,000,000 /- |
|---|---|---|
| Issued Capital | 10,135,215 shares of Rs.100/- each | Rs. 1,013,521,500 /- |
| Paid-up Capital | 10,135,215 shares of Rs.100/- each | Rs.1,013,521,500/- |

**(b)  Share Holders**

| Particulars | % |
|---|---|
| 1.   Local Ownership | 80.00 |
| 1.1  Nepal government | - |
| 1.2  Commercial Banks | - |
| 1.3  Financial Institution | 14.00 |
| 1.4  Organized Institute | 51.00 |
| 1.5  General Public | 15.00 |
| 1.6  Others | - |
| 2.   Foreign Ownership | 20.00 |
| Total | 100.00 |

**(c) Products and Service**

- Deposit
- Corporate Financing
- Consortium Financing
- Retail Financing
- Small and Medium sizes business Financing
- Trade business service
- Card service
- Global footprint in Remittances
- Treasury service
- Ancillary services

## 1.4   Focus of the Study

The concept of financial institutions in Nepal was introduced when the first commercial bank, the Nepal Bank Limited (NBL), was established in 30th Kartik, 1994 B.S as a semi-government organization .In the fiscal year 2039/40, new banking policy was introduced for the establishment of new banks by the joint investment of foreign nations. The establishment of joint venture banks gave a new horizon to the financial sector of the country. Commercial banks are the heart

of financial system. They hold the deposits of many persons, government establishment and business units. They make funds available through their lending and investing activities to borrowers, individuals, business firms and government establishments. In doing so, they assist both the flow of goods and services from the producers to consumers and financial activities of the government. They provide a large portion of medium of exchange and they are the media through which monetary policy is affected. These facts show that the commercial banking system of the nation is important to the functioning of the economy.

Bank is a business organization where monetary transaction occurs. It creates fund from its clients' saving and lends the same to needy person of business companies in term of loans, advances and investment. So proper financial decision-making is more important in banking transaction for its efficiency and profitability. Most of the financial decisions of a bank are concerned with current assets and current liabilities. The working capital management of a bank is different from other type of business enterprise. A bank plays a significant role to fulfill the requirement of working capital of any other type of business enterprises. It also needs efficient management. Investment in working capital of other business enterprises is part of current assets of bank's working capital and we can consider deposits and short-term borrowings as a part of current liabilities .So this study is a reference regarding the working capital management.

## 1.5  Statement of the Problem

The management of working capital is synonymous to the management of short –term liquidity. It has been regarded as one of the conditioning factor in the decision-making issues. It is no doubt, very difficult to point out as to how much

working capital needed by a particular business organization. An organization, which is not willing to take more financial risks, can go for more short-term liquidity. The more of short term liquidity means more of current assets and less of current liabilities. The less current liabilities imply less short term financing heading to the lower returns resulting from the use of more high cost long term financing. So it is very essential to analyze and find out problems and its solutions to make efficient use of funds for minimizing the risks of loss to attain profit objective.

The open and liberal economic policy towards the banking sector of HMG/N initiated many joint venture banks & finance companies, rural banks and co-operative societies in Nepal. The rapid growth of financial institution has led a sharp competition among each other. Although joint venture banks have been managed for better performance than other local commercial banks within short span of time. They have been facing cutthroat competition from other commercial banks. They have been facing neck-to-neck competition among each other's and are taking advantage of weakness, inefficient of domestic commercial banks.

Joint Venture banks like Everest Bank Limited and Nepal SBI Bank Limited face these kinds of problems, even though they have been able to make profit. In fact efficient Working Capital Management is a mirror of weakness & strength of the bank. A strong Joint venture Bank can contribute to national economy and also attract future foreign investors in this sector therefore working capital management should be fully observed to find out whether the banks are economically and financially strong or not.

So the researcher of this study will see the answer to the following questions.

〕 What are the major factors affecting the management of working capital in EBL, NSBL and HBL ?

〕 What is the lending pattern of loan and advances and other investment?

〕 What is the bank's image in relation to working capital?

⟩ Is the composition of working capital of EBL, NSBL and HBL appropriate?

⟩ Which of the current assets are more problematic in EBL, NSBL and HBL?

⟩ What are the components of working capital, which affect the operating income of EBL, NSBL and HBL?

## 1.6 Objectives of the Study

The main objective of this study is to examine the management of working capital in Everest Bank Limited, Nepal SBI Bank Limited and Himalayan Bank Limited. The specific objectives of this study are as follows:

⟩ To study the current assets and current liabilities and their impact on liquidity and profitability.

⟩ To analyze the comparative study of working capital management of EBL, NSBL and HBL.

⟩ To analyze their liquidity, composition of working capital, assets utilization and profitability.

⟩ On the basis of the analysis, to provide recommendation and suggestions for the improvement of working capital management of EBL, NSBL and HBL in the future.

## 1.7  Significance of the Study

Nepalese commercial banks are operating in the competitive environment. In this situation, banks have to adopt suitable strategies for their existence. They should balance and coordinate the different functional areas of business concern. The success or failure of any organization depends on its strategy, which is affected by working capital management. Working capital management is the crux of the problem to prepare the proper strategy on its favors. So the study might be helpful for the management of the concerned bank as well as it might be valuable

for the researcher, scholars, students who want to study into the working capital management of the joint venture banks.

Nepalese commercial banks are operating in the competitive environment. In this situation, banks have to adopt suitable strategies for their existence. They should balance and coordinate the different functional areas of business concern. The success or failure of any organization depends on its strategy, which is affected by working capital management. Working capital management is the crux of the problem to prepare properly strategy on its favors.

The study has multidimensional significance, which can be divided into four broader headings:

1. ***Its significance to the shareholders:*** The study might be helpful to aware the shareholders regarding the working capital management, i.e. liquidity profitability of their banks. The comparison will help them to identify the productivity of their funds in each of these two banks.

2. ***Its Significance to the management:*** The study might be helpful to go deep into the matters as to why the working capital management of their banks is better than their competitors.

3. ***Its significance to the outsiders:*** Among outsiders, mainly the customers financing agencies, stock exchanges and stock traders are interested in the performance of the banks and the customers (both depositors and debtors) can identify to which bank they should go. The financial agencies can understand where their fund is more secured and, stock exchange, stock brokers and stock traders can find out the relative worth of the stocks of each bank.

4. ***Its significance to the policy makers:*** Policy makers here refer to government and Nepal Rastra Bank. The study will be helpful to them while formulating the policy regarding commercial banks.

Therefore, considering all these facts, the study of working capital management of EBL, NSBL and HBL is considerably important.

## 1.8   Limitation of the study

The scope of the present study has been limited in terms of period of study as well as sources and nature of data. The period covered by the study extends over 5 years from 2060/61 to 2064/65 B.S. At the time of study, the data could be available up to 2064/65. The Limitations of this study are as follows:

1.  This study has been confined to only three of the joint venture banks, namely EBL, NSBL and HBL.

2.  The study is mainly based on secondary data. It is done mostly on the basis of the published financial documents, like balance sheet, profit and loss account and other related journals, magazines and books etc.

3.  The study follows with specific tools such as ratio analysis, mean, correlation and hypothesis.

4.  The lack of sufficient time and resources is another limitation of the study. The study is fully based on the student's financial resources and is to be completed within limited time. The report has taken only 5-year data for the study from year 2060/61 to 2064/65.

5.  The study is limited from the point of view of submission on partial fulfillment of the requirement for the master degree in business study.

## 1.9   Organization of the Study

This thesis has been divided into five chapters. They are

1.  Introduction
2.  Review of literature
3.  Research Methodology

4. Data Presentations and Analysis

5. Summary, Conclusion & Recommendation.

The Chapter one is the introductory which deals with background of the study, joint venture banks, profile of EBL, NSBL and HBL, focus of the study, statement of the problems, objective of the study, significant of the study and limitations of the study.

The second chapter deals with the review of literatures relating to concept of working capital management, types of working capital, working capital policy, determinant of working capital, need of working capital, financing of working capital, review of books, review of the journals/ articles and review of dissertation.

The third chapter is the research methodology, which deals with research design, nature and sources of data, population and sample, period covered, data gathering procedure and tools of data analysis. For the analysis, various financial and statistical tools have been used which are discussed in detail in this third chapter.

The fourth chapter deals with the presentation and analysis of relevant data and information through a definite course of research design. The chapter also presents the results relating to working capital management.

The last chapter is concerned with the summary of the study. Various conclusions are drawn from the study and recommendations are provided for improving the future performance.

Finally an extensive bibliography and appendix are presented at the end of the study.

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# CHAPTER-2

# REVIEW OF LITERATURE

## Introduction:

In this chapter, the focus has made on the review of literature relevant to the working capital management of commercial banks. Every study is very much based on past knowledge or provides foundation to the present study. This chapter helps to take adequate feedback to broaden the information based on inputs to researcher is study. It also provides insight into the findings of earlier studies through the review of books, publication and previous study.

## 2.1 Conceptual framework

The term "working capital management" is concerned only with the management of current assets and current liabilities of the business which is necessary for day to day operation. It is controlling the nerve of business .. Every company has variable working capital and permanent working capital . Hence the success and failure of organization depends on it. So far as the management of working capital in Joints Venture Banks of Nepal concerned a number of different management experts and students of MBS/MBA have undertaken studies. They have described the working capital management of various enterprises.

The purpose of this chapter is to provide on insight into W.C. management and to give a bird eye view of different experts thoughts regarding theory of W.C. and its implementation. While making review of related literature of working capital management the researcher has gone through different financial books bulletin documents, reports and generals Thus, this chapter has aimed at reviewing an available literature on working capital management in the context of commercial Banks.

## 2.2 Meaning of commercial Bank

"Commercial Banks are those institutions that perform all kind of banking functions such as accepting deposits, advance loans, creating and advancing loan agency function etc. They provided short-term, medium term and long term loans to trade and industry."[3]

With regards of commercial banks, a writer has concluded, "Commercial bank under takes the payment of subscriptions, premium, rents and collection of cheques, bills promissory notes etc. On behalf of its customer, It also acts as correspondent or representative of its customers other banks and financial operations."[4]

The commercial bank act 2031 B.S has further pointed out that "Commercial bank debt whenever necessary for trade and commerce. They take deposits from public and grant loans in different forms. They purchase and discount bills of exchange promissory note and exchange foreign currency. They discharge various function on behalf of their customers providing that they are paid for their services.[5]

American Institute of Banking defines commercial bank, as "Commercial Bank is a corporation which accepts demand deposits subject to cheques and makes short term loan to business enterprises, regardless of the scope of its other services". The institution also laid down the four functions of commercial banks as receiving and handling deposits (deposit Function), handling payments of money) payment Function), making loans and investment (loan function) and creating money by extension of credit (money function).[6]

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[3] W.Reed Fward, Rechard V.Cotlel, Rechard K. Smith *Commercial Banking* Prentice Hall of India Pvt. Ltd.1976,P.2

[4] Shekhar and Shekhar *Banking the Theory and Practice* Vikash Publishing House Pvt.Ltd New Delhi 1999, P..5

[5] *Nepal Commercial Bank Act* B.S 2031

[6] American Institute of Banking, *Principles of Bank Operation* USA. 1972 ,P.345.

As a summary of the above definitions, the commercial banks are those financial institutions which perform widest range of economics and financial function of any business firm in the economy more over they also provide technical help and suggestions relating to administration suggestion and safe keeping of valuables. Collection of bills, cheques, overdraft facilities, modern banking facilities to industries and commerce are also carried out by these banks.

*Function of commercial banks:-*

- Creating money.
- Deposit accepts.
- Facilitating for the financing of foreign trade.
- Payment mechanism.
- Safe keeping of valuables.
- Extension credits.
- Trust service.
- Remittance service.

In today's concern the operating function of the commercial banks are,(a) to collect working capital (b) to utilize the working capital in various purposes (c) by utilizing the working capital, it earns profit and (d) part of the profit is distributed as dividend and part of the profit is retained for the expansion of banking transactions.

## 2.3   Working Capital Management

The management of the funds of business can be described as financial management. Financial management is mainly concerned with two aspects. Firstly, fixed assets and fixed liabilities, in other words, long term investment and sources of funds. Secondly, current uses and current liabilities. Both of these types of funds play a vital role in business finance.

Working capital is a furnish investment in short –term assets.[7] Working capital is the firm's investment in short term assets cash, short term securities, account receivables and inventories.[8]

The term working capital is often used to refer the firm's current assets like primarily cash, marketable securities, account receivables and inventories. Working capital refers to the fact that most of its components have their impact over weeks and months rather than years. For this reason, working capital management is often referred to as short-term finance.[9] The term working capital is closely related to the term funds and has two common meanings. It is used to mean current assets or current assets minus current liabilities.[10]

Gross working capital is the firm's total current asset.net working capital is current assets minus current liabilities.[11]The gross working capital is simply called as working capital, refers to the firms investment in current assets.[12] Working capital may be defined more particularly as the assets held for current use within a business less the amount due to those who await settlement in the short term in whatever form. Working capital management is an important aspect of manufacturing compares that have so far developed country. Among all available options proper management of working capital is the only best possible option to improve their operational viability. Working capital is the crucial aspect of financial management practice in manufacturing enterprises. Working capital represents portion that circulates from one form to another in the ordinary conduct of business. This idea embraces the recurring transaction from cash to inventories to receivable to cash that forms the conventional chain of business operations. Funds deployed for short-term are mainly for working capital or operational

[7] J.Fred Weston *Mangerial finance* Illinois:The Dryden Press Hinsdale,1981, P.137.
[8] J.F.Weston and E.F.Bringham *Managerial Finance* Illinois:The Dryden Press,1984,P.266
[9] Ezra Soloman and J.J Pringle *An Introduction to Financial Management*, New Delhi :Prentice Hall of India Pvt., 1978 P..51
[10] John J .Hampton *Financial Decision Making* New Delhi :Prentice Hall of India Pvt. Ltd.,1983,P.86
[11] J.F. Weston and E.F.Bringham *Managerial Finance* P 267.
[12] I.M Pandey *Financial Management* New Delhi :Vikas Publishing House Pvt. Ltd .,1994 ,P.666

purpose. Towards the day-to-day operation, a firm will have to provide money towards the purchase of raw materials, payment of wage and salaries to extend credit to buyers of goods as well as to meet other day-to-day operations.

Working capital management is concerned with the problems that arise in attempting to manage the current assets. The term current assets refers to those assets which in the ordinary course of business can be or will be turned into cash with in one year without undergoing a diminution in value and with out disrupting the operation of the firm. The major current assets are cash, marketable securities, account receivables and inventory. Current liabilities are those liabilities, which are intended at their inception to be paid in the ordinary course of business with in a year, out of the current assets or earnings of the concern. The basic current liabilities are accounts account payable, bills payable, bank overdraft and outstanding expenses. The goal of working capital management is to manage the firm's current assets and current liabilities in such a way that a satisfactory level of working capital is maintained.

This is so because if the firm cannot maintain to satisfactory level of working capital, it is likely to become insolvent and may be forced into bankruptcy. The current assets should be large enough to cover its current liabilities in order to ensure a reasonable margin of safety. Each of the current assets must manage efficiently in order to maintain the liquidity of the firm while not keeping too high level of any one of them. Each of the short-term sources of financing must be continuously managed to ensure that they are obtained and used in the best possible way. The interaction between current assets and current liabilities is, therefore, the main theme of the theory of working capital management.[13]

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[13] M.Y. Khan and P.K Jain *Financial Management Text and Problems* Second Edition, New Delhi: Tata McGraw Hill Publishing Co., 1993,P.603.

There are two concepts of working capital: -gross & net. Gross working capital, simply called working capital, refers to the firm's investment in current assets. Current assets are the assets which can be converted into cash within an accounting year (or operating cycle) and cash, short-term securities, debtors, bills receivables and stocks(inventory) are included in current assets.Net working capital refers to the difference between current assets & current liabilities. Current liabilities are those claims of outsiders, which are expected to mature for payment within an accounting year and include creditors, bills payable and outstanding expenses. Net working capital can be positive or negative. A positive working capital occurs when current liabilities are in excess of current assets.[14]

The two concepts of working capital-gross and net are not exclusive; rather they have equal significance from management view. The gross working capital concept focuses attention on two aspects of current assets management; (a) optimum investment in current assets and (b) financing of current assets. The consideration of the level of investment in current assets should avoid two danger points-excessive and inadequate investments in current assets. Excessive investment in current assets should be avoided because it impairs firm's profitability, as idle investment earns nothing. On the other hand, inadequate among of working capital can threaten, solvency of the firm, if it fails to meet its current obligations .It should be realized that the working capital needs of the firms may that be fluctuating with changing the business activity. This may cause excess or shortage of working capital frequently. The management should be prompt to initiate an action and correct imbalances.

By analyzing the above concept about working capital, we concluded that, all the corporations, whether public or private, manufacturing or non-manufacturing have just adequate working capital to serve in competitive market. It is because excessive or inadequate working capital is dangerous from the firm's

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[14] I.M Pandey *Financial Management* New Delhi :Vikas Publishing House Pvt. Ltd ,1994 ,P.665

point of view. Excessive investment on working capital affects a firm's profitability just idle investment, yields nothing. In the same way, inadequate investment on working capital affects the liquidity position of the company and leads to financial embarrassment and failure of the company.

It is therefore, a recognized fact that any mistake made in management of working capital can lead to adverse effects in business and reduces the liquidity, turnover and profitability and increases the cost of financing of the enterprises.

## 2.4   Classification of Working Capital

Working capital can be classified into two types as given below

**1) Permanent Working Capital**

Permanent working capital is the minimum amount of current assets required throughout the year to conduct a business on a continuous and uninterrupted basis, even during the dullest season of the year. It will remain permanently in the business and will not be returned until the business is wound up. But it could vary from year to year depending upon the growth of the company and the stage of business cycle in which it operates. Business firm could not be able to survive itself in the competitive market without permanent working capital. For instance, every business enterprises has to maintain a minimum stock of raw materials, work-in-progress, finished products, spare parts etc. It always requires money for the payment of wages and salaries throughout the year.

**2) Temporary Working Capital**

Temporary working capital is also known as variable, seasonal and fluctuating working capital. It represents the extra working capital, required at certain times during the operating year to meet some exigency. It may require in

seasonal changes of business and certain abnormal conditions like strikes, lockouts, dull market conditions, cut-throat competition etc. If a firm has sound management of this portion of working capital, it can easily win other competitors in the cutthroat of the market.

Types of working capital



**Temporary Working Capital**

**Permanent working capital**

**Time period**
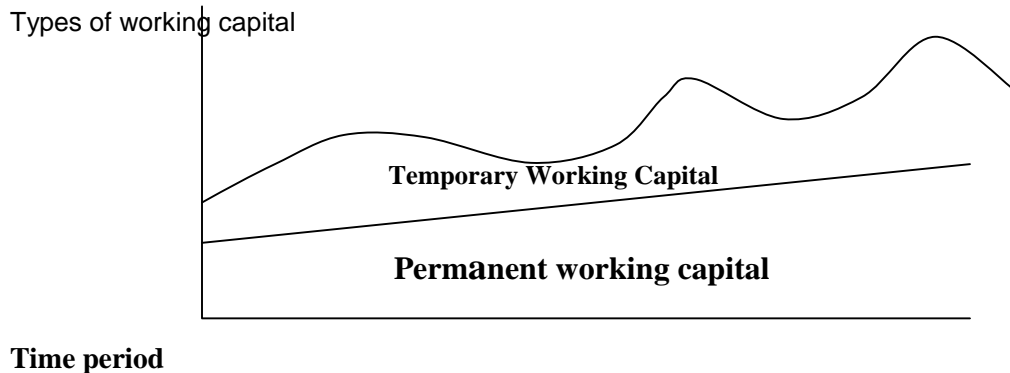
*Source: I.M. Pandey **Financial Management**, P.808*

## 2.5  Need of Working Capital

The need of working capital or current assets cannot be overemphasized. The objective of financial decision-making is to maximize the shareholder's wealth. To achieve this, it is necessary to generate sufficient profits. The extent to which profit can be earned will naturally depend upon the magnitude of the sales among other things. A successful sales program is, in other words, necessary for earning profit by any business enterprise. However, sale does not convert into cash instantly; there is invariable a time log between the sales of goods and receipt of cash .There is ,therefore, a need for working capital in the form of current assets to deal with the problem arising out of the lack of immediate realization of cash against goods sold. Therefore, sufficient working capital is necessary to sustain sales activity. Technically, this is referred to as the operating or cash cycle. The operating cycle can be said to be at the heart of the need for working capital. "Operating cycle is the time duration required to convert sales, after the conversion of resources into inventories, into cash."

Most of the firms aim at maximizing the wealth of shareholders. The firm should earn sufficient return from its operation. The extent to which profit can be earned naturally depends upon the magnitude of sale among the other things. For constant operation or business, every firm needs to hold the working capital components like cash, receivable, inventories etc. Therefore, every firm needs working capital to meet the following motives:

### i) The Transactional Motive:

According to transactional motive, a firm holds cash and inventories to facilitate smooth production and sales oeration in regular .Thus , the firm needs the working capital to meet the transaction motive.

### ii) The Precautaionary Motive:

Precautionary motive is the need to hold cash and inventories to guard against the risk of unpredictable change in demand and supply forces and other factors such as strike, failure of important customer, unexpected slow down in collection of account receivables, cancellation of order for goods and some other unexpected emergency. Thus, the firm needs the working capital to meet any contingencies in future.

### iii) The Speculative Motive:

Speculative motive refers to the desire of afirm to take advantages of following opportunities:

a) An opportunities of profit making investment.
b) An opportunities of purchasing raw materials at reduced price on payment of immediate cash.
c) To speculate on interest rate and,

d) To make purchases at favorable price etc. Thus the firms need the working capital to meet the speculative motive.

## 2.6 Financing of Working Capital

The firm's working capital assets policy is never set in a vacuum; it is always established in conjunction with the firm's working capital policy. Every manufacturing concern or industry requires additional assets whether they are in stable or growing conditions. The most important function of financial manager is to determine the level of working capital and to decide how it is to be financed. Financing of any assets is concerned with two major factors –cost and risk. Therefore, the financial manager must determine an appropriate financing mix, or decide how current liabilities should be used to finance current assets. However, a number of financing mixes are available to the financial manager. He can resort generally three kinds of financing.

i) **Long –term financing**:

Long-term financing has high liquidity and low profitability, Ordinary share, debenture, preference share; retained earning and long term debt of financial institution are major sources of long-term financing.

ii) **Short-term financing:**

A firm must arrange its short-term credit in advance. The sources of short-term financing of working capital are trade credit and bank borrowing.

**Trade Credit:** It refers to the credit that a customer gets from suppliers of goods in the normal course of business. The buying firms don't have to pay cash

immediately for the purchase that is called trade credit. It is mostly an informal arrangement and is granted on an open account basis. Another form of trade credit is bills payable. It depends upon the term of trade credit.(Horne, 1994:471)

**Bank Credit:** Bank credit is the primary institutional sources for working capital financing. For the purpose of bank credit,amount of working capital requirementhas to be estimated by the borrowers and banks are approached with the necessary supporting data.

After availability of this data,bank determines the maximum credit based on the margin reqirement of the security. The types of loan provided by commercial banks are loan arrangement, overdraft arrangement,commercial papers etc.

iii) **Spontaneous financing:**

Spantaneous financing arises from the normal operation of the firms .The two major sources of such financing are trade credit (i.e, credit and bills payable ) and accruals.Whether trade credit is free of cost or not actually depends upon the firm would like to finance its working capital with spontaneous source as much as possible. In practical aspect, the real choice of current assets financing is either short-term or long-term sources. Thus,the financial manager concentrates his power in short term versus long term financing. Hence, the financing of working capital depends upon the working capital policy which is perfectly dominated by mangement attitude the risk–return.

There are three basic approaches for determining an appropriate Working capital financing mix.

**a) Hedging Approach**

If the firm attempts to match asset and liability maturities ,then the working capital financing policy is termed as moderate(maturity matching of self liquidity) policy. Hedging approach is a method of financing where each asset would be offset with a financing instrument of the same approximate maturity.

"With a hedging approaches short-term or seasonal variations in current assets would be financed with short-term debt; the permanent component of current assetss and all fixed assets would be financed with long-term debt or equity. With a hedging approaches to financing ,the borrowing  correspond to the expected swings in current assets,less spontaneous financing.

Here,as the level of permanent current assets increases ,the long-term financing level also increases .Similarly, as the level of temporary or variable current assets increases, the level of short-term financing also increases.However, due to the uncertainty of expected lives of assets exact matching is not always possible.

## b) Conservative Approach

"The financing policy of the firm is said to be convervation when it depends more on long –term funds for financing needs. Under a conservative plan,the firm finances its permanent assets and also a part of temporary current assets,with long-term financing. In the periods when the firm has no need for temporary current assets the idle  long-term funds can be invested in the tradable securities to conserve liquidity.

This approach relies heavily on long-term financing ,as a result firm has less possibility of financing ,the problems of shortage of funds."In conservative approach,permanent capital is used to finance all permanent assets requirements or also to meet some of the seasonal demands.

**c) Aggressive Approach:**

A firm can follow aggressive policy in financing its assets. Under an aggressive policy, the firm finances a part of its permanent current asset with short-term financing. "The relatively more use of short-term financing makes the firm more risky."

"The greater the portion of permanent asset need financed with short-term debt, the more aggressive the financing is said to be."

## 2.7 Determinants of Working Capital

There are no hard and fast rules or certain formulae to determine the working capital requirement of the firm. The importance of efficient working capital management is an aspect of overall financial management. Thus a firm plans its operations with adequate working capital requirement or it should have neither too excess nor too inadequate working capital. A number of factors affect different firms in different ways. Internal policies and environment changes also affect the working capital. Generally, the following factors affect the working capital requirement of the firm.

**i) Nature and size of Business:**

The working capital requirements of a firm is basically related to size and nature of the business.If the size of the firm is bigger,then it requires more working capital whereas small firm needs less working capital relatively to public utilities.

ii) **Manufacturing Cycle**:

Working capital requirement of an enterprise are also influenced by the manufacturing or production cycle. It refers to the time involved to make the finished goods from the raw materials. During the process of manufacturing cycle funds are tied-up. The longer the manufacturing cycle, the larger will be working capital requirement and vice-versa.

**iii) Production Policy:**

Working capital requirement is also determined by its production policy. If a firm produces seasonal goods, then its production and sales volume fluctuate with different seasons. This type of fluctuating policy affects the working capital policy of the firm.

**iv) Credit Policy:**

Credit policy affects the working capital of a firm.Working capital requirement depends on terms of sales.Different terms may be followed by different customers according to their credit worthiness.If the firm follows the liberal credit policy,then it requires more working capital.Conversely,if a firm follows the stringent policy,it requires less working capital.

**v) Availability of Credit:**

Availability of credit facility is another factor that affects the working capital requirements.If the creditors avail a liberal credit terms then the firm will need less working capital and vice-versa.In other words,the firm can get credit facility easily on favorable conditions.Thus,it requires less working capital to run the firm otherwise more working capital is required to operate the firm smoothly.

**vi) Growth and Expansion:**

Growth and expansion also affect the working capital requirement of firm. However, it is difficult to precise; determine the relationship between the growth and expansion of the firm and working capital needs. However, the other things being the same growing firm need more working capital than those static ones.

## vii) Price level Change:

Price level changes also affect the working capital requirement of a firm. Generally, a firm requires maintaining the higher amount of working capital, if the price level rises. Because the same level of current asset needs more funds due to the increasing price .In conclusion, the implications of changing price level on working capital position will vary from firm to firm depending on the nature and other relevant consideration of the operation of the concerned firm.

## viii) Operating Efficiency:

Operating efficiency is also an important factor,which influences the working capital requirements of the firm. It refers to the efficient utilization of available resources at minimum cost. Thus,financial manager can contribute to strong working capital position through oerating efficency.If a firm has strong operating efficency then it needs lesser amount of working capital and vice-versa.

## ix) Profit Margin:

The level of profit margin differs from firm to firm .It depends upon the nature and quality of product ,marketing management and monopoly power in the market. If the firm deals with the high quality product has a sound marketing management and enjoy the monopoly power in the market then it earns quite high profit and vice-versa. Profit is the source of working capital because it contributes towards the working capital as a pool by generating more internal funds.

**x) Level of Taxes:**

The level of taxes also influences working capital requirement of a firm. The amount of taxes to be paid in advances is determined by the prevailing tax regulations. But the firm's profit is not constant ,or cannot be predetermined. Tax liability in a sense of short-term liquidity is payable in cash. Therefore,the provision for tax amount is one of the important aspects of working capital planning.If tax liability increases,it needs to increase the working capital and vice-versa.

## 2.8 Review of Books

Some available books about working capital management are reviewed here under.

The well known professors *Weston and Bringham* have given some theoretical insights into working capital management after their various researches study on it. The bond conceptual findings of their study provide sound knowledge and guidance for the futher study on the field of management of working capital in any enterprise and naturally to this study as well. They explain, in the beginning,the importance of working capital,concept of working capital ,financing of working capital,the use of short term versus long-term debt,relationship of current assets to fixed assets.In the next chapter they have dealt with the various components of working capitals and their effective management techniques. The components of working capital they have dealt with the cash,marketable securities ,receivable and inventory for the efficient management of cash,they have explained the differnet cash management models. They have also explained the major sources and forms of short term financing ,such as trade creddit,loans from commercial banks and commercial paper.

Van Horne has categorized the various components of working capital,i.e , liquidity ,receivable and inventory and current liabilities and grouping them according to the way they affect valuation. He has also described the different methods for efficient management of cash and marketable securities and various models for balancing cash and marketable securities. For the management of receivable,different credit and collection policies have been describedd and various principles of inventory have been examined for inventory management control.

I.M Pandey[15] has described various aspects of working capital management. He has divided working capital management into five chapters. The first chapter deals with the concepts of working capital ,need for working capital,determinants of working capital,dimensions of working capital management,optimum level of current assets,and working capital trends in India. In the second chapter,he has described the management of cash and marketable securities ,where he has dealt with facts of cash management, motives for holding cash,cash balance,investment in marketable securities.In the third capter,he has described the management of receivable,in which he has dealt with goals of credit policy credit procedures for individual accounts. In the fourth chapter of inventory management,he has described the need to hold inventories, objectives of inventory management,inventorymanagement techniques, selective inventory control technique and financial manager's role in inventory management.

Another well-known authors, Khan and Jain have also shed the light on working capital management.Working capital management is concerned with the problem that arises in attempting to manage the current assets,the current laibilities and interrelationship that exist between them.The term current assets refer to those which in the ordinary course of business can be or will be turned in to cash within one year without undergoing a diminution in value and without disrupting the

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[15] I.M Pandey *Financial Management* New Delhi :Vikas Publishing House Pvt. Ltd .,1994, p-665-666

operation of the firm.The major current assets are cash ,marketable securities ,accounts receivable and inventory. Current liabilities are those liabilities which are intended at their inception to be paid in the ordinary course of business within a year,out of the current assets of earning of the concern. The basic current liabilities are account payable,bills payable,bank overdraft and outstanding expenses.

The goal of working capital management is to manage the firm current assets and current liabilities in such a way that a satifactory level of working capital is maintained.This is so because if the firm cannot maintain to satisfactory levelof working capital,it is likely to become insolvent and may be forced into bankruptcy.The current assets should be large enough to cover its current liabilities in order to ensure a reasonable margin of safety.Each of the current assets must manage efficiently in order to maintain the liquidity of the firm while not keeping a too high level of any one of them .Each of the short-term sources of financing must be continuosly managed to ensure that they are obtained and used in the best possible way.The interaction between current assets and current liabilities is therefore ,the main theme of the theory of working capital management.[16]

Surendra pradhan,in his book "Basic of Financial Management",has shed light financing of working capital as: "There are two ways of financing working capital requirements i.e,internal and external sources. Internal sources include use of retained earnings,depreciation found and share capital.External sources include trade credit,advances from customer,short term deposit,cash credit,short term government loan etc". Generally  sources or a combination of various sources of financing to be used depends on the types of current assets (Parmanent and Variable) to be maintained. The long term sources such as stock issues, debts and bonds are appropriate to use for the parmanent type of current assets only if the

[16] M.Y. Khan and P.K Jain  *Financial Management Text and Problems*  Second Edition, New Delhi: Tata McGraw Hill Publishing Co., 1993, p-603

spontaneous type of short term sources are not enough to not available to cover the required sized of permanent current assets."[17]

## 2.9  Review of Journals and Articles

Some of the journals and artices published by management experts in working capital management have reviewed in this section.

Mr.Buddhi Prasad Acharya ,an NTC chartered accountant ,has suggested utilizing NTC fund rather than accepting high interest bearing loans for capital investment ,since the rate of earning in liquid fund is less than the rate of interest it pays for the loan. Mr.Acharya,in another article,has again suggested utilizing its internal resources. He writes, "It has become possible to maximize profit utilizing internal resources with minimum cost. In other hand,liquidity position of the corporation is quite high as it keeps capacity to pay off whole debt at once if the circumstances so required.Keeping in view,the increasing service,it can be expected that the futher profitability trend will get improved futher more in comparision to current trend provided the revenue structure from national and international service remain within as certain limit at unchanged tariff situation."[18]

In another article,published by Dr. K.Acharya, two major problems: Operational problems and Organizational problems-regarding the working capital management in Nepalese PE's have been described .The operational problems,according to Dr. Acharya listed in the first part ,are increase of more current liabilities than current assets ,not allowing the current  ratio 2:1 and slow turnover of inventory.Similarly ,change in working capital in relation to fixed capital had very low impacts over the profitability,and thin transmutation of capital employed to sales,absence of management information system ,break even

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[17] Surendra pradhan *Basic of financial Management*  Kathmandu: Educational Enterprises,2000.
[18]  B.P. Acharya   *Doorsanchaar ko Bartmaan Abastha ra nirakan* Sanchaar Telecommunication Corporation, Silver jubilee Special Issue,kathmandu,NTC.

analysis,fund flow analysis ,and ratio analysis were either undone or ineffective for performance evaluation.Finally,the study points monitoring of the proper functioning of working capital management has never been considered a managerial job.

In the second part, Dr. Acharya has listed the organizational problems in the  PE's. In most of the PE's ,there is a lack of regular internal and external audit system as well as evaluation of financial results.Similarly ,while a very few PE's have been able to present their capital requirement ,functioning of finance department is not satisfactory and some PE's are even facing the under-utilization of capacity .To make an efficient use of funds for minimizing the risk of loss and to attain profit objectives,he has made some suggestions . For example, PE's should avoid the system of crisis decision which prevailed frequently in their operation,avoid fictitious holding of assets,the finance staff should be acquired with the modern scientific tools used fo the presentation and analysis of data. Dr .Acharya has also suggested optimizing level of investment at a point of time. Neither over nor under investment in working capital is desired by the management of an enterprise because of these situation will erode the efficiency of the concern.[19]

## 2.10  Review of Disseration

In the time of  research on secondary sources ,it was reviewed that some students from Tribhuvan university and others from different management schools have conducted several thesis work .Some of them as are supposed to be relevant for this study are presented belows:

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[19] Acharya. K Dr  *Problems and Impediments in the management of Working Capital in Nepalese Enterprises* ISDOC volume 10,1985.

Prem Kumar Shrestha[20] in his study on "Working Capital Management in Bhrikuti Paper Mills Ltd", considered the financial statement of this organization for the five fiscal years from 2044/2045 to 2048/2049 B.S. He has drawn some conclusion from the study. The major components of current assets are cash and bank balances,inventories and receivables. Among them cash and bank balance holds the largest portion and has fluctuating trend. Due to the lack of definite credit and collection policy the receviables are increasing year after year.Various turnovers are decreasing which indicate that current assets are not properly utilized in the mill. The liquidity position of the mill is not bad;it is due to decrease trend of current liabilities. Although,the mill is earning profits ,its profitability position is not encouraging one because its return on total assets is not high enough.

Keshav Gadtaula[21] , in his study on working capital of Nepal Tea Development Corporation(NTDC),analyzed the financial statements of the corporation for ten year from 1982/83 to 1991/92 by using different finacial and statistical tools. He used ratio analysis ,trend analysis,funds flow analysis ,standard deviations ,co-efficient of variation and regression analysis and test of hypothesis as the tools of analysis.The major findings of his study were:

- ) The company had higher percentage of current assets that denotes greater liquidity position of the firm and lower risk of technical insolvency.
- ) Current asset to sales ratio was not constant in every year.
- ) Increasing position of sundry debtors indicates slack position of the sales with accumulation of inventories.
- ) The company had a significant positive correlation between working capital and total assets and working capital and net sales.
- ) The company inventory constituted the most important and largest elements of working capital.

[20] Shrestha Kumar Prem *A Study on Working capital Management in Bhrikuti paper mills Ltd* An Unpublished Master's Degree Thesis, Faculty of Management, T.U ,1994

[21] Gadtaula Keshav Prasad , *Working Capital Management of Nepal Tea Development Corporation,* Unpublished Master's Degree Thesis, Faculty of Management, T.U ,1994

） Net working capital turnover ratio of the company was lower indicating the inefficent utilization of working capital.

Based on the findings ,he recommended that inventory should be well managed and inventory budgets should be fixed on the basis of actual requirement, inventory norms and its demand,liquidity positon should be maintened to lead the firm from minimum current liabilities to maximum sales. He also suggested the NTDC management for effective sales promotion(i,e, advertisement campaigns),sound labor and personnel management and to determine its cash holding structure according to the operational needs.

Another study on working capital management of Bottlers Nepal is conducted by Raghu  Krishan Shrestha.[22] He focused his study on the appropriateness of investment in current assets to its total assets,Liquidity position management of working capital needs and utilization of current assets in BNL. From the study he found that the proportion of CAS to that assets was increasing year after year and the proportion of inventories was the highest followed by receivable and cash respectively. He also found the liquidity position of BNL was very high resoling low profitability and concluded that the efficency of working capital management in BNL was poor. For those problems he suggested paying proper attention to increase investment .He suggested adopting suitable credit policy and providing discount to accelerate its debt collection period. He also recommended  to set minimim target rate of return to minimize the gap of achievement.

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[22] Raghu Krishna Shrestha *An Evaluation of Working Capital Management of Bottler's Nepal Ltd.*  An Unpublished Master's Degree Thesis, Faculty of Management, T.U ,1994

CHAPTER THREE

## RESEARCH METHODOLOGY

### 3.1 <u>Introduction</u>

In the modern world Research has become an indispensable in all spheres of human activity. Research is essentially a systematic inquiry seeking facts through objectives verifiable methods in order to discover the relationship among them and to deduce from them broad principles or laws. It is really a method of critically thinking by defining and redefining problems, formulating hypothesis or suggested solution, collecting, organizing and evaluating data, making deductions and making conclusions to determine whether they fit the formulated hypothesis.

Research is a systematic method of finding out solution to a problem where as research methodology refers to "various sequential steps to adopt by a research in studying a problem with certain objective in view".[23] In other words, research methodology describes the methods, techniques and process applied in the entire aspect of the study.

"A systematic research study needs to follow proper methodology to active the pre-mentioned objective. Research methodology is a sequential procedure and method to be adopted in a systematic study".[24]

It has been clear that research methodology is a systematic and scientific method of identifying problems, collecting facts and information tabulating and recording the data, setting hypothesis, analyzing the facts and researching certain conclusion with a view of findings answer to the problems. In fact, research methodology is one of the crucial aspects of the thesis writing. So the present chapter outlines the entire research methodology used and followed in this study.

### 3.2 <u>Research Design</u>

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[23] C.R. Kothari, *Research Methodology Methods and Techniques*, Villey Eastery Limited New Delhi, 1989, p. 38.

[24] C.R.Kothari, *Quantitative Techniques*, Vikash Publishing House Pvt. LTd., New Delhi, 1994, p. 19.

Research design refers to the conceptual structure within which the research is conducted. It is the plan, structure and strategy of investigation conceived so as to obtain a number of research questions and to control variance. It is essential for the whole study and helps in finding out deficiency in expectation of the starting of work. The research design is the outline of a plan to test the hypothesis and should include all the procedures that follow. It is said that the formidable problem that follows in task of defining the research is the preparation of design of the research project, popularly known as research design. Basically, the research design has two purposes. The first purpose is to answer the research question or test the research hypothesis. The second purpose of research design is to control variance.

"A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure".[25]

Thus, a research design is a plan for the collection and analysis of data. Research design is the main part of a thesis or any research work. It presents a series of guide posts to enable the researcher to progress in the right direction in order to achieve the goal. This study tries to evaluate the working capital management of the selected JVBs banks. To accomplish the objectives it has adopted the descriptive cum analytical type of research design. It tries to describe and analyze all these facts that have been collected for the purpose of the study. Some statistical and accounting tools have also been applied to examine the facts and descriptive techniques have been adopted to evaluate the structure of selected nature of operations.

### 3.3 Population and Sample

The term "population" used in statistics denotes the aggregate from which the sample is to be taken and the term "sample" is that part of the population which we select for the purpose of investigation. Population refers not only to people but the totality of all observations that have selected for study. Population is also known as universe. Sample refers to a part chosen from the population. Shoppers often examine a handful of rice from the sack before purchasing any. They decide from the handful of rice (sample) what the sack (population) will contain.

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[25] Claire Selltiz Others, *Research Methods in Social Science*, 1962, as quoted in C.R. Kothari, *Quantitative Techniques*, Vikash Publishing house Pvt. Ltd., New Delhi, p. 22.

Thus, in statistics population means whole and the sample means the part of the whole. This study is directly concerned in the population and treated in the population and sampling data. In Nepal 115 companies are listed in NSE whose stocks are traded in stock market. Out of 115 listed companies, the three JVBs have been selected as samples for the study. The financial statements of the total number of commercial bank in Nepal from the date of their establishment till today constitute the population for the present study.

## 3.4 Sources of Data

Analysis of data means to study the tabulated material in order to determine inherent facts or meanings. It involves breaking down the existing complex factors in to simpler parts and putting them together in new arrangements for interpretation. A plan of analysis should be prepared in advance before the actual collection of the material. A preliminary analysis plan for investigation process requires detailed information about similarities, differences, trends, outstanding factors etc.

This research would include both Primary and Secondary data. Data collected by the researcher or through agent for the first time from related field and possessing original character are known as primary data. Primary data are also called field source. On the other hand, data collected by some one else, used already and are made available to others in the form of published statistics are known as secondary data. Once primary data have been used, it loses its primary characteristics and becomes secondary. The difference between primary and secondary data is a matter of relativity. Primary data are generally used in those cases where the secondary data do not provide an adequate basis for analysis. In certain cases both data may be employed.

## 3.5 Data Collection Techniques

Once the purpose of statistical investigation has defined, the next step is the collection of the data which are relevant for analysis in a meaningful manner. Thus collection of data is considered as an integral part of the research activity. The following data collection procedure was used after the identification of sources of data required for the preparation of this research work.

Firstly, the financial statements i.e. Profit and Loss Account and Balance Sheet of the three JVBs were downloaded from the Nepal Stock Exchange to the computer disk and printed later on. Lastly, financial statement published by the

banks from time to time, Auditor General's Reports, some previous study made regarding in this field, newspaper, journals, booklets and articles related to this study, Publications of Ministry of Finance, Ministry of Industry, Central Bureau of Statistics, National Planning Commission and similar reports submitted to various meeting, seminar and official accounting were collected.

## 3.6 Data Analysis Tools

There are different analytical tools and technique used in these research studies which are highlighted below:

### 3.6.1 Ratio Analysis

Financial ratios are just a convenient way to summarize large quantities of financial data. They are simply a means of highlighting in arithmetical terms the relationship between figures drawn from financial statements. There are two ways of expressing ratios -one is the percentage method such as 100 percent and the other is the phrase method such as two for one.

A ratio is the defined as" the indicated quotient of two mathematical expressions" and as "the relationship between two or more things."[26]

"A ratio is simply one number expressed in terms of another." [27]

Ratio analysis is considered as one of the most important and commonly used techniques in the modern times for the analysis of working capital. It is the basic technique used in judging the liquidity position of a firm. It is the one that help to make rational decisions in keeping with the objectives of the firms. It is computed from financial statement such as Balance Sheet, Profit and Loss account; Fixed Assets Schedule, etc.

In this research study, the investigator has selected which is related to working capital management of the selected banks.

### 3.6.2 Average

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[26] *Webster's New Collegiate Dictionary*, 8th Edition, Springfield, Mass: G & C, Merrian, 1975, p. 958.
[27] Robert N. Anthony, *Management Accounting*, Third Edition, Homewood, Illinois, 1964, p. 297.

The term "average" is referred as a measure of central tendency. The average is the measures, which condense a huge data in to a single value, which represents the entire data and generally located at the central part. There are different types of averages but only Arithmetic Mean is used for this research work. Arithmetic Mean is most popular and frequently used measure of central tendency. It is the ratio of the sum of all observations to the number of observations. It is calculated from ungrouped data and frequency distributions.

Arithmetic mean of a given set of observations is their sum divided by the number of observations. In general, if $X_1, X2\ldots..X_n$ are the given n observations, then their arithmetic mean, usually denoted by $\overline{X}$ is given by:

$$\overline{X} = \frac{X_1 \Gamma X_2 \Gamma \} \} ..\Gamma Xn}{n} = \frac{x}{n}$$

where,

$x$ = the sum of the observations and

$n$  = no. of years

### 3.6.3 Standard Deviation (SD)

It measures the variation of the mass of the figures in a series of average. It is absolute measure of dispersion. So, it is calculated to supplement the relative measure, Coefficient of variation. It is usually denoted by $\exists$ (Small Sigma). Standard deviation is the positive square root of the arithmetic mean of the square of the deviation of given observation from their arithmetic mean. Thus, if $X_1, X_2, X_3\ldots\ldots\ldots Xn$ is a set of 'n' observation then the standard deviation is given by,

$$\dagger X \sqrt{\frac{\int X \, Z \overline{X} Å}{N}}$$

### 3.6.4 Trend Percentage Method

There are various phenomena, which change with the passage of time. So the careful study of relative change that has taken place in the past help to forecast the future trend and tendencies. An index number is statistical device assigned to measure the relative change in the level of phenomena (variable or

group of variable) with respect time, geographical location or other characteristic. In fact, index no is a device for measuring change in the magnitude of the phenomena from time to time or event from place to place.

Thus, index numbers are indicators to measure the relative change in the value of the variable in any given period called the "current period" with respect to its values in some fixed period called "base period". Index numbers are also called economic barometer because each phenomenon like import, export, price, quantity at two periods are compared by using Index numbers. The index number of current period is compared by assuming the value at base period (i.e. free from natural calamities like flood, draught, war, strike etc) and is not varying distant with the current year.

### 3.6.5 Correlation Analysis

Correlation is the measure of relationship between two or more characteristics of a population or a sample. It simply measures the changes between the phenomenon. If two quantities vary in a related manner so that a movement- an increase or decrease on one tends to accompanied by a movement in the same or opposite direction in the other, they are called correlated. Correlation analysis is one of the most widely used tools in practical cases.

"The correlation is defined as the relationship between (among) the one dependent variable (or factor) and one (or more than one) independent variable(s) or factor(s). In other words, correlation is the relationship between (or among) two or more variables (i.e. only one variable dependent and one or more variable (s) independent)".[28]

"Correlation is the statistical tool that we can use to describe the degree to which one variable is linearly related to another".[29]

Thus, correlation is a statistical tool, with the help of which, we can determine whether or not two or more variables are correlated and if they are correlated the degree (extent) and direction of correlation is determined. It can be used in two or more variables. It shows the positive and negative relationship between the variables**.** It indicates the relationship between the two such variables in which with the change in the value of one variable, the value of the other variable also changes. The result of coefficient of correlation is always between +1 or -1. When r = +1, it means that there is perfect relationship between two variables and vice-versa. When r = 0, it means that there is no relationship between two variables. It is calculated by the following formula-

$$r \, X \frac{(x - \overline{x})(y - \overline{y})}{\sqrt{\quad (x - \overline{x})^2 \quad (y - \overline{y})^2}}$$

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

[28] Sunity Shrestha and Dhruba Prasad, *Statistical Method in Management*, Taleju Prakashan, Kathmandu, 2nd Edition, 2057, p. 315.

[29] Levin Richard and David Rubin, *Statistics for Management,* Prentice Hall of India, Pvt. Ltd., New Delhi, 1991, p. 505.

Coefficient of variation may be simply defined as the ratio of standard deviation to the mean. It is expressed in percentage. It is calculated by using the following formula-

$$C.V. X \frac{\dagger}{\overline{X}} \mid 100\%$$

### 3.6.7 Probable Error (P.E.)

Probable error is a statistical technique by which significance of Karl Pearson coefficient of correlation can be tested. If 'r' is the correlation coefficient from a sample of 'N' pair of items then 'P.E.' is defined as follows-

$$P.E. X .6745 \mid \frac{1 Z r^2}{\sqrt{N}}$$

If the value of correlation(r) is less than 'P.E.', it means correlation is not significant at all. If 'r' is greater than six times of 'P.E.', it means 'r' is significant. All the assumed ratio and significant test are conducted in the next chapter.

### 3.6.8 Analysis of Variance Test (F- statistic)

When we have to test the significance of the differences between two sample means, t-test is suitable. But when we need to test the significance of the differences among more than two sample means, f-distribution is suitable technique, called the "Analysis of Variance". Using ANOVA technique we will be able to make inferences about whether our samples are drawn from populations having the same mean.

Analysis of variance (ANOVA) is an extremely useful technique concerning researches in the fields of economics, biology, education, psychology, sociology, business/industry etc. An essence of ANOVA is that the total amount of variation in a set of data is broken down into two types, that amount which can be attributed to chance and that amount which can be attributed to specified causes. There may be variation between samples and also with in sample items. Through this technique one can explain whether various varieties of seeds or

fertilizers or soils differ significantly so that a policy decision could be taken accordingly, concerning a particular variety in the context of agriculture researchers.

The basic principle of ANOVA is to test for differences among the means of the populations by examining the amount of variation with in each of these samples relative to the amount of variation between the samples by the ratio.

# CHAPTER-FOUR

# PRESENTATION AND ANALYSIS OF DATA

## 4.1 Introduction

The chapter entitled "Presentation and Analysis of Data" is a crucial chapter and has been organized to present the result and analyze them accordingly. The basic objective of this study is to observe and comparatively analyze the working capital position of the three JVBs named as Everest Bank Limited and Nepal SBI Bank Limited and Himalayan Bank Ltd.. The presentation and analysis of data in this study have been done to evaluate the working capital position through the financial data available in the website of Nepal Stock.com.

Data collected for the analysis of working capital management are presented in the form of tabular form and are analyzed with the help of widely accepted tools of financial management, ratio analysis, correlation analysis, trend analysis, and analysis of variance.

## 4.2 Analysis of Ratios

A ratio is simply defined as the indicated quotient of two mathematical expressions and the relationship between two or more things. There are two ways of expressing ratios -one is the percentage method such as 100 percent and the other is the phrase method such as two for one.

"The ratio analysis provides guides and clues especially in spotting trends towards better or poorer performance, and in finding out significant deviation from any average or relatively applicable standard." [30]

Ratio analysis is a technique commonly employed by analysts examining a company's financial statements. It is mainly used by three main groups: (1) managers, who employ ratios to help analyze, control and thus improve their firm's operations; (2) credit analysts, including bank loan officers and bond rating analysts, who analyze ratios to help ascertain a company's ability to pay its debts; and (3) stock analysts, who are interested in a company's efficiency, risk, and growth prospects. In particular, an analysis of selected accounting ratios allows a

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[30] Erich A. Helfert, *Techniques of Financial Analysis*, Homewood, Illinois, 1957, p.57.

bank manager to evaluate the bank's current performance, the change in its performance over time (time series analysis of ratios over a period of time), and its performance relative to that of competitor banks (cross-sectional analysis of ratios across a group of firms).

In this study, only those ratios have been covered which is related to working capital management of the selected banks.

### 4.2.1 Cash and Bank Balance to Current Assets

The cash and bank balance to current assets ratio is also one measure of liquidity. The cash and bank balance is the most liquid form of the current assets. It provides liquidity to the firm and is a major and important resource of working capital. Only this item can meet the current bills and current obligations of the firm when they are due. In fact, it plays a crucial role to achieve efficient and effective management of working capital in all types of business organization whether manufacturing or non-manufacturing organization. The ratio shows the percentage of readily available fund within the banks over total current assets. It helps in examining the cash and bank balance out of bank's current assets. It gives the bank management the clear idea of cash and bank balance in its current assets account. Thus, this ratio measures the proportion of cash and bank balance held by Everest Bank Limited and Nepal SBI Bank Limited and Himalayan Bank Ltd.out of its total current assets.  It can be calculated as-

$$\text{Cash and Bank Balance to Current Assets} = \frac{\text{Cash and Bank Balance}}{\text{Current Assets}}$$

The low ratio indicates sound management and high ratio indicates weak management policy.

The following table shows the ratio of cash & bank balance to current assets of EBL, HBL and NSBI from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 1**
**Cash and Bank Balance to Current Assets**

(Rs. In Million)

| 1<br>Year | Everest Bank Ltd | | | Himalayan Bank Ltd. | | | NSBI Ltd. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2<br>Cash &<br>Bank<br>Balance | 3<br>CA | 2/3=4<br>Ratio<br>(%) | 5<br>Cash &<br>Bank<br>Balance | 6<br>CA | 5/6=7<br>Ratio<br>(%) | 8<br>Cash &<br>Bank<br>Balance | 9<br>CA | 8/9=10<br>Ratio<br>(%) |
| 2001/2002 | 630.94 | 11961.95 | 5.27 | 802.21 | 10988.05 | 7.30 | 826.15 | 12862.22 | 6.42 |
| 2002/2003 | 910.07 | 14788.91 | 6.15 | 901.91 | 15605.42 | 5.78 | 1020.46 | 16650.32 | 6.13 |
| 2003/2004 | 812.91 | 13161.68 | 6.18 | 1435.17 | 17359.84 | 8.27 | 961.05 | 19224.18 | 5.00 |
| 2004/2005 | 1051.82 | 13312.39 | 7.90 | 1264.67 | 14165.33 | 8.93 | 825.23 | 18330.82 | 4.50 |
| 2005/2006 | 1144.77 | 13868.31 | 8.25 | 1979.21 | 16881.45 | 11.72 | 1512.3 | 20797.6 | 7.27 |
| 2006/2007 | 970.49 | 14243.92 | 6.81 | 2001.18 | 18657.35 | 10.73 | 2023.16 | 23225.83 | 8.71 |
| 2007/2008 | 559.38 | 14969.38 | 3.74 | 2014.47 | 21326.26 | 9.45 | 1111.12 | 21447.16 | 5.18 |
| Total | 6080.38 | 96306.54 | 44.30 | 10398.82 | 114983.7 | 62.18 | 8279.47 | 132538.13 | 43.21 |
| Avg.(mean) | 868.63 | 13758.08 | 6.33 | 1485.55 | 16426.24 | 8.88 | 1182.78 | 18934.02 | 6.17 |
| s.d. | | | 1.43 | | | 1.86 | | | 1.36 |
| c.v. | | | 22.59 | | | 20.95 | | | 22.04 |

*Source: Comparative Balance Sheet and Profit And Loss Account of* Everest Bank Limited and Nepal SBI Bank Limited and Himalayan Bank Ltd. *as given in* WWW. Nepal Stock.com

The table highlights the proportion of cash and bank balance to current assets of three JVBs from 2001/2002 to 2007/2008. The proportion of cash and bank balance to current assets for 7 successive years of EBL is 5.27%, 6.15%, 6.18%, 7.90%,  8.25%, 6.81% and 3.74% respectively whereas of HBL is 7.30%, 5.78%, 8.27%, 8.93%, 11.72%, 10.72% and 9.45% respectively and that of NSBI is 6.42%, 6.13%, 5.00%, 4.50%, 7.27%, 8.71% and 5.18% respectively. The proportion of cash and bank balance to current assets is highest in the year 2005/2006 i.e. 8.25% and lowest in the year 2007/2008 i.e. 3.74% for EBL, highest in the year 2005/2006 i.e. 11.72% and lowest in the year 2002/2003 i.e. 5.78% for HBL and highest in the year 2006/2007 i.e. 8.71% and lowest in the year 2004/2005 i.e. 4.50% for NSBI. The average proportion of cash and bank balance to current assets of EBL, HBL and NSBI are 6.33%, 8.88% and 6.17% respectively. The average proportion of HBL i.e. .8.88% is greater in comparision to the three JVBs. Therefore liquidity position on the basis of cash and bank balance to current assets ratio maintained by HBL is better among the three JVBs. Higher  proportion of cash and bank balance to current assets indicates higher amount of cash and bank balance maintained by the bank which shows that the

bank has been able to maintained enough liquidity to fulfill its current obligations but the bank should keep in consideration that enough cash and bank balance results in idle money which incurs opportunity cost. Hence from the utilization perspective, this may not be desirable solution.

The C.V. of cash and bank balance to current assets for 7 successive years of EBL is 22.59% whereas of HBL is 20.95% and that of NSBI is 22.04%. Thus, as regard to the consistency maintained by the three JVBs, HBL is more consistent or uniform among the three JVBs because the C.V. of HBL (i.e. 20.95%) is lower than that of the EBL and NSBI. In other words, there is more fluctuation in cash and bank balance to current assets ratio of EBL and NSBI than the HBL.

### 4.2.2 Cash and Bank Balance to Total Assets

Cash and bank balance is a significant aspect of the TA. It provides liquidity to the firm. The proportional of liquid cash in comparison to the TA shows the investment in cash out of TA. The higher ratio decreases the risk and provides more working capital but if the excess cash earn nothing, the profitability would decrease. Thus, this ratio measures the proportion of cash and bank balance held by EBL, HBL and NSBI out of its total current assets.  It can be done by the following expression-

$$\text{Cash and Bank Balance to Total Assets} = \frac{\text{Cash and Bank Balance}}{\text{Total Assets}}$$

The low ratio indicates the decrease in risk and profitability and the high ratio indicates the increase in the working capital.

The following table shows the ratio of cash & bank balance to total assets of EBL, HBL and NSBI from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 2**

Cash and Bank Balance to Total Assets

(Rs. In Million)

| 1 Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI Ltd. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2 Cash & Bank Balance | 3 TA | 2/3=4 Ratio (%) | 5 Cash & Bank Balance | 6 TA | 5/6=7 Ratio (%) | 8 Cash & Bank Balance | 9 TA | 8/9=10 Ratio (%) |
| 2001/2002 | 630.94 | 12184.05 | 5.18 | 802.21 | 11244.10 | 7.13 | 826.15 | 13016.98 | 6.35 |
| 2002/2003 | 910.07 | 15024.20 | 6.06 | 901.91 | 15863.74 | 5.68 | 1020.46 | 16832.23 | 6.06 |
| 2003/2004 | 812.91 | 17770.65 | 4.57 | 1435.17 | 19500.57 | 7.36 | 961.05 | 19357.18 | 4.96 |
| 2004/2005 | 1051.82 | 17629.25 | 5.97 | 1264.67 | 21315.85 | 5.93 | 825.23 | 18443.10 | 4.47 |
| 2005/2006 | 1144.77 | 16562.62 | 6.91 | 1979.21 | 24197.97 | 8.18 | 1512.30 | 21000.50 | 7.20 |
| 2006/2007 | 970.49 | 16745.49 | 5.80 | 2001.18 | 25729.79 | 7.78 | 2023.16 | 23642.06 | 8.56 |
| 2007/2008 | 559.38 | 17186.33 | 3.25 | 2014.47 | 28871.34 | 6.98 | 1111.12 | 21893.58 | 5.08 |
| Total | 6080.38 | 113102.59 | 37.74 | 10398.82 | 146723.36 | 49.04 | 8279.47 | 134185.63 | 42.68 |
| Avg.(mean) | 868.63 | 16157.51 | 5.39 | 1485.55 | 20960.48 | 7.01 | 1182.78 | 19169.38 | 6.10 |
| s.d. | | | 1.11 | | | .85 | | | 1.33 |
| c.v. | | | 20.59 | | | 12.12 | | | 21.80 |

*Source: Comparative Balance Sheet and Profit And Loss Account of      EBL,  HBL  and  NSBI  as given in <u>WWW. Nepal</u> Stock.com*

The above table highlights the proportion of cash and bank balance to total assets of three JVBs from 2001/2002 to 2007/2008. The proportion of cash and bank balance to total assets for 7 successive years of EBL is 5.18%, 6.06%, 4.57%, 5.97%, 6.91%, 5.80% and 3.25% respectively whereas of HBL is 7.13%, 5.68%, 7.36%, 5.93%, 8.18%, 7.78% and 6.98% respectively and that of NSBI is 6.35%, 6.06%, 4.96%, 4.47%, 7.20%, 8.56% and 5.08% respectively. The proportion of cash and bank balance to total assets is highest in the year 2005/2006 i.e. 6.91% and lowest in the year 2007/2008 i.e. 3.25% for EBL, highest in the year 2005/2006 i.e. 8.18% and lowest in the year 2002/2003 i.e. 5.68% for HBL and highest in the year 2006/2007 i.e. 8.56% and lowest in the year 2004/2005 i.e. 4.47% for NSBI. The average proportion of cash and bank balance to total assets of EBL, HBL and NSBI are 5.39%, 7.01% and 6.10% respectively. The average proportion of HBL i.e. 7.01% is greater in comparision to the three JVBs. Therefore liquidity position on the basis of cash and bank balance to total assets ratio maintained by HBL is better among the three JVBs. Higher ratio indicates higher amount of cash and bank balance maintained by the bank which shows that the bank has been able to maintained enough liquidity to

fulfill its current obligations but the bank should keep in consideration that enough cash and bank balance results in idle money which incurs opportunity cost. Hence from the utilization perspective, this may not be desirable solution.

The C.V. of cash and bank balance to total assets for 7 successive years of EBL is 20.59% whereas of HBL is 12.12% and that of NSBI is 21.80%. Thus, as regard to the consistency maintained by the three JVBs, HBL is more consistent or uniform among the three JVBs because the C.V. of HBL (i.e. 12.12%) is lower than that of the EBL and NSBI. In other words, there is more fluctuation in cash and bank balance to total assets of EBL and NSBI than the HBL.

### 4.2.3 Current Assets to Total Assets

Current assets normally require meeting working capital, which is used to fulfill the need of daily business requirement. The volume or size of CA differs as the base of the size as well as the nature of the business. The current assets to total assets shows what percentage of the firm's total assets are invested in the form of current assets. Higher percentage of CA in TA indicates greater liquidity position of the firm as well as it lowers the risk of being insolvent and vice-versa. It can be calculated as-

$$\text{Current Assets to Total Assets} = \frac{\text{Current Assets}}{\text{Total Assets}}$$

Higher the ratio, higher the risk and profitability and lower the ratio, lower the risk and profitability.

The following table shows the ratio of current assets to total assets of EBL, HBL and NSBI from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 3**
Current Assets to Total Assets

(Rs. In Million)

| 1<br>Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2<br>CA | 3<br>TA | 2/3=4<br>Ratio<br>(%) | 5<br>CA | 6<br>TA | 5/6=7<br>Ratio<br>(%) | 8<br>CA | 9<br>TA | 8/9=10<br>Ratio<br>(%) |
| 2001/2002 | 11961.95 | 12184.05 | 98.18 | 10988.05 | 11244.10 | 97.72 | 12862.22 | 13016.98 | 98.81 |
| 2002/2003 | 14788.91 | 15024.20 | 98.43 | 15605.42 | 15863.74 | 98.37 | 16650.32 | 16832.23 | 98.92 |
| 2003/2004 | 13161.68 | 17770.65 | 74.06 | 17359.84 | 19500.57 | 89.02 | 19224.18 | 19357.18 | 99.31 |
| 2004/2005 | 13312.39 | 17629.25 | 75.51 | 14165.33 | 21315.85 | 66.45 | 18330.82 | 18443.10 | 99.39 |
| 2005/2006 | 13868.31 | 16562.62 | 83.73 | 16881.45 | 24197.97 | 69.76 | 20797.60 | 21000.50 | 99.03 |
| 2006/2007 | 14243.92 | 16745.49 | 85.06 | 18657.35 | 25729.79 | 72.51 | 23225.83 | 23642.06 | 98.24 |
| 2007/2008 | 14969.38 | 17186.33 | 87.10 | 21326.26 | 28871.34 | 73.87 | 21447.16 | 21893.58 | 97.96 |
| Total | 96306.54 | 113102.59 | 602.08 | 114983.7 | 146723.36 | 567.71 | 132538.13 | 134185.63 | 691.67 |
| Avg.(mean) | 13758.08 | 16157.51 | 86.01 | 16426.2429 | 20960.48 | 82.31 | 18934.02 | 19169.38 | 98.81 |
| s.d. | | | 8.97 | | | 12.57 | | | 0.49 |
| c.v. | | | 10.43 | | | 15.27 | | | 0.50 |

*Source: Comparative Balance Sheet and Profit And Loss Account of EBL, HBL and NSBI LTD as given in WWW. Nepal Stock.com*

The above table highlights the proportion of current assets to total assets of three JVBs from 2001/2002 to 2007/2008. The proportion of current assets to total assets for 7 successive years of EBL is 98.18%, 98.43%, 74.06%, 75.51%, 83.73%, 85.06% and 87.10% respectively whereas of HBL is 97.72%, 98.37%, 89.02%, 66.45%, 69.76%, 72.51% and 73.87% respectively and that of NSBI LTD is 98.81%, 98.92%, 99.31%, 99.39%, 99.03%, 98.24% and 97.96% respectively. The proportion of current assets to total assets is highest in the year 2002/2003 i.e. 98.43% and lowest in the year 2003/2004 i.e. 74.06% for EBL, highest in the year 2002/2003 i.e. 98.375 and lowest in the year 2004/2005i.e. 66.45% for HBL and highest in the year 2004/2005 i.e. 99.39% and lowest in the year 2007/2008 i.e. 97.96% for NSBI LTD. The average proportion of current assets to total assets of EBL, HBL and NSBI LTD are 86.01%, 82.31%, and 98.81% respectively. The average proportion of current assets to total assets of NSBI LTD is greater in comparision to the three JVBs. Therefore, on the basis of current assets to total assets ratio maintained by NSBI LTD, it can be concluded that NSBI LTD has been in both profitable and riskier position during the seven years study period among the three JVBs. However, NSBI LTD should concentrate on its current assets management because high level of current assets denotes good liquidity position

but it adversely affects the profitability of the bank because idle money earns nothing.

The C.V. of current assets to total assets for 7 successive years of EBL is 10.43% whereas of HBL is 15.27% and that of NSBI LTD is 0.50%. Thus, as regard to the consistency maintained by the three JVBs, NSBI LTD is more consistent or uniform among the three JVBs because the C.V. of NSBI LTD (i.e. 0.50%) is lower than that of the EBL and HBL. In other words, there is more fluctuation in cash and bank balance to current assets of EBL and HBL than the NSBI LTD.

### 4.2.4 Current Assets to Fixed Assets

It should be kept in mind that for operating efficiently and effectively for any firm, it requires both reasonable amount of current assets and fixed assets. It is one of the vital aspects of the firm and plays a key role for the success or failure of the firm. The ratio of current assets to fixed assets indicates the relationship between current assets and fixed assets. It is calculated as-

$$\text{Current Assets to Fixed Assets} = \frac{\text{Current Assets}}{\text{Fixed Assets}}$$

Increase in the ratio accompanied by the profit indicates that the business is expanding and the decrease in the ratio indicates that business is slack or more mechanism has been put through.

The following table shows the ratio of current assets to fixed assets of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 4**
Current Assets to Fixed Assets

(Rs. In Million)

| 1 Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2 CA | 3 FA | 2/3=4 Ratio (in times) | 5 CA | 6 FA | 5/6=7 Ratio (in times) | 8 CA | 9 FA | 8/9=10 Ratio (in times) |
| 2001/2002 | 11961.95 | 205.59 | 58.18 | 10988.05 | 171.31 | 64.14 | 12862.22 | 143.57 | 89.59 |
| 2002/2003 | 14788.91 | 219.17 | 67.48 | 15605.42 | 193.05 | 80.83 | 16650.32 | 170.72 | 97.53 |
| 2003/2004 | 13161.68 | 248.67 | 52.93 | 17359.84 | 201.68 | 86.07 | 19224.18 | 121.81 | 157.82 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2004/2005 | 13312.39 | 237.64 | 56.01 | 14165.33 | 318.84 | 44.43 | 18330.82 | 101.07 | 181.37 |
| 2005/2006 | 13868.31 | 251.91 | 55.05 | 16881.45 | 229.87 | 73.44 | 20797.60 | 191.71 | 108.48 |
| 2006/2007 | 14243.92 | 338.13 | 42.13 | 18657.35 | 299.64 | 62.27 | 23225.83 | 136.23 | 170.49 |
| 2007/2008 | 14969.38 | 361.23 | 41.44 | 21326.26 | 295.82 | 72.09 | 21447.16 | 71.41 | 300.34 |
| Total | 96306.54 | 1862.34 | 373.22 | 114983.7 | 1710.21 | 483.27 | 132538.13 | 936.52 | 1105.62 |
| Avg.(mean) | 13758.08 | 266.05 | 53.31 | 16426.2429 | 244.32 | 69.03 | 18934.02 | 133.79 | 157.95 |
| s.d. | | | 8.46 | | | 12.72 | | | 67.35 |
| c.v. | | | 15.87 | | | 18.43 | | | 42.60 |

The above table highlights the proportion of current assets to fixed assets of three JVBs from 2001/2002 to 2007/2008. The proportion of current assets to fixed assets for 7 successive years of EBL is 58.18 times, 67.48 times, 52.93 times, 56.01 times, 55.05 times, 42.13 times and 41.44 times respectively whereas of HBL is 64.14 times, 80.83 times, 86.07 times, 44.43 times, 73.44 times, 62.27 times and 72.09 times respectively and that of NSBI LTD is 89.59 times, 97.53 times, 157.82 times, 181.37 times, 108.48 times, 170.49 times and 300.34 times respectively. The proportion of current assets to fixed assets is highest in the year 2001/2002 i.e. 67.48 times and lowest in the year 2007/2008 i.e. 41.44 times for EBL, highest in the year 2003/2004 i.e. 86.07 times and lowest in the year 2004/2005 i.e. 44.43 times for HBL and highest in the year 2007/2008 i.e. 300.34 times and lowest in the year 2001/2002 i.e. 89.59 times for NSBI LTD. The average proportion of current assets to fixed assets of EBL, HBL and NSBI LTD are 53.31 times, 69.03 times, 157.95 times respectively. The average proportion of NSBI LTD is greater in comparision to the three JVBs. As higher ratio indicates higher amount of current assets maintained by the bank in comparision to the fixed assets, so the higher ratio accompanied by the profit of NSBI LTD indicates that the business of NSBI LTD is expanding. The decrease in the ratio of EBL and HBL as compared to NSBI LTD indicates that business is slack or more mechanism has been put through.

The C.V. of current assets to fixed assets for 7 successive years of EBL is 15.87 times whereas of HBL is 18.43 times and that of NSBI LTD is 42.60 times. Thus, as regard to the consistency maintained by the three JVBs, EBL is more consistent or uniform among the three JVBs because the C.V. of EBL (i.e. 15.87 times) is lower than that of the HBL and NSBI LTD. In other words, there is more fluctuation in current assets to fixed assets ratio of HBL and NSBI LTD than the EBL.

**4.2.5 <u>Net Working Capital to Current Assets</u>**

　　Maintaining enough working capital is one of the important functions of the finance manager. It is needed for the daily operations of the business. The net working capital is computed after deducting current liabilities from current assets. This ratio indicates the relationship between net working capital and current assets.

$$\text{Net Working Capital to Current Assets} = \frac{\text{Net Working Capital}}{\text{Current Assets}}$$

The following table shows the ratio of net working capital to current assets of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 5**
Net Working Capital to Current Assets

(Rs. In Million)

| 1<br>Year | EBL Bank Limited | | | | Himalayan Bank Limited | | | |
|---|---|---|---|---|---|---|---|---|
| | 2<br>TCA | 3<br>TCL | 4<br>Net Working Capital (2-3) | 4/2=5<br>Ratio (%) | 6<br>TCA | 7<br>TCL | 8<br>Net Working Capital (6-7) | 8/6=9<br>Ratio (%) |
| 2001/2002 | 11961.95 | 11249.94 | 712.01 | 5.95 | 10988.05 | 10698.75 | 289.30 | 2.63 |
| 2002/2003 | 14788.91 | 13977.29 | 811.62 | 5.49 | 15605.42 | 15311.04 | 294.38 | 1.89 |
| 2003/2004 | 13161.68 | 17226.21 | (4,064.53) | (30.88) | 17359.84 | 18742.46 | (1,382.62) | (7.96) |
| 2004/2005 | 13312.39 | 16384.73 | (3,072.34) | (23.08) | 14165.33 | 19433.25 | (5,267.92) | (37.19) |
| 2005/2006 | 13868.31 | 15135.42 | (1,267.11) | (9.14) | 16881.45 | 21899.93 | (5,018.48) | (29.73) |
| 2006/2007 | 14243.92 | 15112.45 | (868.53) | (6.10) | 18657.35 | 22325.47 | (3,668.12) | (19.66) |
| 2007/2008 | 14969.38 | 15385.33 | (415.95) | (2.78) | 21326.26 | 25837.29 | (4,511.03) | (21.15) |
| Total | 96306.54 | 104471.37 | (8,164.83) | (60.53) | 114983.70 | 134,248.19 | (19,264.49) | (111.17) |
| Avg.(mean) | 13758.08 | 14924.48 | (1,166.40) | (8.65) | 16426.24 | 19,178.31 | (2,752.07) | (15.88) |
| s.d. | | | | 12.85 | | | | 14.19 |
| c.v. | | | | 148.55 | | | | 89.36 |

| NSBI LTD. | | | |
|---|---|---|---|
| 10<br>TCA | 11<br>TCL | 12<br>Net Working Capital<br>(10-11) | 12/10=13<br>Ratio<br>(%) |
| 12862.22 | 11936.55 | 925.67 | 7.20 |
| 16650.32 | 15817.40 | 832.92 | 5.00 |
| 19224.18 | 18245.18 | 979.00 | 5.09 |
| 18330.82 | 17207.62 | 1123.20 | 6.13 |
| 20797.60 | 19631.60 | 1166.00 | 5.61 |
| 23225.83 | 22146.32 | 1079.51 | 4.65 |
| 21447.16 | 20311.16 | 1136.00 | 5.30 |
| 132538.13 | 125295.83 | 7,242.30 | 38.97 |
| 18934.02 | 17899.40 | 1,034.61 | 5.57 |
|  |  |  | .80 |
|  |  |  | 14.36 |

*Source: Comparative Balance Sheet and Profit And Loss Account of         EBL, HBL and NSBI LTD as given in* <u>WWW. Nepal Stock.com</u>

The table highlights the proportion of net working capital to current assets of three JVBs from 2001/2002 to 2007/2008. The proportion of net working capital to current assets for 7 successive years of EBL is 5.95%, 5.49%, -30.88%, -23.08%, -9.14%, -6.10% and -2.78% respectively whereas of HBL is 2.63%, 1.89%, -7.96%, -37.19%, -29.73%, -19.66% and -21.15% respectively and that of NSBI LTD is 7.2%, 5.00%, 5.09%, 6.13%, 5.61%, 4.65% and 5.30% respectively. The proportion of net working capital to current assets is highest in the year 2001/2002 i.e. 5.95% and lowest in the year 2003/2004 i.e. -30.88% for EBL, highest in the year 2001/2002 i.e. 2.63% and lowest in the year 2004/2005 i.e. -37.19% for HBL and highest in the year 2001/2002 i.e. 7.20% and lowest in the year 4.65% for NSBI LTD. The average proportion of net working capital to current assets of EBL, HBL and NSBI LTD are -8.65%, -15.88%, 5.57% respectively. The average proportion of NSBI LTD is greater in comparision to the three JVBs.

The C.V. of net working capital to current assets for 7 successive years of EBL is 148.55% whereas of HBL is 89.36% and that of NSBI LTD is 14.36%. Thus, as regard to the consistency maintained by the three JVBs, NSBI LTD is more consistent or uniform among the three JVBs because the C.V. of NSBI LTD (i.e. 14.36%) is lower than that of the EBL and HBL. In other words, there is more fluctuation in net working capital to current assets of EBL and HBL than the NSBI LTD.

### 4.2.6 <u>Current Assets to Current Liabilities</u>

The management of working capital is concerned with management of relationship between the current assets and current liabilities. This ratio is applied to test the short term financial strength i.e. it is an indicator of the firm's ability to meet its short term obligations. In other words, it indicates the firm's ability to cover its current liabilities with its available current assets. It indicates the rupees of current assets available for each rupee of current liabilities.

Current assets normally include cash, marketable securities, accounts receivable, and inventories. Current liabilities consist of accounts payable, short-term notes payable, current maturities of long-term debt, accrued taxes, and other accrued expenses (principally wages).

$$\text{Current Assets to Current Liabilities} = \frac{CurrentAssets}{CurrentLiabilities}$$

The standard ratio is considered as 2:1. Generally, higher ratio is favorable for the business but if the ratio is greater than 2, it indicates idle fund and hence the ideality of the management to manage its working capital properly. The low ratio indicates the short term solvency or poor liquidity position of the firm i.e. cash may not be available in the firm to pay off its current liabilities.

The following table shows the ratio of current assets to current liabilities of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 6**

Current Assets to Current Liabilities

(Rs. In Million)

| 1 Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2 CA | 3 CL | 2/3=4 Ratio (%) | 5 CA | 6 CL | 5/6=7 Ratio (%) | 8 CA | 9 CL | 8/9=10 Ratio (%) |
| 2001/2002 | 11961.95 | 11249.94 | 106.33 | 10988.05 | 10698.75 | 102.70 | 12862.22 | 11903.72 | 108.05 |
| 2002/2003 | 14788.91 | 13977.29 | 105.81 | 15605.42 | 15311.04 | 101.92 | 16650.32 | 15781.19 | 105.51 |
| 2003/2004 | 13161.68 | 17226.21 | 76.40 | 17359.84 | 18742.46 | 92.62 | 19224.18 | 18196.01 | 105.65 |
| 2004/2005 | 13312.39 | 16384.73 | 81.25 | 14165.33 | 19433.25 | 72.89 | 18330.82 | 17150.05 | 106.88 |
| 2005/2006 | 13868.31 | 15135.42 | 91.63 | 16881.45 | 21899.93 | 77.08 | 20797.60 | 19559.38 | 106.33 |
| 2006/2007 | 14243.92 | 15112.45 | 94.25 | 18657.35 | 22325.47 | 83.57 | 23225.83 | 22090.48 | 105.14 |
| 2007/2008 | 14969.38 | 15385.33 | 97.30 | 21326.26 | 25837.29 | 82.54 | 21447.16 | 20235.75 | 105.99 |
| Total | 96306.54 | 104471.37 | 652.97 | 114983.70 | 134248.19 | 613.34 | 132538.13 | 124916.58 | 743.55 |
| Avg.(mean) | 13758.08 | 14924.48 | 93.28 | 16426.24 | 19178.313 | 87.62 | 18934.02 | 17845.23 | 106.22 |
| s.d. | | | 10.53 | | | 10.87 | | | 0.91 |
| c.v. | | | 11.29 | | | 12.41 | | | 0.86 |

*Source: Comparative Balance Sheet and Profit And Loss Account of        EBL, HBL and NSBI LTD as given in* <u>WWW. Nepal Stock.com</u>

The above table highlights the proportion of current assets to current liabilities of three JVBs from 2001/2002 to 2007/2008. The proportion of current assets to current liabilities for 7  successive years of EBL is 106.33%, 105.81%, 76.40%, 81.25%, 91.63%, 94.25% and 97.30% respectively whereas of HBL is 102.70 %, 101.92%,92.62%, 72.89%, 77.08%, 83.57% and 82.54% respectively and that of NSBI LTD is 108.05%, 105.51%, 105.65%, 106.88%, 106.33%,105.14% and 105.99  respectively. The proportion of current assets to current liabilities is highest in the year 2001/2002 i.e. 106.33% and lowest in the year 2004/2005 i.e. 76.40% for EBL, highest in the year 2001/2002 i.e. 102.70 % and lowest in the year 2004/2005 i.e. 72.89% for HBL and highest in the year 2001/2002 i.e. 108.05% and lowest in the year 2006/2007i.e. 105.14% for NSBI LTD. The average proportion of current assets to current liabilities of EBL, HBL and NSBI LTD are 93.28%, 87.62%, 106.22% respectively. The average proportion of NSBI LTD is greater in comparision to the three JVBs. Therefore current assets to current liabilities ratio maintained by NSBI LTD is better among the three JVBs. Higher ratio indicates better current assets management maintained by the bank which shows that the NSBI LTD has been able to maintain safety margin to protect the interest of the creditors and to provide cushion the bank requires in adverse circumstances.

The C.V. of current assets to current liabilities ratios for 7 successive years of EBL is 11.29% whereas of HBL is 12.41% and that of NSBI LTD is 0.86%. Thus, as regard to the consistency maintained by the three JVBs, NSBI LTD is more consistent or uniform among the three JVBs because the C.V. of NSBI LTD (i.e. 0.86%) is lower than that of the EBL and HBL. In other words, there is more fluctuation in proportion of current assets to current liabilities of EBL and HBL than the NSBI LTD.

### 4.2.7 Return on Current Assets

The assets which can be cashed within an accounting period are known as current assets. It includes cash and near cash elements. Return is the main factor for the existence of any firm. The return on current assets measures the profit with respect to its total current assets. It gives the utilization of CA effectiveness.

$$\text{Return on Current Assets} = \frac{\text{NPAT}}{\text{Current Assets}}$$

Higher ratio indicates higher utilization of current assets.

The following table shows the ratio of return on current assets of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 7**

Return on Current Assets

(Rs. In Million)

| 1<br>Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2<br>NPAT | 3<br>CA | 2/3=4<br>Ratio<br>(%) | 5<br>NPAT | 6<br>CA | 5/6=7<br>Ratio<br>(%) | 8<br>NPAT | 9<br>CA | 8/9=10<br>Ratio<br>(%) |
| 2001/2002 | 266.48 | 11961.95 | 2.23 | 165.25 | 10988.05 | 1.50 | 359.46 | 12862.22 | 2.79 |
| 2002/2003 | 329.12 | 14788.91 | 2.23 | 199.25 | 15605.42 | 1.28 | 392.69 | 16650.32 | 2.36 |
| 2003/2004 | 291.38 | 13161.68 | 2.21 | 277.04 | 17359.84 | 1.60 | 430.86 | 19224.18 | 2.24 |
| 2004/2005 | 271.64 | 13312.39 | 2.04 | 235.02 | 14165.33 | 1.66 | 479.21 | 18330.82 | 2.61 |
| 2005/2006 | 416.24 | 13868.31 | 3.00 | 212.13 | 16881.45 | 1.26 | 506.93 | 20797.60 | 2.44 |
| 2006/2007 | 455.31 | 14243.92 | 3.20 | 263.05 | 18657.35 | 1.41 | 537.80 | 23225.83 | 2.32 |
| 2007/2008 | 518.64 | 14969.38 | 3.46 | 308.28 | 21326.26 | 1.45 | 539.20 | 21447.16 | 2.51 |
| Total | 2548.81 | 96306.54 | 18.37 | 1660.15 | 114983.7 | 10.15 | 3246.15 | 132538.13 | 17.28 |
| Avg.(mean) | 364.12 | 13758.08 | 2.62 | 237.16 | 16426.2429 | 1.45 | 463.74 | 18934.02 | 2.47 |
| s.d. | | | 0.53 | | | 0.14 | | | 0.17 |
| c.v. | | | 20.23 | | | 9.65 | | | 6.88 |

*Source: Comparative Balance Sheet and Profit And Loss Account of        EBL, HBL and NSBI LTD as given in* <u>*WWW. Nepal Stock.com*</u>

The above table highlights the proportion of net profit after tax to current assets of three JVBs from 2001/2002 to 2007/2008. The proportion of net profit after tax to current assets for 7 successive years of EBL is 2.23%, 2.23%, 2.21%, 2.04%, 3.00%, 3.20%, 3.46% and respectively whereas of HBL is 1.50%, 1.28%, 1.60%, 1.66%, 1.26%, 1.41% and 1.45% respectively and that of NSBI LTD is 2.79%, 2.36%, 2.24%, 2.61%, 2.44%, 2.32% and 2.51% respectively. The proportion of net profit after tax to current assets is highest in the year 2007/2008 i.e. 3.46% and lowest in the year 2004/2005 i.e. 2.04% for EBL, highest in the year 2004/2005 i.e. 1.66% and lowest in the year 2005/2006 1.26% for HBL and highest in the year 2001/2002 i.e. 2.79% and lowest in the year 2003/2004 i.e. 2.24% for NSBI LTD. The average proportion of net profit after tax to current assets of EBL, HBL and NSBI LTD are 2.62%, 1.45%, 2.47% respectively. The average proportion of EBL is greater in comparision to the three JVBs. It reveals that EBL has been able to utilize it current assets more effectively than HBL and NSBI LTD.

The C.V. of net profit after tax to current assets for 7 successive years of EBL is 20.23% whereas of HBL is 9.65% and that of NSBI LTD is 6.88%. Thus, as regard to the consistency maintained by the three JVBs, NSBI LTD is more

consistent or uniform among the three JVBs because the C.V. of NSBI LTD (i.e. 6.88) is lower than that of the EBL and HBL.

### 4.2.8 Return on Total Assets

The ratio of return on total assets measures the success or failure of the firm to utilize the total assets. This ratio judge's effectiveness in using the pool of funds, which is useful to measure the profitability of all the financial resources, invested in the firm's assets. It is defined as the net income divided by total assets. It determines the net income produced per dollar of assets. Return on total assets is computed by using the following formula-

$$\text{Return on Total Assets} = \frac{Net \Pr ofit \, After \, Tax}{Total \, Assets}$$

As higher ratio indicates that the overall efficiency of the bank to utilize their entire resources, which implies that the bank has lower proportion of non-performing assets. So higher the ratio, the better it is for the firm and the share and vice-versa.

The following table shows the return on total assets of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008

**Table No.: 8**

Return on Total Assets

(Rs. In Million)

| 1<br>Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2<br>NPAT | 3<br>TA | 2/3=4<br>Ratio<br>(%) | 5<br>NPAT | 6<br>TA | 5/6=7<br>Ratio<br>(%) | 8<br>NPAT | 9<br>TA | 8/9=10<br>Ratio<br>(%) |
| 2001/2002 | 266.48 | 12184.05 | 2.19 | 165.25 | 11244.10 | 1.47 | 359.46 | 13016.98 | 2.76 |
| 2002/2003 | 329.12 | 15024.20 | 2.19 | 199.25 | 15863.74 | 1.26 | 392.69 | 16832.23 | 2.33 |
| 2003/2004 | 291.38 | 17770.65 | 1.64 | 277.04 | 19500.57 | 1.42 | 430.86 | 19357.18 | 2.23 |
| 2004/2005 | 271.64 | 17629.25 | 1.54 | 235.02 | 21315.85 | 1.10 | 479.21 | 18443.10 | 2.60 |
| 2005/2006 | 416.24 | 16562.62 | 2.51 | 212.13 | 24197.97 | 0.88 | 506.93 | 21000.50 | 2.41 |
| 2006/2007 | 455.31 | 16745.49 | 2.72 | 263.05 | 25729.79 | 1.02 | 537.80 | 23642.06 | 2.27 |
| 2007/2008 | 518.64 | 17186.33 | 3.02 | 308.28 | 28871.34 | 1.07 | 539.20 | 21893.58 | 2.46 |
| Total | 2548.81 | 113102.59 | 15.81 | 1660.15 | 146723.36 | 8.22 | 3246.15 | 134185.63 | 17.07 |
| Avg.(mean) | 364.12 | 16157.51 | 2.26 | 237.16 | 20960.48 | 1.17 | 463.74 | 19169.38 | 2.44 |
| s.d. | | | 0.50 | | | 0.20 | | | 0.17 |
| c.v. | | | 22.12 | | | 17.09 | | | 6.97 |

*Source: Comparative Balance Sheet and Profit And Loss Account of       EBL, HBL and NSBI LTD as given in WWW. Nepal Stock.com*

The table highlights the proportion of net profit after tax to total assets of three JVBs from 2001/2002 to 2007/2008. The proportion of net profit after tax to total assets for 7  successive years of EBL is 2.19%, 2.19%, 1.64%, 1.54%, 2.51%, 2.72% and 3.02% respectively whereas of HBL is 1.47%, 1.26%, 1.42%, 1.10%, 0.88%, 1.02% and 1.07% respectively and that of NSBI LTD is 2.76%, 2.33%, 2.23%, 2.60%, 2.41%, 2.27% and 2.46%  respectively. The proportion of net profit after tax to total assets is highest in the year 2007/2008 i.e. 3.02% and lowest in the year 2004/2005 i.e. 1.54% for EBL, highest in the year 2001/2002 i.e. 1.47% and lowest in the year 2005/2006 i.e. 0.88% for HBL and highest in the year 2001/2002 i.e. 2.76% and lowest in the year 2003/2004i.e. 2.23% for NSBI LTD. The average proportion of net profit after tax to total assets of EBL, HBL and NSBI LTD are 2.26%, 1.17%, and 2.44% respectively. The average proportion of NSBI LTD is greater in comparision to the three JVBs. It reveals that NSBI LTD provides greater rate of return to its total assets thereby indicating that the bank has been able to utilize its available resources more effectively and efficiently in comparision to other two JVBs.

The C.V. of net profit after tax to total assets for 7 successive years of EBL is 22.12% whereas of HBL is 17.09% respectively and that of NSBI LTD is 6.97%. Thus, as regard to the consistency maintained by the three JVBs, NSBI LTD is more consistent or uniform among the three JVBs because the C.V. of NSBI LTD (i.e. 6.97%) is lower than that of the EBL and HBL. In other words, there is more fluctuation in net profit after tax to total assets ratio of EBL and HBL than the NSBI LTD.

### 4.2.9 Receivable on Total Assets

In today's world of cut throat competition, the firm cannot be able to survive for a long period of time without dealing in credit. The survival and expansion of the firm depends upon the firm's credit sales and when the firm sales in credit receivables occur. Thus, receivable is one of the important components of the working capital which indicates the amount due from the customer. The ratio of receivable to total assets is calculated dividing receivable by total assets.

$$\text{Receivable on Total Assets} = \frac{\text{Receivable}}{\text{Total Assets}}$$

This ratio measures the accounts receivable in terms of number of days of credit sales during a particular period. The high ratio indicates the greater chance of bad debts and the low ratio indicates the less chance of bad debts.

The following table shows the ratio of receivable on total assets of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 9**

Receivable on Total Assets

(Rs. In Million)

| 1<br>Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2<br>R | 3<br>TA | 2/3=4<br>Ratio<br>(%) | 5<br>R | 6<br>TA | 5/6=7<br>Ratio<br>(%) | 8<br>R | 9<br>TA | 8/9=10<br>Ratio<br>(%) |
| 2001/2002 | 231.65 | 12184.05 | 1.90 | 173.26 | 11244.10 | 1.54 | 97.69 | 13016.98 | 0.75 |
| 2002/2003 | 373.01 | 15024.20 | 2.48 | 386.56 | 15863.74 | 2.44 | 154.70 | 16832.23 | 0.92 |
| 2003/2004 | 372.35 | 17770.65 | 2.10 | 335.75 | 19500.57 | 1.72 | 139.03 | 19357.18 | 0.72 |
| 2004/2005 | 171.09 | 17629.25 | 0.97 | 385.38 | 21315.85 | 1.81 | 215.98 | 18443.10 | 1.17 |
| 2005/2006 | 230.07 | 16562.62 | 1.39 | 466.53 | 24197.97 | 1.93 | 174.48 | 21000.50 | 0.83 |
| 2006/2007 | 225.44 | 16745.49 | 1.35 | 564.36 | 25729.79 | 2.19 | 290.73 | 23642.06 | 1.23 |
| 2007/2008 | 208.67 | 17186.33 | 1.21 | 578.37 | 28871.34 | 2.00 | 266.63 | 21893.58 | 1.22 |
| Total | 1812.28 | 113102.59 | 11.40 | 2,890.21 | 146723.36 | 13.63 | 1339.24 | 134185.63 | 6.84 |
| Avg.(mean) | 258.90 | 16157.51 | 1.63 | 412.89 | 20960.48 | 1.95 | 191.32 | 19169.38 | 0.98 |
| s.d. | | | 0.50 | | | 0.28 | | | 0.21 |
| c.v. | | | 30.67 | | | 14.36 | | | 21.43 |

*Source: Comparative Balance Sheet and Profit And Loss Account of          EBL, HBL and NSBI LTD as given in* <u>*WWW. Nepal Stock.com*</u>

The above table highlights the proportion of receivables on total assets of three JVBs from 2001/2002 to 2007/2008. The proportion of receivables on total assets  for 7  successive years of EBL is 1.90%, 2.48%, 2.10%, 0.97%, 1.39%, 1.35% and 1.21% respectively whereas of HBL is 1.54%, 2.44%, 1.72%, 1.81%, 1.93%, 2.19% and 2.00% respectively and that of NSBI LTD is 0.75%, 0.92%, 0.72%, 1.17%, 0.83%, 1.23% and 1.22% respectively. The proportion of receivables on total assets is highest in the year 2002/2003 i.e. 2.48% and lowest in the year 2004/2005 i.e. 0.97% for EBL, highest in the year 2002/2003 i.e. 2.44% and lowest in the year 2001/2002i.e. 1.54% for HBL and highest in the year 2006/2007 i.e. 1.23% and lowest in the year 1998/1999 i.e. 0.75% for NSBI LTD. The average proportion of receivables on total assets of EBL, HBL and NSBI LTD are 1.63%, 1.95%, 0.98% respectively. The average proportion of HBL is greater in comparision to the three JVBs.

The C.V. of receivables on total assets for 7 successive years of EBL is 30.67% whereas of HBL is 14.36% and that of NSBI LTD is 21.43%. Thus, as regard to the consistency maintained by the three JVBs, HBL is more consistent or uniform among the three JVBs because the C.V. of HBL (i.e. 14.36%) is lower than that of the EBL and NSBI LTD. In other words, there is more fluctuation in receivables on total assets of EBL and NSBI LTD than the HBL.

**4.2.10 <u>Receivable to Current Assets</u>**

This ratio is calculated dividing receivable by current assets.

Receivable to Current Assets = $\dfrac{\text{Receivable}}{\text{Current Assets}}$

The high ratio indicates an unfavorable condition for the business and low ratio indicates the favorable condition for the business.

The following table shows the ratio of receivable on current assets of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 10**

Receivable to Current Assets

(Rs. In Million)

| 1<br>Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2<br>R | 3<br>CA | 2/3=4<br>Ratio<br>(%) | 5<br>R | 6<br>CA | 5/6=7<br>Ratio<br>(%) | 8<br>R | 9<br>CA | 8/9=10<br>Ratio<br>(%) |
| 2001/2002 | 231.65 | 11961.95 | 1.94 | 173.26 | 10988.05 | 1.58 | 97.69 | 12862.22 | 0.76 |
| 2002/2003 | 373.01 | 14788.91 | 2.52 | 386.56 | 15605.42 | 2.48 | 154.70 | 16650.32 | 0.93 |
| 2003/2004 | 372.35 | 13161.68 | 2.83 | 335.75 | 17359.84 | 1.93 | 139.03 | 19224.18 | 0.72 |
| 2004/2005 | 171.09 | 13312.39 | 1.29 | 385.38 | 14165.33 | 2.72 | 215.98 | 18330.82 | 1.18 |
| 2005/2006 | 230.07 | 13868.31 | 1.66 | 466.53 | 16881.45 | 2.76 | 174.48 | 20797.60 | 0.84 |
| 2006/2007 | 225.44 | 14243.92 | 1.58 | 564.36 | 18657.35 | 3.02 | 290.73 | 23225.83 | 1.25 |
| 2007/2008 | 208.67 | 14969.38 | 1.39 | 578.37 | 21326.26 | 2.71 | 266.63 | 21447.16 | 1.24 |
| Total | 1812.28 | 96306.54 | 13.21 | 2,890.21 | 114983.70 | 17.21 | 1339.24 | 132538.13 | 6.92 |
| Avg.(mean) | 258.90 | 13758.08 | 1.89 | 412.89 | 16426.24 | 2.46 | 191.32 | 18934.02 | 0.99 |
| s.d. | | | 0.54 | | | 0.48 | | | 0.21 |
| c.v. | | | 28.57 | | | 19.51 | | | 21.21 |

*Source: Comparative Balance Sheet and Profit And Loss Account of       EBL,  HBL  and NSBI LTD as given in <u>WWW. Nepal Stock.com</u>*

The table highlights the proportion of receivable to current assets of three JVBs from 2001/2002 to 2007/2008. The proportion of receivable to current assets for 7  successive years of EBL is 1.94%, 2.52%, 2.83%, 1.29%, 1.66%, 1.58% and 1.39% respectively whereas of HBL is 1.58%, 2.48%, 1.93%, 2.72%, 2.76%, 3.02% and 2.71% respectively and that of NSBI LTD is 0.76%, 0.93%, 0.72%, 1.18%, 0.84%, 1.25% and 1.24% respectively. The proportion of receivable to current assets is highest in the year 2003/2004 i.e. 2.83% and lowest in the year 2004/2005 i.e. 1.29% for EBL, highest in the year 2006/2007i.e. 3.02% and lowest in the year 2001/2002 i.e. 1.58% for HBL and highest in the year 2006/2007 i.e. 1.25% and lowest in the year 2003/2004 i.e. 0.72% for NSBI LTD. The average proportion of receivable to current assets of EBL, HBL and NSBI LTD are 1.89%, 2.46%, 0.99% respectively. The average proportion of HBL is greater in comparision to the three JVBs. It reveals the unfavorable business condition for HBL in comparison to the other two JVBs. The most favourable business condition is for NSBI LTD as its average ratio is lower than the rest.

The C.V. of receivable to current assets for 7 successive years of EBL is 28.57% whereas of HBL is 19.51% and that of NSBI LTD is 21.21%. Thus, as regard

to the consistency maintained by the three JVBs, HBL is more consistent or uniform among the three JVBs because the C.V. of HBL (i.e. 19.51%) is lower than that of the EBL and NSBI LTD. In other words, there is more fluctuation in receivable to current assets of EBL and NSBI LTD than the HBL.

**4.2.11 Quick Assets to Current Liabilities**

Those assets which can be easily converted into cash within a year are termed as quick assets. The quick, or acid test, ratio indicates the company's ability to convert its current assets quickly into cash to meets its current liability. It is calculated by deducting inventories from current assets and then dividing the remainder by current liabilities. The quick ratio removes inventories from current assets because they are the least liquid asset. Therefore, the quick ratio is an "acid test" of a company's ability to meets its current obligations.

$$\text{Quick Assets to Current Liabilities} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

It tries to test the ability of the firm to meet its current obligations i.e. payment of current liability. The standard ratio is considered as 1:1 as a firm can easily meet all its current liability. Both the high and low ratio is not favorable for the business.

The following table shows the ratio of quick assets to current liabilities of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 11**

Quick Assets to Current Liabilities

(Rs. In Million)

| 1 Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2 QA | 3 CL | 2/3=4 Ratio (%) | 5 QA | 6 CL | 5/6=7 Ratio (%) | 8 QA | 9 CL | 8/9=10 Ratio (%) |
| 2001/2002 | 11961.95 | 11249.94 | 106.33 | 10988.05 | 10698.75 | 102.70 | 12862.22 | 11903.72 | 108.05 |
| 2002/2003 | 14788.91 | 13977.29 | 105.81 | 15605.42 | 15311.04 | 101.92 | 16650.32 | 15781.19 | 105.51 |
| 2003/2004 | 13161.68 | 17226.21 | 76.40 | 17359.84 | 18742.46 | 92.62 | 19224.18 | 18196.01 | 105.65 |
| 2004/2005 | 13312.39 | 16384.73 | 81.25 | 14165.33 | 19433.25 | 72.89 | 18330.82 | 17150.05 | 106.88 |
| 2005/2006 | 13868.31 | 15135.42 | 91.63 | 16881.45 | 21899.93 | 77.08 | 20797.60 | 19559.38 | 106.33 |
| 2006/2007 | 14243.92 | 15112.45 | 94.25 | 18657.35 | 22325.47 | 83.57 | 23225.83 | 22090.48 | 105.14 |
| 2007/2008 | 14969.38 | 15385.33 | 97.30 | 21326.26 | 25837.29 | 82.54 | 21447.16 | 20235.75 | 105.99 |
| Total | 96306.54 | 104471.37 | 652.97 | 114983.7 | 134248.19 | 613.34 | 132538.13 | 124916.58 | 743.55 |
| Avg.(mean) | 13758.08 | 14924.48 | 93.28 | 16426.2429 | 19178.313 | 87.62 | 18934.02 | 17845.23 | 106.22 |
| s.d. | | | 10.53 | | | 10.87 | | | 0.91 |
| c.v. | | | 11.29 | | | 12.41 | | | 0.86 |

*Source: Comparative Balance Sheet and Profit And Loss Account of          EBL,  HBL  and NSBI LTD as given in <u>WWW. Nepal Stock.com</u>*

The table highlights the proportion of quick assets to current liabilities of three JVBs from 2001/2002 to 2007/2008. The proportion of quick assets to current liabilities for 7 successive years of EBL is 106.33%, 105.81%, 76.40%, 81.25%, 91.63%, 94.25%, 97.30% respectively whereas of HBL is 102.70%, 101.92%, 92.62%, 72.89%, 77.08%, 83.57%, 82.54% respectively and that of NSBI LTD is 108.05%, 105.51%, 105.65%, 106.88%, 106.33%, 105.14%, 105.99% respectively. The proportion of quick assets to current liabilities is highest in the year 2001/2002i.e. 106.33% and lowest in the year 2003/2004 i.e. 76.40% for EBL, highest in the year 2001/2002 i.e. 102.70% and lowest in the year 2004/2005 i.e. 72.89% for HBL and highest in the year 2001/2002 i.e. 108.05% and lowest in the year 2006/2007 i.e. 105.14% for NSBI LTD. The average proportion of quick assets to current liabilities of EBL, HBL and NSBI LTD are 93.28%, 87.62%, 106.22% respectively. The average proportion of NSBI LTD is greater in comparision to the three JVBs. Therefore, the quick ratio maintained by the NSBI LTD is better as the bank can easily meet its all current claims. But it should be noticed that as the average ratio maintained by all the three JVBs are above or below the standard ratio so it is not favourable for them.

The C.V. of quick assets to current liabilities for 7 successive years of EBL is 11.29% whereas of HBL is 12.41% and that of NSBI LTD is 0.86%. Thus, as regard to the consistency maintained by the three JVBs, NSBI LTD is more consistent or uniform among the three JVBs because the C.V. of NSBI LTD (i.e. 0.86%) is lower than that of the EBL and HBL. In other words, there is more fluctuation in quick assets to current liabilities of EBL and HBL than the NSBI LTD.

**4.2.12 Cash and Bank Balance to Current Liabilities**

This ratio is calculated dividing cash and bank balance by current liabilities.

Cash and Bank Balance to Current Liabilities = $\dfrac{\text{Cash and Bank Balance}}{\text{Current Liabilities}}$

The following table shows the ratio of cash and bank balance to current liabilities of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 12**

Cash and Bank Balance to Current Liabilities

(Rs. In Million)

| 1<br>Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2<br>Cash &<br>Bank<br>Balance | 3<br>CL | 2/3=4<br>Ratio<br>(%) | 5<br>Cash &<br>Bank<br>Balance | 6<br>CL | 5/6=7<br>Ratio<br>(%) | 8<br>Cash &<br>Bank<br>Balance | 9<br>CL | 8/9=10<br>Ratio<br>(%) |
| 2001/2002 | 630.94 | 11249.94 | 5.61 | 802.21 | 10698.75 | 7.50 | 826.15 | 11903.72 | 6.94 |
| 2002/2003 | 910.07 | 13977.29 | 6.51 | 901.91 | 15311.04 | 5.89 | 1020.46 | 15781.19 | 6.47 |
| 2003/2004 | 812.91 | 17226.21 | 4.72 | 1435.17 | 18742.46 | 7.66 | 961.05 | 18196.01 | 5.28 |
| 2004/2005 | 1051.82 | 16384.73 | 6.42 | 1264.67 | 19433.25 | 6.51 | 825.23 | 17150.05 | 4.81 |
| 2005/2006 | 1144.77 | 15135.42 | 7.56 | 1979.21 | 21899.93 | 9.04 | 1512.30 | 19559.38 | 7.73 |
| 2006/2007 | 970.49 | 15112.45 | 6.42 | 2001.18 | 22325.47 | 8.96 | 2023.16 | 22090.48 | 9.16 |
| 2007/2008 | 559.38 | 15385.33 | 3.64 | 2014.47 | 25837.29 | 7.80 | 1111.12 | 20235.75 | 5.49 |
| Total | 6080.38 | 104471.37 | 37.24 | 10398.82 | 134248.19 | 53.35 | 8279.47 | 124916.58 | 45.88 |
| Avg.(mean) | 868.63 | 14924.48 | 5.84 | 1485.55 | 19178.313 | 7.62 | 1182.78 | 17845.23 | 6.55 |
| s.d. | | | 1.21 | | | 1.07 | | | 1.42 |
| c.v. | | | 20.72 | | | 14.04 | | | 21.68 |

*Source: Comparative Balance Sheet and Profit And Loss Account of                EBL,  HBL  and NSBI LTD as given in <u>WWW. Nepal Stock.com</u>*

The table highlights the proportion of cash and bank balance to current liabilities of three JVBs from 2001/2002 to 2007/2008. The proportion of cash and bank balance to current liabilities for 7 successive years of EBL is 5.61%, 6.51%, 4.72%, 6.42%, 7.56%, 6.42% and 3.64% respectively whereas of HBL is 7.50%, 5.89%, 7.66%, 6.51%, 9.04%, 8.96% and 7.80% respectively and that of NSBI LTD is 6.94%, 6.47%, 5.28%, 4.81%, 7.73%, 9.16% and 5.49% respectively. The proportion of cash and bank balance to current liabilities is highest in the year 2002/2003 i.e. 7.56% and lowest in the year 2007/2008 i.e. 3.64% for EBL, highest in the year 2005/2006 i.e. 9.04% and lowest in the year 2002/2003 i.e. 5.89% for HBL and highest in the year 2006/2007 i.e. 9.16% and lowest in the year 2004/2005 i.e. 4.81% for NSBI LTD. The average proportion of cash and bank balance to current liabilities of EBL, HBL and NSBI LTD are 5.84%, 7.62%, 6.55% respectively. The average proportion of HBL is greater in comparision to the three JVBs. Therefore liquidity position on the basis of cash and bank balance to current liabilities ratio maintained by HBL is better among the three JVBs. Higher ratio indicates higher amount of cash and bank balance maintained by the bank which shows that the bank has been able to maintained enough liquidity to fulfill

its current obligations but the bank should keep in consideration that enough cash and bank balance results in idle money which incurs opportunity cost. Hence from the utilization perspective, this may not be desirable solution.

The C.V. of cash and bank balance to current liabilities for 7 successive years of EBL is 20.72% whereas of HBL is 14.04% and that of NSBI LTD is 21.68%. Thus, as regard to the consistency maintained by the three JVBs, HBL is more consistent or uniform among the three JVBs because the C.V. of HBL (i.e. 14.04%) is lower than that of the EBL and NSBI LTD. In other words, there is more fluctuation in cash and bank balance to current liabilities of EBL and NSBI LTD than the HBL.

### 4.2.13 Debt to Equity Ratio

Debt to equity ratio shows the relationship between the borrowed fund and owner's fund. It helps in the firm prediction of relative claims of outsiders and owners against firm's total resources. The ratio is calculated by dividing total debt by shareholders equity.

$$\text{Debt to Equity Ratio} = \frac{\text{Debt}}{\text{Equity}}$$

The following table shows the ratio of quick assets to current liabilities of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 13**

Debt to Equity Ratio (

Rs. In Million)

| 1 Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2 Total Debt | 3 Shareholder Equity | 2/3=4 Ratio (times) | 5 Total Debt | 6 Shareholder Equity | 5/6=7 Ratio (times) | 8 Total Debt | 9 Shareholder Equity | 8/9=10 Ratio (times) |
| 2001/2002 | 11306.31 | 877.33 | 12.89 | 10792.91 | 451.18 | 23.92 | 11936.55 | 1080.41 | 11.05 |
| 2002/2003 | 14040.13 | 984.07 | 14.27 | 15337.69 | 526.05 | 29.16 | 15817.40 | 1014.85 | 15.59 |
| 2003/2004 | 16707.80 | 1062.85 | 15.72 | 18779.96 | 720.59 | 26.06 | 18245.18 | 1112.02 | 16.41 |
| 2004/2005 | 16482.82 | 1146.43 | 14.38 | 20457.73 | 858.11 | 23.84 | 17207.62 | 1235.48 | 13.93 |
| 2005/2006 | 15248.44 | 1314.19 | 11.60 | 23134.84 | 1063.13 | 21.76 | 19631.6 | 1368.91 | 14.34 |
| 2006/2007 | 15263.80 | 1481.68 | 10.30 | 24375.62 | 1324.17 | 18.41 | 22146.32 | 1495.74 | 14.81 |
| 2007/2008 | 15528.69 | 1657.64 | 9.37 | 27329.6 | 1541.75 | 17.73 | 20311.16 | 1582.41 | 12.84 |
| Total | 104577.99 | 8524.19 | 88.52 | 140,208.35 | 6,484.98 | 160.88 | 125295.83 | 8889.82 | 86.12 |
| Avg.(mean) | 14939.71 | 1217.74 | 12.65 | 20,029.76 | 926.43 | 22.98 | 17899.40 | 1269.97 | 14.14 |
| s.d. | | | 2.15 | | | 3.77 | | | 1.65 |
| c.v. | | | 16.70 | | | 16.40 | | | 11.67 |

*Source: Comparative Balance Sheet and Profit And Loss Account of       EBL, HBL and NSBI LTD as given in* <u>*WWW. Nepal Stock.com*</u>

The table highlights the proportion of debt to equity of three JVBs from 2001/2002 to 2007/2008. The proportion of debt to equity for 7 successive years of EBL is 12.89, 14.27, 15.72, 14.38, 11.60, 10.30 and 9.37 times respectively whereas of HBL is 23.92, 29.16, 26.06, 23.84, 21.76, 18.41 and  17.73 times respectively and that of NSBI LTD is 11.05, 15.59, 16.41, 13.93, 14.34, 14.81 and 12.84 times respectively. The proportion of debt to equity is highest in the year 2004/2005 i.e. 15.72 times and lowest in the year 2007/2008 i.e. 9.37 times for EBL, highest in the year 2002/2003 i.e. 29.16 times and lowest in the year 2007/2008 i.e. 17.73 times for HBL and highest in the year 2003/2004 i.e. 16.41 and lowest in the year 2001/2002 i.e. 11.05 times for NSBI LTD. The average proportion of debt to equity of EBL, HBL and NSBI LTD are 12.65 times, 22.98 times, 14.14 times respectively. The average proportion of HBL is greater in comparision to the three JVBs. Therefore from the shareholders point of view, investment in the share of HBL is considered to be satisfactory than EBL and NSBI LTD because of low cost of outsider's fund were used to acquire assets to generate higher return. In contrary, from the creditor's point of view, a lower debt-equity is generally viewed as favourable so EBL and NSBI LTD are favorable as they provide safe investment.

The C.V. of debt to equity for 7 successive years of EBL is 16.70 times whereas of HBL is 16.40 times and that of NSBI LTD is 11.67 times respectively. Thus, as regard to the consistency maintained by the three JVBs, NSBI LTD is more consistent or uniform among the three JVBs because the C.V. of NSBI LTD (i.e. 11.67 times) is lower than that of the EBL and HBL. In other words NSBI LTD fluctuates less than the other two JVBs.

### 4.2.14 Net Worth to Total Assets

Net worth plays a vital role in supporting its daily operations and ensuring the long run viability of the banking system. This ratio shows the relationship between the net worth and the total assets of the firm. It examines the percentage of the net worth in total assets.

$$\text{Net Worth to Total Assets} = \frac{\text{Net Worth}}{\text{Total Assets}}$$

The high ratio indicates the higher existence of net worth in total assets which is favourable condition for the firm.

The following table shows the ratio of net worth to total assets of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

**Table No.: 14**
Net Worth to Total Assets

(Rs. In Million)

| 1<br>Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2<br>Net<br>Worth | 3<br>TA | 2/3=4<br>Ratio<br>(%) | 5<br>Net<br>Worth | 6<br>TA | 5/6=7<br>Ratio<br>(%) | 8<br>Net<br>Worth | 9<br>TA | 8/9=10<br>Ratio<br>(%) |
| 2001/2002 | 877.33 | 12184.05 | 7.20 | 451.18 | 11244.10 | 4.01 | 1080.41 | 13016.98 | 8.30 |
| 2002/2003 | 984.07 | 15024.20 | 6.55 | 526.05 | 15863.74 | 3.32 | 1014.85 | 16832.23 | 6.03 |
| 2003/2004 | 1062.85 | 17770.65 | 5.98 | 720.59 | 19500.57 | 3.70 | 1112.02 | 19357.18 | 5.74 |
| 2004/2005 | 1146.43 | 17629.25 | 6.50 | 858.11 | 21315.85 | 4.03 | 1235.48 | 18443.10 | 6.70 |
| 2005/2006 | 1314.19 | 16562.62 | 7.93 | 1063.13 | 24197.97 | 4.39 | 1368.91 | 21000.50 | 6.52 |
| 2006/2007 | 1481.68 | 16745.49 | 8.85 | 1324.17 | 25729.79 | 5.15 | 1495.74 | 23642.06 | 6.33 |
| 2007/2008 | 1657.64 | 17186.33 | 9.65 | 1541.75 | 28871.34 | 5.34 | 1582.41 | 21893.58 | 7.23 |
| Total | 8524.19 | 113102.59 | 52.66 | 6,484.98 | 146723.36 | 29.93 | 8889.82 | 134185.63 | 46.85 |
| Avg.(mean) | 1217.74 | 16157.51 | 7.52 | 926.43 | 20960.48 | 4.28 | 1269.97 | 19169.38 | 6.69 |
| s.d. | | | 1.25 | | | 0.69 | | | 0.79 |
| c.v. | | | 16.62 | | | 16.12 | | | 11.81 |

*Source: Comparative Balance Sheet and Profit And Loss Account of EBL, HBL and NSBI LTD as given in* <u>WWW. Nepal Stock.com</u>

The table highlights the proportion of net worth to total assets of three JVBs from 2001/2002 to 2007/2008. The proportion of net worth to total assets for 7 successive years of EBL is 7.20%, 6.55%, 5.98%, 6.50%, 7.93%, 8.85% and 9.65% respectively whereas of HBL is 4.01%, 3.32%, 3.70%, 4.03%, 4.39%, 5.15% and 5.34% respectively and that of NSBI LTD is 8.30%, 6.03%, 5.74%, 6.70%, 6.52%, 6.33% and 7.23% respectively. The proportion of net worth to total assets is highest in the year 2007/2008 i.e. 9.65% and lowest in the year 2003/2004 i.e. 5.98% for EBL, highest in the year 2007/2008 i.e. 5.34% and lowest in the year 2002/2003 i.e. 3.32% for HBL and highest in the year 2001/2002 i.e. 8.30% and lowest in the year 2003/2004 i.e. 5.74% for NSBI LTD. The average proportion of net worth to total assets of EBL, HBL and NSBI LTD are 7.52%, 4.28%, and 6.69% respectively. The average proportion of EBL is greater in comparison to the three JVBs. It reveals that average proportion of net worth to total assets favors EBL more than the rest of the JVBs.

The C.V. of net worth to total assets for 7 successive years of EBL is 16.62% whereas of HBL is 16.12% and that of NSBI LTD is 11.81%. Thus, as regard to the

consistency maintained by the three JVBs, NSBI LTD is more consistent or uniform among the three JVBs because the C.V. of NSBI LTD (i.e. 11.81%) is lower than that of the EBL and HBL. In other words, there is more fluctuation in net worth to total assets of EBL and HBL than the NSBI LTD.

### 4.2.15 <u>Return on Owner's Equity</u>

Ultimately, the most important, or "bottom line," accounting ratio is the ratio of net income to owner's equity, which measures the return on owner's equity. Shareholders invest their funds in the firm's share in an anticipation of greater return in the near future. They purchase the shares of the firm so that they could get higher return in the future and thus, it is the firm's responsibility to provide the shareholders reasonable return. So the basic purpose of the return on owner's equity is to measure the productivity of the shareholders equity. In other words, it indicates the ability of the management to efficiently and effectively capitalize the shareholders fund in income generating purposes. It can be calculated as-

$$\text{Return on Owner's Equity} = \frac{\text{Net Profit After Tax}}{\text{Owners's Equity}}$$

The high ratio indicates that that the shareholders equity i.e. their funds are being effectively and efficiently utilized in the profit generating purposes.

The following table shows the ratio of return on owner's equity of EBL, HBL and NSBI LTD from F/Y 2001/2002 to F/Y 2007/2008.

## Table No.: 15

### Return on Owner's Equity

(Rs. In Million)

| 1 Year | EBL Bank Limited | | | Himalayan Bank Ltd. | | | NSBI LTD. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2 NPAT | 3 Owner Equity | 2/3=4 Ratio (%) | 5 NPAT | 6 Owner Equity | 5/6=7 Ratio (%) | 8 NPAT | 9 Owner Equity | 8/9=10 Ratio (%) |
| 2001/2002 | 266.48 | 877.33 | 30.37 | 165.25 | 451.18 | 36.63 | 359.46 | 1080.41 | 33.27 |
| 2002/2003 | 329.12 | 984.07 | 33.44 | 199.25 | 526.05 | 37.88 | 392.69 | 1014.85 | 38.69 |
| 2003/2004 | 291.38 | 1062.85 | 27.41 | 277.04 | 720.59 | 38.45 | 430.86 | 1112.02 | 38.75 |
| 2004/2005 | 271.64 | 1146.43 | 23.69 | 235.02 | 858.11 | 27.39 | 479.21 | 1235.48 | 38.79 |
| 2005/2006 | 416.24 | 1314.19 | 31.67 | 212.13 | 1063.13 | 19.95 | 506.93 | 1368.91 | 37.03 |
| 2006/2007 | 455.31 | 1481.68 | 30.73 | 263.05 | 1324.17 | 19.87 | 537.80 | 1495.74 | 35.96 |
| 2007/2008 | 518.64 | 1657.64 | 31.29 | 308.28 | 1541.75 | 20.00 | 539.20 | 1582.41 | 34.07 |
| Total | 2548.81 | 8524.19 | 208.62 | 1660.15 | 6,484.98 | 200.15 | 3246.15 | 8889.82 | 256.56 |
| Avg.(mean) | 364.12 | 1217.74 | 29.80 | 237.16 | 1,621.25 | 28.59 | 463.74 | 1269.97 | 36.65 |
| s.d. | | | 3.00 | | | 8.23 | | | 2.13 |
| c.v. | | | 10.07 | | | 28.79 | | | 5.82 |

*Source: Comparative Balance Sheet and Profit And Loss Account of EBL, HBL and NSBI LTD as given in* <u>WWW. Nepal Stock.com</u>

The table highlights the proportion of return on owner's equity of three JVBs from 2001/2002 to 2007/2008. The proportion of return on owner's equity for 7 successive years of EBL is 30.37%, 33.44%, 27.41%, 23.69%, 31.67%, 30.73% and 31.29% respectively whereas of HBL is 36.63%, 37.88%, 38.45%, 27.39%, 19.95%, 19.87% and 20.00%, respectively and that of NSBI LTD is 33.27%, 38.69%, 38.75%, 38.79%, 37.03%, 35.96% and 34.07% respectively. The proportion of return on owner's equity is highest in the year 2002/2003 i.e. 33.44% and lowest in the year 2004/2005 i.e. 23.69% for EBL, highest in the year 2003/20004 i.e. 38.45% and lowest in the year 2006/2007 i.e. 19.87% for HBL and highest in the year 2004/2005 i.e. 38.79% and lowest in the year 2001/2002 i.e. 33.27% for NSBI LTD. The average proportion of return on owner's equity of EBL, HBL and NSBI LTD are 29.80%, 28.59%, 36.65% respectively. The average proportion of NSBI LTD is greater in comparision to the three JVBs. It reveals that NSBI LTD provides greater rate of return to their shareholder's equity than the remaining two JVBs.

The C.V. of return on owner's equity for 7 successive years of EBL is 10.07% whereas of HBL is 28.79% and that of NSBI LTD is 5.82%. Thus, as regard to the consistency maintained by the three JVBs, NSBI LTD is more consistent or uniform among the three JVBs because the C.V. of NSBI LTD (i.e. 5.82%) is lower

than that of the EBL and HBL. In other words, there is more fluctuation in return on owner's equity of EBL and HBL than the NSBI LTD.


## 4.3 <u>Trend Analysis</u>

In today's world of dynamic change nothing remains constant instead everything changes now and then. As such, business too changes each year. This really makes a Herculean task to find enough information about business by way of analyzing the financial statements of a single year. In order to succeed in this dynamic world, it is quite important for a business analysts to find out the direction and tendency of business and to determine it, the relative past data to the problem are studied and the trend is determined.

Trend analysis makes it easy to understand the changes occurred in an item or group of items over a period of time. Thus, trend analysis is one of the important tool for the bankers as it enable them to indicate the direction in which their business is going and on this basis to forecast its future. There are generally two methods of expressing trends which are listed below-

- Trend Ratios
- Graphs and Diagrams

Here, graphs and diagrams have been used to express the trends of different items of the three JVBs.


## 4.3.1 Trend of Current Assets:

### Graph no.: 1
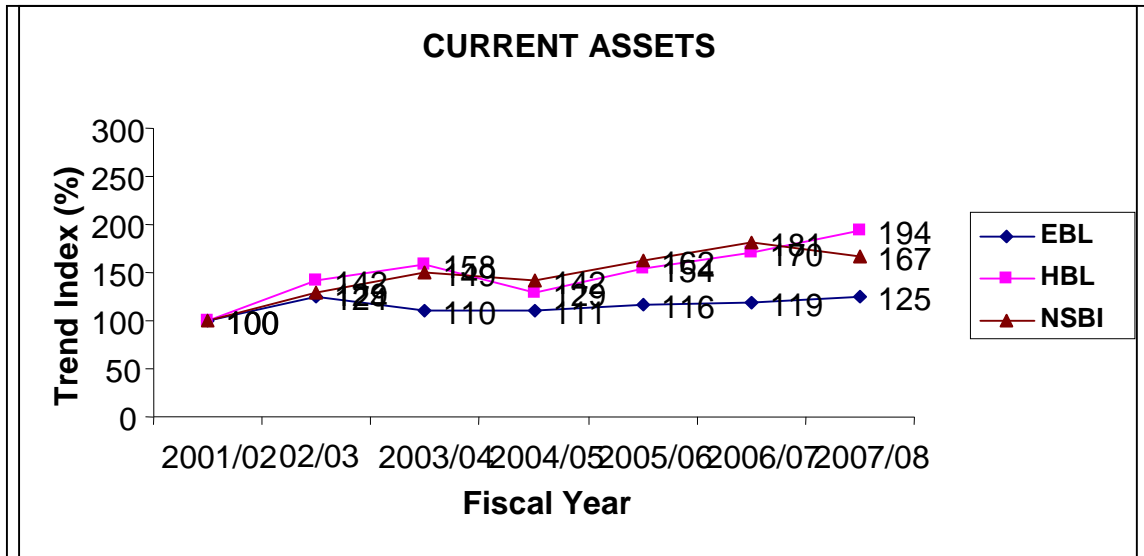
**CURRENT ASSETS**



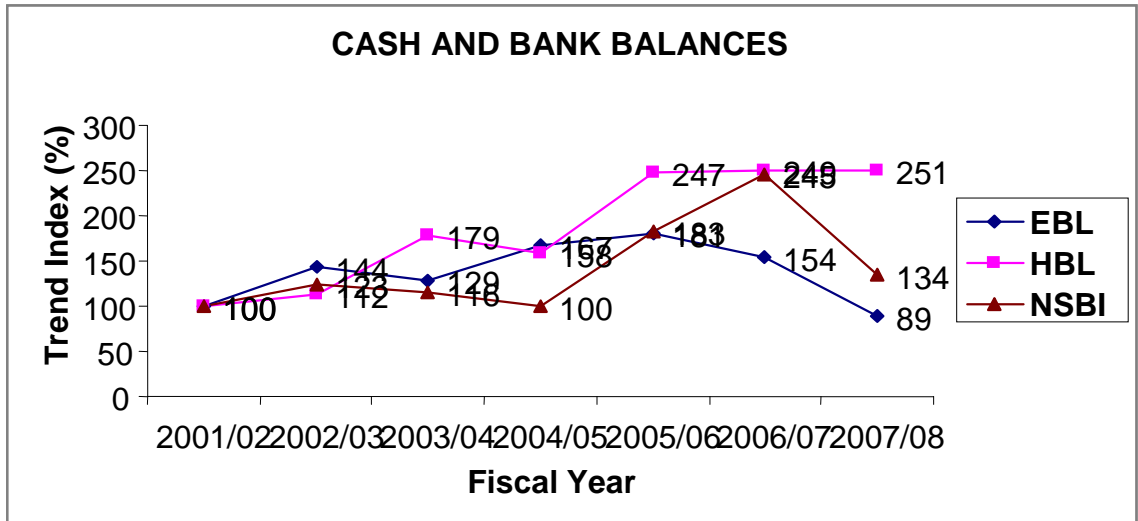*Source: Appendix-A*

The graph highlights the current assets trends of three JVBs from 2001/2002 to 2007/2008. The growth of current assets in comparision to the base year (i.e. 100%) for 7  successive years of EBL is 124%, 110%, 111%, 116%, 119%, 119%, 125% respectively whereas of HBL is 142%, 158%, 129%, 154%, 170%, 194% respectively and that of NSBI LTD is 129%, 149%, 142%, 162%, 181%, 167% respectively. The current assets of EBL shows the fluctuating trend throughout the period understudy as there is rise and fall in successive years. The current assets of HBL marked an increasing trend throughout the period understudy except in 2004/2005. The current assets of the NSBI LTD also marked an increasing trend throughout the period understudy except in 2004/2005 and 2007/2008. This indicates that the current assets management of HBL and NSBI LTD is better in comparision to the EBL.

**4.3.2 Trend of Current Liabilities:**

**CURRENT LIABILITIES**
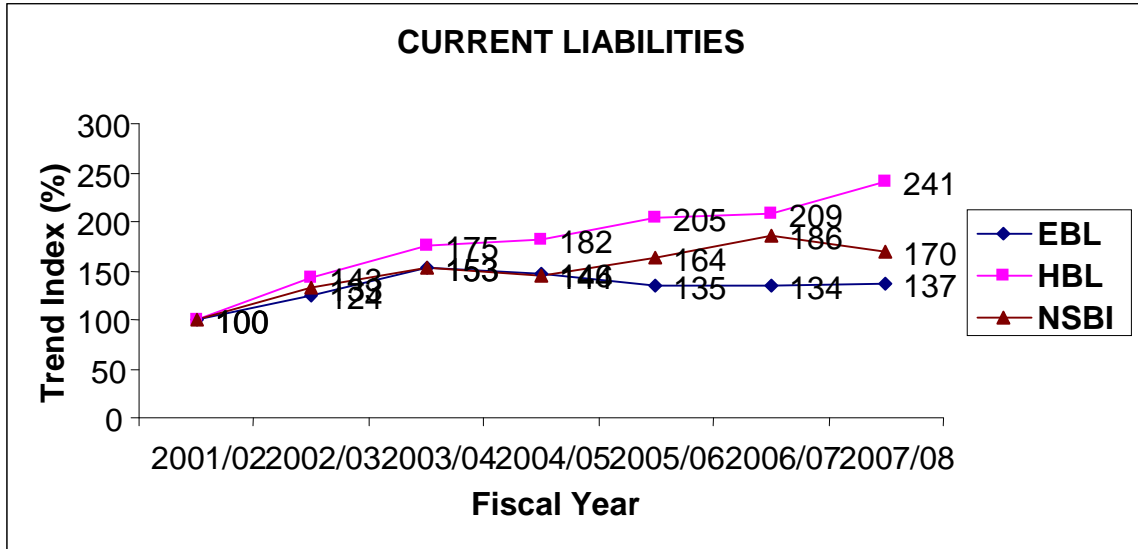


*Source: Appendix-A*

The above graph highlights the current liabilities trends of three JVBs from 2001/2002 to 2007/2008. The growth of current liabilities in comparision to the base year (i.e. 100%) for 7 successive years of EBL is 124%, 153%, 146%, 135%, 134%, 137% respectively whereas of HBL is 143%, 175%, 182%, 205%, 209%, 241% respectively and that of NSBI LTD is 133%, 153%,144%, 164%, 186%, 170% respectively. The current liabilities of EBL shows the fluctuating trend throughout the period understudy as there is rise and fall in successive years. The current liabilities marked an increasing trend throughout the period understudy. The current assets of the NSBI LTD marked an increasing trend throughout the period understudy except in 2004/2005 and 2007/2008. This indicates that the current liabilities of HBL and NSBI LTD are greater in comparision to the EBL.

**4.3.3 Trend of Cash and Bank Balances:**

**CASH AND BANK BALANCES**

Source: Appendix-A

The above graph highlights the cash and bank balance trends of three JVBs from 2001/2002 to 2007/2008. The cash and bank balance in comparision to the base year (i.e. 100%) for 7 successive years of EBL is 144%, 129%, 167%, 181%, 1545%, 89% respectively whereas of HBL is 112%, 179%, 158%, 247%, 249%, 251%, respectively and that of NSBI LTD is 123%, 116%, 100%, 183%, 245%, 134% respectively. The cash and bank balance of EBL indicates highly fluctuating trend throughout the period understudy. The cash and bank balance of HBL marked an increasing trend throughout the period understudy except in 2004/2005 and 2007/2008. The cash and bank balance of the NSBI LTD marked a fluctuating trend throughout the period understudy. This indicates that the cash and bank balance of EBL and NSBI LTD is lower in comparision to the HBL which may be termed as both good and worst as greater cash and bank balances is good for the banks because it will increase there working capital and they can perform their operations smoothly whereas it is worst because greater cash balance may indicate idle cash which incurs cost.

**4.3.4 Trend of Total Assets:**

<div align="center">
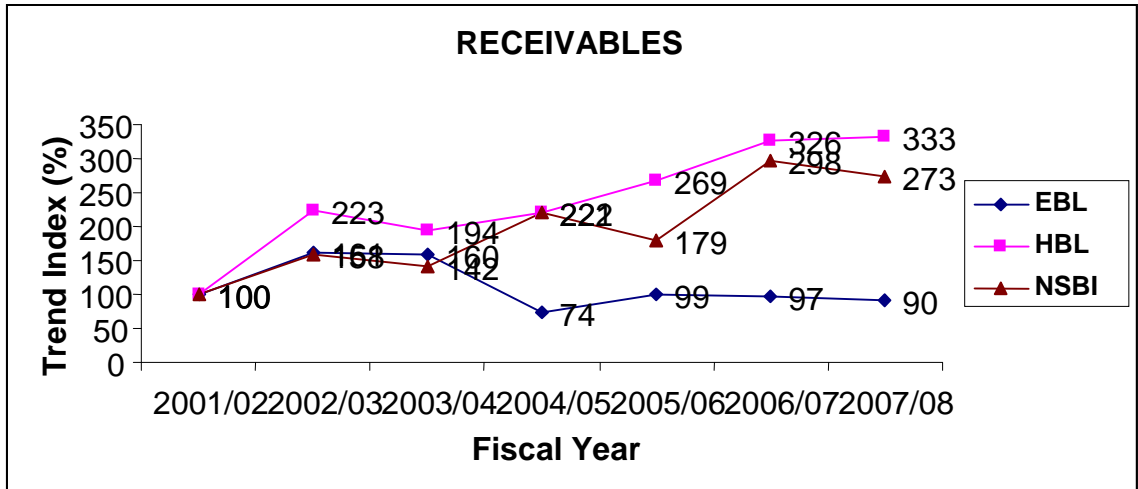
**Graph no.: 4**

</div>
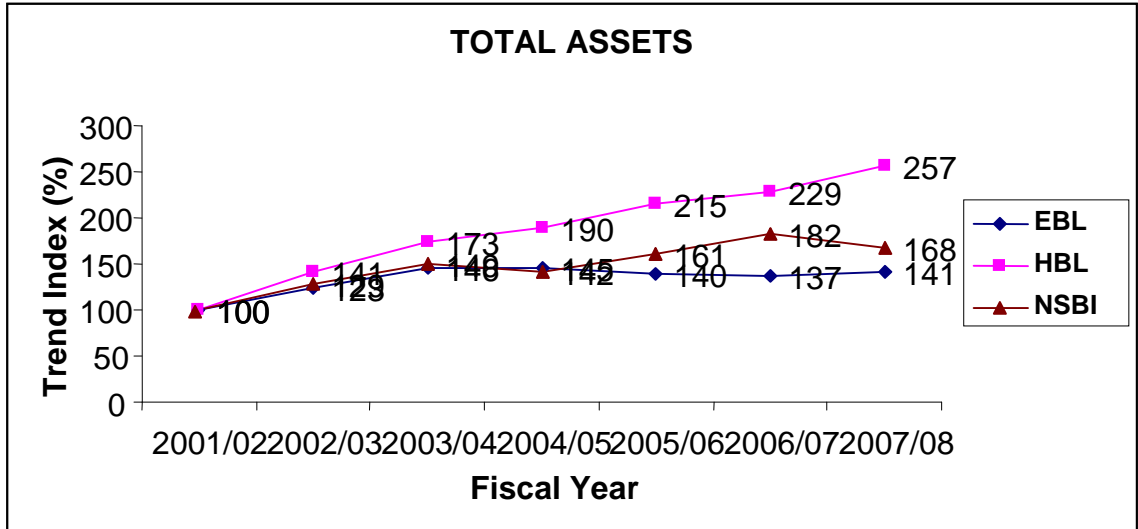


**TOTAL ASSETS**

*Source: Appendix-A*

The above graph highlights the total assets trends of three JVBs from 2001/2002 to 2007/2008. The growth of total assets in comparision to the base year (i.e. 100%) for 7 successive years of EBL is 123%, 146%, 145%, 140%, 137%, 141% respectively whereas of HBL is 141%, 173%, 190%, 215%, 229%, 257% respectively and that of NSBI LTD is 129%, 149%, 142%, 161%, 182%, 168% respectively. The total assets of EBL show the increasing trend in the year 2002/03, 2003/04 and 2007/08 and decreasing trend in the remaining years. The total assets of HBL marked an increasing trend throughout the period understudy. The total assets of NSBI LTD marked an increasing trend throughout the period understudy except in 2004/2005 and 2007/2008. This indicates that the total assets management of HBL and NSBI LTD is better in comparision to the EBL.
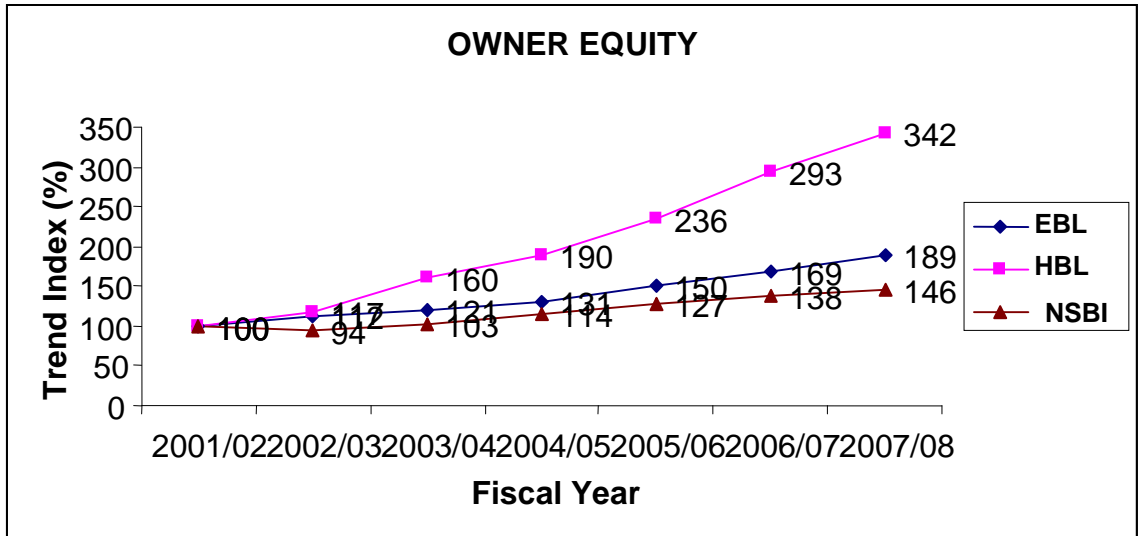
**4.3.5 Trend of Receivables:**

*Source: Appendix-A*

The above graph highlights the receivable trends of three JVBs from 2001/2002 to 2007/2008. The growth of receivable in comparision to the base year (i.e. 100%) for 7 successive years of EBL is 161%, 160%, 74%, 99%, 97%, 90% respectively whereas of HBL is 223%, 194%, 222%, 269%, 326%, 333% respectively and that of NSBI LTD is 158%, 142%, 221%, 179%, 298%, 273% respectively. The receivable of EBL shows the decreasing trend throughout the period understudy as there is constant fall in successive years except in the year 2002/03. The receivable of HBL marked a fluctuating trend throughout the period understudy. The receivable of the NSBI LTD also marked a fluctuating trend throughout the period. This indicates that the receivable of HBL and NSBI LTD is poor in comparision to the EBL.

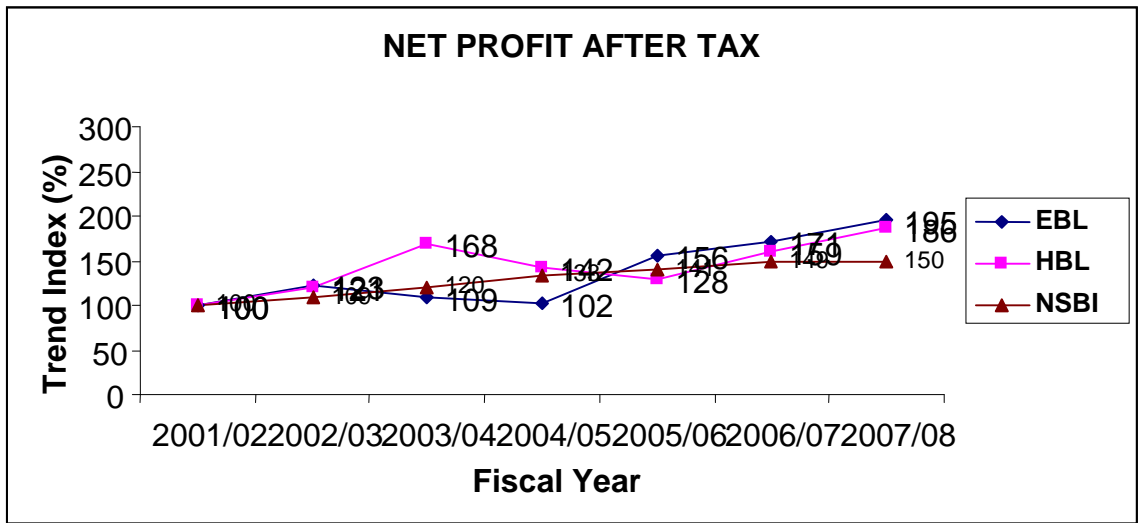**4.3.6 Trend of Owner Equity:**

**OWNER EQUITY**



*Source: Appendix-A*

The above graph highlights the owner equity trends of three JVBs from 2001/2002 to 2007/2008. The growth of owner equity in comparision to the base year (i.e. 100%) for 7 successive years of EBL is 112%, 121%, 131%, 150%, 169%, 189% respectively whereas of HBL is 117%, 160%, 190%, 236%, 293%, 342% respectively and that of NSBI LTD is 94%, 103%, 114%, 127%, 138%, 146% respectively. The owner equity of EBL, HBL and NSBI LTD all the three marked an increasing trend throughout the period understudy but there is slow increase in EBL and NSBI LTD as compared to the high increase in the HBL.

**4.3.7 Trend of Net Profit after Tax:**

*Source: Appendix-A*

The above graph highlights the net profit after tax trends of three JVBs from 2001/2002 to 2007/2008. The growth of net profit after tax in comparision to the base year (i.e. 100%) for 7 successive years of EBL is 123%, 109%, 102%, 156%, 171%, 195% respectively whereas of HBL is 121%, 168%, 142%, 128%, 159%, 186% respectively and that of NSBI LTD is 109%, 120%, 133%, 141%, 149%, 150% respectively. The net profit after tax of EBL shows the increasing trend in the year 2002/03, 2005/06, 2006/07 and 2007/08 and decreasing trend in the remaining years. The net profit after tax of HBL marked an increasing trend throughout the period understudy except in the year 2004/05 and 2005/06. The net profit after tax of NSBI LTD marked an increasing trend throughout the period understudy as there is gradual increase in the successive years. This indicates that the net profit after tax of NSBI LTD is the best among the rest and is able to give higher return to the shareholders, creditors and is satisfying them.

**4.4 Correlation Analysis and Probable Error**

In simple term, the word correlation may be defined as a statistical tool which helps to determine whether or not two or more variables are correlated and if they are correlated, what is the degree and direction of correlation.

"When the relationship is of a quantitative nature, the appropriate statistical tool for discovering and measuring the relationship and expressing it in a brief formula, is known as correlation."[31]

Thus, correlation analysis gives the extent to which two variables correlate and the direction of movement. As mentioned earlier, the value of correlation lies between 0 to ±1. The more is the value of correlation coefficient the more it approaches to 1. The relationship may be positive or negative. In case of positive correlation, the variable changes to the same direction and vice-versa.

Probable error is a statistical technique by which significance of Karl Pearson coefficient of correlation can be tested. If the value of correlation(r) is less than 'P.E.', it means correlation is not significant at all. If 'r' is greater than six times of 'P.E.', it means 'r' is significant.

Here the researcher has aimed to measure the degree of correlation and probable error between some important variables and for this Karl Pearson's correlation coefficient method has been used.

### 4.4.1 Karl Pearson's correlation coefficient and probable error of Cash and Bank Balance and Current Assets of the three JVBs are tabulated below-

**Table no.: 16**

| Banks | Correlation (r) | P.E. | 6×P.E. | Correlation |
|-------|-----------------|------|--------|-------------|
| EBL | 0.0939 | 0.2527 | 1.5161 | r < 6 P.E. ; not significant |
| HBL | 0.8295 | 0.0795 | 0.4771 | r > 6 P.E. ; significant |
| NSBI LTD | 0.7458 | 0.1131 | 0.6788 | r > 6 P.E. ; significant |

The above table highlights the seven years Karl Pearson's correlation coefficient (r) and probable error (P.E.) in between cash and bank balance and current assets of EBL, HBL and NSBI LTD which are 0.0939 and 0.2527, 0.8295 and 0.0795, 0.7458 and 0.1131 respectively. We can conclude that the highest degree of correlation in between cash and bank balance and current assets is 0.8295 of HBL and the lowest is 0.0939 of EBL among the three JVBs. In the above figure, there is moderate degree positive correlation coefficient in between cash and bank balance and current assets of EBL but since it is not 6 times more than P.E.,

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[31] Croxton and Cowden, as quoted by S.P. Gupta, *An easy approach to Statistics*, 6th edition , S. Chand and Company Ltd., Ram Nagar, New Delhi-110055, p.155.

it is not considered as significant and the change in cash and bank balance does not affect the volume of current assets to the great extent. On the other hand, there is high degree positive correlation coefficient in between cash and bank balance and current assets of HBL and NSBI LTD and as it is 6 times greater than P.E., it is considered as significant and thereby changes in cash and bank balance affects volume of current assets.

**4.4.2** **Karl Pearson's correlation coefficient and probable error of Cash and Bank Balance and Total Assets of the three JVBs are tabulated below-**

**Table no.: 17**

| Banks | Correlation (r) | P.E. | 6×P.E. | Correlation |
|-------|-----------------|------|--------|-------------|
| EBL | 0.3654 | 0.2209 | 1.3254 | r < 6 P.E. ; not significant |
| HBL | 0.9407 | 0.0293 | 0.1760 | r > 6 P.E. ; significant |
| NSBI LTD | 0.7508 | 0.1112 | 0.6674 | r > 6 P.E. ; significant |

The above table highlights the seven years Karl Pearson's correlation coefficient (r) and probable error (P.E.) in between cash and bank balance and total assets of EBL, HBL and NSBI LTD which are 0.3654 and 0..2209, 0.9407 and 0.0293, 0.7508 and 0.1112 respectively. We can conclude that the highest degree of correlation in between cash and bank balance and total assets is 0.9407 of HBL and the lowest is 0.3654 of EBL among the three JVBs. In the above figure, there is moderate degree positive correlation coefficient in between cash and bank balance and total assets of EBL but since it is not 6 times more than P.E., it is not considered as significant and the change in cash and bank balance does not affect the volume of total assets to the great extent. On the other hand, there is high degree positive correlation coefficient in between cash and bank balance and total assets of HBL and NSBI LTD and as it is 6 times greater than P.E., it is considered as significant and thereby changes in cash and bank balance affects volume of total assets.

**4.4.3** **Karl Pearson's correlation coefficient and probable error of Current Assets and Total Assets of the three JVBs are tabulated below-**

**Table no.: 18**

| Banks | Correlation (r) | P.E. | 6×P.E. | Correlation |
|-------|-----------------|------|--------|-------------|
| EBL | 0.4783 | 0.1966 | 1.1796 | r < 6 P.E.; not significant |
| HBL | 0.8844 | 0.0555 | 0.3332 | r > 6 P.E. ; significant |
| NSBI LTD | 0.9996 | 0.0002 | 0.0012 | r > 6 P.E. ; significant |

The table highlights the seven years Karl Pearson's correlation coefficient (r) and probable error (P.E.) in between current assets and total assets of EBL, HBL and NSBI LTD which are 0.4783 and 0.1966, 0.8844 and 0.0555, 0.9996 and 0.0002 respectively. We can conclude that the highest degree of correlation in between current assets and total assets is 0.9996 of NSBI LTD and the lowest is 0.4783 of EBL among the three JVBs. In the above figure, there is moderate degree positive correlation coefficient in between current assets and total assets of EBL but since it is not 6 times more than P.E., it is not considered as significant and the change in current assets does not affect the volume of total assets to the great extent. On the other hand, there is high degree positive correlation coefficient in between current assets and total assets of HBL and NSBI LTD and as it is 6 times greater than P.E., it is considered as significant and thereby changes in current assets affects volume of total assets.

**4.4.4 Karl Pearson's correlation coefficient and probable error of Current Assets and Current Liabilities of the three JVBs are tabulated below-**

**Table no.: 19**

| Banks | Correlation (r) | P.E. | 6×P.E. | Correlation |
|-------|-----------------|------|--------|-------------|
| EBL | 0.3547 | 0.2229 | 1.3374 | r < 6 P.E. ; not significant |
| HBL | 0.9041 | 0.0465 | 0.2793 | r > 6 P.E. ; significant |
| NSBI | 0.9996 | 0.0002 | 0.0012 | r > 6 P.E. ; significant |

The above table highlights the seven years Karl Pearson's correlation coefficient (r) and probable error (P.E.) in between current assets and current liabilities of EBL, HBL and NSBI LTD which are 0.3547 and 0.2229, 0.9041 and 0.0465, 0.9996 and 0.0002 respectively. We can conclude that the highest degree of correlation in between current assets and current liabilities is 0.9996 of NSBI LTD and the lowest is 0.3547 of EBL among the three JVBs .In the above figure, the correlation coefficient in between current assets and current liabilities of EBL is positive but since it is not 6 times more than P.E., so it is not considered as significant and the change in between current assets does not affect the volume of current liabilities to the great extent. On the other hand, the correlation coefficient in between cash and bank balance and current assets of HBL and NSBI LTD is positive as well as 6 times greater than P.E., so it is considered as significant and thereby changes in current assets affects volume of current liabilities.

**4.4.5 Karl Pearson's correlation coefficient and probable error of Return and Current Assets of the three JVBs are tabulated below-**

**Table no.: 20**

| Banks | Correlation (r) | P.E. | 6×P.E. | Correlation |
|-------|-----------------|------|--------|-------------|
| EBL | 0.7381 | 0.1160 | 0.6963 | r > 6 P.E. ; significant |
| HBL | 0.8803 | 0.0574 | 0.3443 | r > 6 P.E.; significant |
| NSBI LTD | 0.9322 | 0.0334 | 0.2004 | r > 6 P.E. ; significant |

The above table highlights the seven years Karl Pearson's correlation coefficient (r) and probable error (P.E.) in between return and current assets of

EBL, HBL and NSBI LTD which are 0.7381 and 0.1160, 0.8803 and 0.0574, 0.9322 and 0.0334 respectively. We can conclude that the highest degree of correlation in between return and current assets is 0.9322 of NSBI LTD and the lowest is 0.7381 of EBL among the three JVBs. In the above figure, there is high degree of positive correlation coefficient in between return and current assets of EBL, HBL and NSBI LTD. Since the correlation coefficient in between return and current assets of EBL, HBL and NSBI LTD is 6 times greater than P.E., so it is considered as significant and thereby changes in return affects the volume of current assets.

## 4.5    Testing of Hypothesis with the help of ANOVA Table     (F-Test)

### 4.5.1  Testing of Hypothesis on the basis of Current Assets:

The following null hypothesis has been tested by the help of applying the f-test on the basis of Current Assets of three JVBs.

Null Hypothesis          $(H_0)$: $\mu_1 = \mu_2 = \mu_3$ i.e. there is no significant difference in average current assets of the three  JVBs.

Alternative Hypothesis $(H_1)$: $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. there is a significant difference in average current assets of the three JVBs.

**Computation of test statistic:**

**Table no.: 21**

**Current Assets of EBL, HBL and NSBI LTD**

| Banks<br>Year | EBL<br>$(X_1)$ | HBL<br>$(X_2)$ | NSBI LTD<br>$(X_3)$ |
|---|---|---|---|
| 2001/2002 | 11961.95 | 10988.05 | 12862.22 |
| 2002/2003 | 14788.91 | 15605.42 | 16650.32 |
| 2003/2004 | 13161.68 | 17359.84 | 19224.18 |
| 2004/2005 | 13312.39 | 14165.33 | 18330.82 |
| 2005/2006 | 13868.31 | 16881.45 | 20797.6 |
| 2006/2007 | 14243.92 | 18657.35 | 23225.83 |
| 2007/2008 | 14969.38 | 21326.26 | 21447.16 |
| **Total** | **96306.54** | **114983.70** | **132538.13** |

*Source: Computed from previous tables (Table no. 1 to 15)*

Sum of Squares of Current Assets:
$\sum X_1^2$ =1331551272
$\sum X_2^2$ =1954176424
$\sum X_3^2$ =2580217935

$T = \sum X_1 + \sum X_2 + \sum X_3$
 = 96306.54 + 114983.70 + 132538.13
 = 343828.37

Correction Factor (C.F.) = $T^2 / N$
$$= (343828.37)^2 / 21$$
$$= 5629426096$$

Sum of Squares Between Sample Banks (SSB)
= $(\sum X_1)^2 / n_1 + (\sum X_2)^2 / n_2 + (\sum X_3)^2 / n_3 - T^2 / N$
= $(96306.54)^2 / 7 + (114983.70)^2 / 7 + (132538.13)^2 / 7 - 5629426096$
= 5723222402.30 - 5629426096
= 93796306.3

Total Sum of Squares Between Banks (TSS)
= $\sum X_1^2 + \sum X_2^2 + \sum X_3^2 - T^2 / N$
=1331551272 + 1954176424 + 2580217935 - 5629426096
=5865945631 - 5629426096

=236519535


Sum of Squares Within Sample Banks (SSW)
=TSS - SSB
=236519535 - 93796306.3
=142723228.7

| Source of Variation | Sum of Squares | Degree of Freedom | Mean Sum of Square | F-ratio |
|---|---|---|---|---|
| Between Banks | 93796306.3 | 3 - 1 = 2 | 46898153.15 | $\dfrac{46898153.15}{7929068.26}$ |
| Within Banks | 142723228.7 | 20 - 2 = 18 | 7929068.26 | = 5.91 |
| **Total** | **236519535** | **21 - 1 = 20** | | |

**From above:**

Computed value of F = 5.91
Tabulated value of $F_{0.05}$ for $V_1$ = 2 and $V_2$ = 18 is 3.55.

**Decision:**

Since computed value of F is greater than its tabulated value, $H_0$ is rejected i.e. there is a significant difference in average current assets of the three JVBs. The difference can be seen as there is a significant difference in the total of current assets of the three JVBs.


**4.5.2  Testing of Hypothesis on the basis of Current Liabilities:**

The following null hypothesis has been tested by the help of applying the f-test on the basis of Current Liabilities of three JVBs.

Null Hypothesis          $(H_0)$: $\mu_1 = \mu_2 = \mu_3$ i.e. there is no significant difference in average current liabilities of the three JVBs.

Alternative Hypothesis $(H_1)$: $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. there is a significant difference in average current liabilities of the three JVBs.

Computation of test statistic:

**Table no. 22**

**Current Liabilities of EBL, HBL and NSBI LTD**

| Banks \ Year | EBL $(X_1)$ | HBL $(X_2)$ | NSBI LTD $(X_3)$ |
|---|---|---|---|
| 2001/2002 | 11249.94 | 10698.75 | 11903.72 |
| 2002/2003 | 13977.29 | 15311.04 | 15781.19 |
| 2003/2004 | 17226.21 | 18742.46 | 18196.01 |
| 2004/2005 | 16384.73 | 19433.25 | 17150.05 |
| 2005/2006 | 15135.42 | 21899.93 | 19559.38 |
| 2006/2007 | 15112.45 | 22325.47 | 22090.48 |
| 2007/2008 | 15385.33 | 25837.29 | 20235.75 |
| **Total** | **104471.37** | **134248.19** | **124916.58** |

*Source: Computed from previous tables (Table no. 1 to 15)*

Sum of Squares of Current Liabilities:

$\sum X_1^2 = 1581302936.67$

$\sum X_2^2 = 2723421309.13$

$\sum X_3^2 = 2296007733.25$

$T = \sum X_1 + \sum X_2 + \sum X_3$

   = 104471.37 + 134248.19 + 124916.58

   = 363636.14

Correction Factor (C.F.) $= T^2 / N$

$= (363636.14)^2 / 21$

= 6296725824.47

Sum of Squares Between Sample Banks (SSB)

$= (\sum X_1)^2 / n_1 + (\sum X_2)^2 / n_2 + (\sum X_3)^2 / n_3 - T^2 / N$

$= (104471.37)^2 / 7 + (134248.19)^2 / 7 + (124916.58)^2 / 7 - 6296725824.47$

= 6362999375.22 - 6296725824.47

= 66273550.75

Total Sum of Squares Between Banks (TSS)

$= \sum X_1^2 + \sum X_2^2 + \sum X_3^2 - T^2 / N$

= 1581302936.67+ 2723421309.13 + 2296007733.25 - 6296725824.47

= 6600731979.06 - 6296725824.47

= 304006154.59

## Sum of Squares Within Sample Banks (SSW)

= TSS - SSB

= 304006154.59 - 66273550.75

= 237732603.84

| Source of Variation | Sum of Squares | Degree of Freedom | Mean Sum of Square | F-ratio |
|---|---|---|---|---|
| Between Banks | 66273550.75 | 3 - 1 = 2 | 33136775.38 | $\dfrac{33136775.38}{13207366.88}$ |
| Within Banks | 237732603.84 | 20 - 2 = 18 | 13207366.88 | = 2.51 |
| **Total** | **304006154.59** | **21 - 1 = 20** | | |

**From above:**

Computed value of F = 2.51

Tabulated value of $F_{0.05}$ for $V_1$ = 2 and $V_2$ = 18 is 3.55.

**Decision:**

Since computed value of F is less than its tabulated value, $H_0$ is accepted i.e. there is no significant difference in current liabilities of the three JVBs.

### 4.5.3 Testing of Hypothesis on the basis of Cash and Bank Balance:

The following null hypothesis has been tested by the help of applying the f-test on the basis of Current Assets of three JVBs.

Null Hypothesis (H$_0$): $\mu_{1=}\mu_{2=}\mu_3$ i.e. there is no significant difference in average cash and bank balance of the three JVBs.

Alternative Hypothesis (H$_1$): $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. there is a significant difference in average cash and bank balance of the three JVBs.

Computation of test statistic:

**Table no.: 23**

**Cash and Bank Balance of EBL, HBL and NSBI LTD**

| Banks Year | EBL ($X_1$) | HBL ($X_2$) | NSBI LTD ($X_3$) |
|---|---|---|---|
| 2001/2002 | 630.94 | 802.21 | 826.15 |
| 2002/2003 | 910.07 | 901.91 | 1020.46 |
| 2003/2004 | 812.91 | 1435.17 | 961.05 |
| 2004/2005 | 1051.82 | 1264.67 | 825.23 |
| 2005/2006 | 1144.77 | 1979.21 | 1512.3 |
| 2006/2007 | 970.49 | 2001.18 | 2023.16 |
| 2007/2008 | 559.38 | 2014.47 | 1111.12 |
| **Total** | **6080.38** | **10398.82** | **8279.47** |

*Source: Computed from previous tables (Table no. 1 to 15)*

Sum of Squares of Cash and Bank Balance:

$\sum X_1^2 = 5558715.85$

$\sum X_2^2 = 17096168.67$

$\sum X_3^2 = 10943299.42$

$T = \sum X_1 + \sum X_2 + \sum X_3$

$= 6080.38 + 10398.82 + 8279.47$

$= 24758.67$

Correction Factor (C.F.) $= T^2 / N$

$= (24758.67)^2 / 21$

$= 612991740.17 / 21$

$= 29190082.86$

Sum of Squares Between Sample Banks (SSB)

$= (\sum X_1)^2 / n_1 + (\sum X_2)^2 / n_2 + (\sum X_3)^2 / n_3 - T^2 / N$

$= (6080.38)^2 / 7 + (10398.82)^2 / 7 + (8279.47)^2 / 7 - 29190082.86$

$= 30522300.26 - 29190082.86$

$= 1332217.40$

Total Sum of Squares Between Banks (TSS)
$= \sum X_1{}^2 + \sum X_2{}^2 + \sum X_3{}^2 - T^2 / N$
= 5558715.85 + 17096168.67 + 10943299.42 - 29190082.86
= 4408101.08

Sum of Squares Within Sample Banks (SSW)
= TSS - SSB
= 4408101.08 - 1332217.40
= 3075883.68

| Source of Variation | Sum of Squares | Degree of Freedom | Mean Sum of Square | F-ratio |
|---|---|---|---|---|
| Between Banks | 1332217.40 | 3 - 1 = 2 | 666108.70 | $\dfrac{666108.70}{170882.43}$ |
| Within Banks | 3075883.68 | 20 - 2 = 18 | 170882.43 | = 3.90 |
| **Total** | **4408101.08** | **21 - 1 = 20** | | |

**From above:**

Computed value of F = 3.90
Tabulated value of $F_{0.05}$ for $V_1$ = 2 and $V_2$ = 18 is 3.55.

**Decision:**

Since computed value of F is greater than its tabulated value, $H_0$ is rejected i.e. there is a significant difference in cash and bank balance of the three JVBs.

**4.5.4  Testing of Hypothesis on the basis of Net Profit:**

The following null hypothesis has been tested by the help of applying the f-test on the basis of Current Assets of three JVBs.

Null Hypothesis          ($H_0$): $\mu_1 = \mu_2 = \mu_3$ i.e. there is no significant difference in average net profit of the three JVBs.

Alternative Hypothesis ($H_1$): $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. there is a significant difference in average net profit of the three JVBs.

Computation of test statistic:

**Table no.: 24**

**Net Profit of EBL, HBL and NSBI LTD**

| Banks / Year | EBL ($X_1$) | HBL ($X_2$) | NSBI LTD ($X_3$) |
|---|---|---|---|
| 2001/2002 | 266.48 | 165.25 | 359.46 |
| 2002/2003 | 329.12 | 199.25 | 392.69 |
| 2003/2004 | 291.38 | 277.04 | 430.86 |
| 2004/2005 | 271.64 | 235.02 | 479.21 |
| 2005/2006 | 416.24 | 212.13 | 506.93 |
| 2006/2007 | 455.31 | 263.05 | 537.80 |
| 2007/2008 | 518.64 | 308.28 | 539.20 |
| **Total** | **2548.81** | **1660.15** | **3246.15** |

*Source: Computed from previous tables (Table no. 1 to 15)*

Sum of Squares of Net Profit:

$\sum X_1^2 = 987572.54$

$\sum X_2^2 = 408224.68$

$\sum X_3^2 = 1535643.00$

$T = \sum X_1 + \sum X_2 + \sum X_3$

= 2548.81 + 1660.15 + 3246.15

= 7455.11

Correction Factor (C.F.) = $T^2 / N$

= $(7455.11)^2 / 21$

= 55578665.11 / 21

= 2646603.10

Sum of Squares Between Sample Banks (SSB)

= $(\sum X_1)^2 / n_1 + (\sum X_2)^2 / n_2 + (\sum X_3)^2 / n_3 - T^2 / N$

= $(2548.81)^2 / 7 + (1660.15)^2 / 7 + (3246.15)^2 / 7 - 2646603.10$

= 2827145.75 - 2646603.10

= 180542.65

Total Sum of Squares Between Banks (TSS)

$$= \sum X_1^2 + \sum X_2^2 + \sum X_3^2 - T^2 / N$$

= 987572.54 + 408224.68 + 1535643.00 - 2646603.10

= 284837.12

Sum of Squares Within Sample Banks (SSW)

= TSS - SSB

= 284837.12 - 180542.65

= 104294.47

| Source of Variation | Sum of Squares | Degree of Freedom | Mean Sum of Square | F-ratio |
|---|---|---|---|---|
| Between Banks | 180542.65 | 3 - 1 = 2 | 90271.32 | $\dfrac{90271.32}{5794.14}$ |
| Within Banks | 104294.47 | 20 - 2 = 18 | 5794.14 | = 15.58 |
| **Total** | **284837.12** | **21 - 1 = 20** | | |

**From above:**

Computed value of F = 15.58

Tabulated value of $F_{0.05}$ for $V_1 = 2$ and $V_2 = 18$ is 3.55.

**Decision:**

Since computed value of F is greater than its tabulated value, $H_0$ is rejected i.e. there is a significant difference in net profit of the three JVBs.

### 4.5.5 Testing of Hypothesis on the basis of Receivables:

The following null hypothesis has been tested by the help of applying the f-test on the basis of Current Assets of three JVBs.

Null Hypothesis        ($H_0$): $\mu_1 = \mu_2 = \mu_3$ i.e. there is no significant difference in average receivables of the three JVBs.

Alternative Hypothesis (H$_1$): $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. there is a significant difference in average receivables of the three JVBs.

Computation of test statistic:

**Table no. 25**

**Receivables of EBL, HBL and NSBI LTD**

| Banks / Year | EBL ($X_1$) | HBL ($X_2$) | NSBI LTD ($X_3$) |
|---|---|---|---|
| 2001/2002 | 231.65 | 173.26 | 97.69 |
| 2002/2003 | 373.01 | 386.56 | 154.70 |
| 2003/2004 | 372.35 | 335.75 | 139.03 |
| 2004/2005 | 171.09 | 385.38 | 215.98 |
| 2005/2006 | 230.07 | 466.53 | 174.48 |
| 2006/2007 | 225.44 | 564.36 | 290.73 |
| 2007/2008 | 208.67 | 578.37 | 266.63 |
| **Total** | **1812.28** | **2890.21** | **1339.24** |

*Source: Computed from previous tables (Table no. 1 to 15)*

Sum of Squares of Receivables:

$\sum X_1^2 = 508013.06$

$\sum X_2^2 = 1311357.78$

$\sum X_3^2 = 285510.89$

$T = \sum X_1 + \sum X_2 + \sum X_3$

= 1812.28 + 2890.21 + 1339.24

= 6041.73

Correction Factor (C.F.) $= T^2 / N$

$= (6041.73)^2 / 21$

$= 1738214.35$

Sum of Squares Between Sample Banks (SSB)

$= (\sum X_1)^2 / n_1 + (\sum X_2)^2 / n_2 + (\sum X_3)^2 / n_3 - T^2 / N$

$= (1812.28)^2 / 7 + (2890.21)^2 / 7 + (1339.24)^2 / 7 - 1738214.35$

= 1918748.06 - 1738214.35

= 180533.71

Total Sum of Squares Between Banks (TSS)

$= \sum X_1^2 + \sum X_2^2 + \sum X_3^2 - T^2 / N$

= 508013.06 + 1311357.78 + 285510.89 - 1738214.35

= 2104881.73 - 1738214.35

= 366667.38


### Sum of Squares Within Sample Banks (SSW)

= TSS - SSB
= 366667.38 - 180533.71
= 186133.67

| Source of Variation | Sum of Squares | Degree of Freedom | Mean Sum of Square | F-ratio |
|---|---|---|---|---|
| Between Banks | 180533.71 | 3 - 1 = 2 | 90266.85 | $\dfrac{90266.85}{10340.76}$ |
| Within Banks | 186133.67 | 20 - 2 = 18 | 10340.76 | = 8.73 |
| **Total** | **366667.38** | **21 - 1 = 20** | | |

**From above:**

Computed value of F = 8.73
Tabulated value of $F_{0.05}$ for $V_1 = 2$ and $V_2 = 18$ is 3.55.

**Decision:**

Since computed value of F is greater than its tabulated value, $H_0$ is rejected i.e. there is a significant difference in receivables of the three JVBs.


### 4.5.6 Testing of Hypothesis on the basis of Net Working Capital:

The following null hypothesis has been tested by the help of applying the f-test on the basis of Current Assets of three JVBs.

Null Hypothesis        $(H_0)$: $\mu_1 = \mu_2 = \mu_3$ i.e. there is no significant difference in average net working capital of the three JVBs.

Alternative Hypothesis $(H_1)$: $\mu_1 \neq \mu_2 \neq \mu_3$ i.e. there is a significant difference in average net working capital of the three JVBs.

Computation of test statistic:

**Table no.: 26**

**Net Working Capital of EBL, HBL and NSBI LTD**

| Banks / Year | EBL ($X_1$) | HBL ($X_2$) | NSBI LTD ($X_3$) |
|---|---|---|---|
| 2001/2002 | 712.01 | 289.30 | 925.67 |
| 2002/2003 | 811.62 | 294.38 | 832.92 |
| 2003/2004 | (4,064.53) | (1,382.62) | 979.00 |
| 2004/2005 | (3,072.34) | (5,267.92) | 1123.20 |
| 2005/2006 | (1,267.11) | (5,018.48) | 1166.00 |
| 2006/2007 | (868.53) | (3,668.12) | 1079.51 |
| 2007/2008 | (415.95) | (4,511.03) | 1136.00 |
| **Total** | **(8,164.83)** | **(19,264.49)** | **7,242.30** |

*Source: Computed from previous tables (Table no. 1 to 15)*

Sum of Squares of Net Working Capital:

$\sum X_1^2 = 29658288.98$

$\sum X_2^2 = 88822610.77$

$\sum X_3^2 = 7586033.76$

$T = \sum X_1 + \sum X_2 + \sum X_3$

$= (-8,164.83) + (-19,264.49) + 7,242.30$

$= -13887.02$

Correction Factor (C.F.) $= T^2 / N$

$= (-13887.02)^2 / 21$

$= 9183301.17$

Sum of Squares Between Sample Banks (SSB)

$= (\sum X_1)^2 / n_1 + (\sum X_2)^2 / n_2 + (\sum X_3)^2 / n_3 - T^2 / N$

$= (-8,164.83)^2 / 7 + (-19,264.49)^2 / 7 + (7,242.30)^2 / 7 - 9183301.17$

$= 70033704.74 - 9183301.17$

$= 60850403.57$

Total Sum of Squares Between Banks (TSS)

$= \sum X_1^2 + \sum X_2^2 + \sum X_3^2 - T^2 / N$

$= 29658288.98 + 88822610.77 + 7586033.76 - 9183301.17$

$= 126066933.50 - 9183301.17$

$= 125148603.33$

Sum of Squares Within Sample Banks (SSW)
= TSS - SSB
= 125148603.33 - 60850403.57
= 64298199.76

| Source of Variation | Sum of Squares | Degree of Freedom | Mean Sum of Square | F-ratio |
|---|---|---|---|---|
| Between Banks | 60850403.57 | 3 - 1 = 2 | 30425201.78 | $\dfrac{30425201.78}{3572122.21}$ |
| Within Banks | 64298199.76 | 20 - 2 = 18 | 3572122.21 | = 8.52 |
| **Total** | | **21 - 1 = 20** | | |

**From above:**

Computed value of F = 8.52
Tabulated value of $F_{0.05}$ for $V_1$ = 2 and $V_2$ = 18 is 3.55.

**Decision:**

Since computed value of F is greater than its tabulated value, $H_0$ is rejected i.e. there is a significant difference in net working capital of the three JVBs.

# CHAPTER-FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATION

## 5.1    Summary

Banks are very important segment of financial infrastructure of any country. The economic history of many countries reveals that economic development and growth of financial infrastructures go hand in hand. Banks tailor made deposit facilities rightly meet our needs in today's fast-paced business world, ensures attractive returns to our surplus fund making our personal banking convenient and efficient thus diversifying our portfolio to best suit our investment plan. Thus, led by its vision to become a significant contributor to the economic development of the nation, banks have devised various deposits, loans and other facilities that suit the banking requirements of its valuable customers, assisting them to cope with their personal and business requirement, an endeavor to grow stronger mutually.

After the restoration of multiparty democracy in Nepal, government took this step permitting opening up the commercial banking sector for foreign participations in 1984. Thus, many JVBs established thereafter. Joint Venture Bank is an effect of strategic alliances-an arrangement in which two corporations combine forces to form a cooperative partnership in order to share risk of development, to offset one's weaknesses with strengths of other and alike others. Thus, these selected three JVBs named as EBL Bank Limited, Himalayan Bank Limited and NSBI Limited is such a product of strategic alliances. They have been serving the nation since a long time. They all are well equipped with designed products, schemes, policy, strategy and are able to retain the customers that have made them as one of the leading and competitive banks of the country.

In Nepal, the competitiveness among the commercial banks has grown considerably as the number has reached 17 in due course of time with the market remaining the same for all to cater. Thus, the banks have to develop various strategies to gain competitive edge over the rest of the banks. Among various strategies, the bank has to develop; one of the most important strategies to develop is efficient and effective working capital management. As working capital management is regarded as the life-blood and nerve knot of a business firm, the present study aims to analyze the working capital management of the three JVBs operating in Nepal with the help of secondary data for the period 1998/99 to 2004/05.

The present study is organized into five chapters which include introduction, review of literature, research methodology, presentation and analysis of data and last summary, conclusion and recommendation.

The first chapter is the introductory and deals with the background, focus of the study, statement of the problems, research questions, hypothesis of the study, objectives of the study, need and significance of the study, limitation of the study and organization of the study.

The second chapter is devoted to theoretical analysis and brief review of related literature. It explains theoretical framework and review of major studies conducted earlier by the various scholars. The present study has been accomplished with the assistance of a framework provided by the theoretical and review of related literature conducted in this part.

The third chapter discusses briefly the research methodology, which has been used to evaluate the working capital management of the banks under consideration. It discusses the research design, population and sample, sources of data, data collection and data analysis tools used.

The fourth chapter is the main part of the study which deals with the empirical analysis of the study. It deals in presentation and major findings of the study of working capital management.

The fifth and final chapter is devoted to summary of the four earlier chapters. This chapter tries to fetch out a conclusions of the study and attempts to offer various suggestions and recommendations for the improvement of the future performance of the three JVBs under review.

In order to carryout this study, data have been mainly obtained from secondary sources such as annual reports and financial statement, official records, periodicals, journals and bulletins of selected companies, various published reports, etc. Besides, personal contacts with the respondents of selected companies have also been made. This is the last chapter in which summary, conclusion and recommendations are included.

## 5.2    Conclusion

This study is based on the different aspect of working capital management. The major findings or conclusions derived from study of analysis of ratios, trend analysis, correlation analysis and probable error, and the hypothesis testing are summarized below-

## 5.2.1 <u>Analysis of Ratios</u>

The major findings or conclusions derived from the study of analysis of ratios are summarized below-

After the study of cash and bank balance to current assets ratio of the three JVBs , it has been found that both the banks EBL and NSBI LTD have been able to maintain quite similar and HBL slightly higher mean cash and bank balance to current assets ratio. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and NSBI LTD than the HBL.

After the study of cash and bank balance to total assets ratio of the three JVBs, it has been found that both the banks EBL and NSBI LTD have been able to maintain quite similar and HBL slightly higher mean cash and bank balance to total assets ratio. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and NSBI LTD than the HBL.

After the study of current assets to total assets ratio of the three JVBs, it has been found that NSBI LTD have been able to maintain higher mean current assets to total assets ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and HBL than the NSBI LTD.

After the study of current assets to fixed assets ratio of the three JVBs, it has been found that NSBI LTD have been able to maintain higher mean current assets to fixed assets ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of HBL and NSBI LTD than the EBL.

After the study of net working capital to current assets ratio of the three JVBs, it has been found that NSBI LTD have been able to maintain positive and EBL and HBL have been maintaining negative mean net working capital to current assets ratio. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and HBL than the NSBI LTD.

After the study of current assets to current liabilities ratio of the three JVBs, it has been found that NSBI LTD have been able to maintain higher mean current assets to current liabilities ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and HBL than the NSBI LTD.

After the study of net profit after tax to current assets ratio of the three JVBs, it has been found that EBL have been able to maintain higher mean net profit after tax to current assets ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and HBL than the NSBI LTD.

After the study of net profit after tax to total assets ratio of the three JVBs, it has been found that NSBI LTD have been able to maintain higher mean net profit after tax to total assets ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and HBL than the NSBI LTD.

After the study of receivables on total assets ratio of the three JVBs, it has been found that HBL have been able to maintain higher mean receivables on total assets ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and NSBI LTD than the HBL.

After the study of receivables on current assets ratio of the three JVBs, it has been found that HBL have been able to maintain higher mean receivables on current assets ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and NSBI LTD than the HBL.

After the study of quick assets to current liabilities ratio of the three JVBs, it has been found that NSBI LTD have been able to maintain higher mean quick assets to current liabilities ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and HBL than the NSBI LTD.

After the study of cash and bank balance to current liabilities ratio of the three JVBs, it has been found that HBL have been able to maintain higher mean cash and bank balance to current liabilities ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and NSBI LTD than the HBL.

After the study of debt to equity ratio of the three JVBs, it has been found that HBL have been able to maintain higher mean debt to equity ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and HBL than the NSBI LTD.

After the study of net worth to total assets ratio of the three JVBs, it has been found that EBL have been able to maintain higher mean net worth to total assets ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and HBL than the NSBI LTD.

After the study of return on owner's equity ratio of the three JVBs, it has been found that NSBI LTD have been able to maintain higher mean return on owner's equity ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of EBL and HBL than the NSBI LTD.

## 5.2.2  **Trend Analysis**

The major findings or conclusions derived from the study of trend analysis are summarized below-

i.  After the study of current assets trends of three JVBs from 2001/2002 to 2007/2008, it has been revealed that the current assets of EBL shows the fluctuating trend throughout the period understudy as there is rise and fall in successive years. The current assets of HBL marked an increasing trend throughout the period understudy except in 04/05. The current assets of the NSBI LTD also marked an increasing trend throughout the period understudy except in 04/05 and 07/08. This indicates that the current assets management of HBL and NSBI LTD is better in comparison to the EBL.

**ii.**  After the study of current liabilities trends of three JVBs from 2001/2002 to 2007/2008, the current liabilities of EBL shows the fluctuating trend throughout the period understudy as there is rise and fall in successive years. The current liabilities marked an increasing trend throughout the period understudy. The current assets of the NSBI LTD marked an increasing trend throughout the period understudy except in 2001/2002 to 2007/2008. This indicates that the current liabilities of HBL and NSBI LTD are greater in comparison to the EBL.

iii.  After the study of cash and bank balance trends of three JVBs from 2001/2002 to 2007/2008, the cash and bank balance of EBL

indicates highly fluctuating trend throughout the period understudy. The cash and bank balance of HBL marked an increasing trend throughout the period understudy except in 2001/2002 to 2007/2008. The cash and bank balance of the NSBI LTD marked a fluctuating trend throughout the period understudy. This indicates that the cash and bank balance of EBL and NSBI LTD is lower in comparison to the HBL which may be termed as both good and worst as greater cash and bank balances is good for the banks because it will increase there working capital and they can perform their operations smoothly whereas it is worst because greater cash balance may indicate idle cash which incurs cost.

iv.     After the study of total assets trends of three JVBs from 2001/2002 to 2007/2008, the total assets of EBL show the increasing trend in the year 2002/03, 2003/04 and 2007/08 and decreasing trend in the remaining years. The total assets of HBL marked an increasing trend throughout the period understudy. The total assets of NSBI LTD marked an increasing trend throughout the period understudy except in 2001/2002 and 2007/2008. This indicates that the total assets management of HBL and NSBI LTD is better in comparision to the EBL.

**v.**     After the study of receivable trends of three JVBs from 2001/2002 to 2007/2008, the receivable of EBL shows the decreasing trend throughout the period understudy as there is constant fall in successive years except in the year 2002/03. The receivable of HBL marked a fluctuating trend throughout the period understudy. The receivable of the NSBI LTD also marked a fluctuating trend throughout the period. This indicates that the receivable of HBL and NSBI LTD is poor in comparision to the EBL.

**vi.**    After the study of the owner equity trends of three JVBs from 2001/2002 to 2007/2008, the owner equity of EBL, HBL and NSBI LTD all the three marked an increasing trend throughout the period understudy but there is slow increase in EBL and NSBI LTD as compared to the high increase in the HBL.

**vii.**   After the study of the net profit after tax trends of three JVBs from 2001/2002 to 2007/2008, the net profit after tax of EBL shows the increasing trend in the year 2002/03, 2005/06, 2006/07 and 2007/2008 and decreasing trend in the remaining years. The net

profit after tax of HBL marked an increasing trend throughout the period understudy except in the year 2001/2002 and 2007/2008The net profit after tax of NSBI LTD marked an increasing trend throughout the period understudy as there is gradual increase in the successive years. This indicates that the net profit after tax of NSBI LTD is the best among the rest and is able to give higher return to the shareholders, creditors and is satisfying them.

### 5.2.3  Correlation Analysis and Probable Error

The major findings or conclusions derived from the study of correlation analysis and probable error are summarized below-

1. After the study of correlation coefficient and probable error between cash and bank balance and current assets of EBL, HBL and NSBI LTD, the highest degree of correlation in between cash and bank balance and current assets is 0.8295 of HBL and the lowest is 0.0939 of EBL among the three JVBs. There is moderate degree positive correlation coefficient in between cash and bank balance and current assets of EBL but since it is not 6 times more than P.E., it is not considered as significant and the change in cash and bank balance does not affect the volume of current assets to the great extent. On the other hand, there is high degree positive correlation coefficient in between cash and bank balance and current assets of HBL and NSBI LTD and as it is 6 times greater than P.E., it is considered as significant and thereby changes in cash and bank balance affects volume of current assets.

2. After the study of correlation coefficient and probable error between cash and bank balance and total assets of EBL, HBL and NSBI LTD, the highest degree of correlation in between cash and bank balance and total assets is 0.9407 of HBL and the lowest is 0.3654 of EBL among the three JVBs. There is moderate degree positive correlation coefficient in between cash and bank balance and total assets of EBL but since it is not 6 times more than P.E., it is not considered as significant and the change in cash and bank

balance does not affect the volume of total assets to the great extent. On the other hand, there is high degree positive correlation coefficient in between cash and bank balance and total assets of HBL and NSBI LTD and as it is 6 times greater than P.E., it is considered as significant and thereby changes in cash and bank balance affects volume of total assets.

3. After the study of correlation coefficient and probable error between current assets and total assets of EBL, HBL and NSBI LTD, the highest degree of correlation in between current assets and total assets is 0.9996 of NSBI LTD and the lowest is 0.4783 of EBL among the three JVBs. There is moderate degree positive correlation coefficient in between current assets and total assets of EBL but since it is not 6 times more than P.E., it is not considered as significant and the change in current assets does not affect the volume of total assets to the great extent. On the other hand, there is high degree positive correlation coefficient in between current assets and total assets of HBL and NSBI LTD and as it is 6 times greater than P.E.; it is considered as significant and thereby changes in current assets affects volume of total assets.

4. After the study of correlation coefficient and probable error between current assets and current liabilities of EBL, HBL and NSBI LTD, the highest degree of correlation in between current assets and current liabilities is 0.9996 of NSBI LTD and the lowest is 0.3547 of EBL among the three JVBs. The correlation coefficient in between current assets and current liabilities of EBL is positive but since it is not 6 times more than P.E., so it is not considered as significant and the change in between current assets does not affect the volume of current liabilities to the great extent. On the other hand, the correlation coefficient in between cash and bank balance and current assets of HBL and NSBI LTD is positive as well as 6 times greater than P.E., so it is considered as significant and thereby changes in current assets affects volume of current liabilities.

5. After the study of correlation coefficient and probable error between return and current assets of EBL, HBL and NSBI LTD, the highest degree of correlation in between return and current assets is 0.9322 of NSBI LTD and the lowest is 0.7381 of EBL among the three JVBs. There is high degree of positive correlation coefficient in between return and current assets of EBL, HBL and NSBI LTD. Since

the correlation coefficient in between return and current assets of EBL, HBL and NSBI LTD is 6 times greater than P.E., so it is considered as significant and thereby changes in return affects the volume of current assets.

**5.2.4  Testing of Hypothesis with the help of ANOVA Table     (F-Test)**

The major findings or conclusions derived from the study of hypothesis testing with the help of ANOVA table (F-Test) are summarized below-

i.  After the testing of Hypothesis on the basis of Current Assets, it was found that the computed value of F i.e. 5.91 was greater than its tabulated value i.e. 3.55. Therefore, null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted i.e. there is a significant difference in current assets of the three JVBs.

ii.  After the testing of Hypothesis on the basis of current liabilities, it was found that the computed value of F i.e. 2.51 was less than its tabulated value i.e. 3.55. Therefore, null hypothesis ($H_0$) is accepted and alternative hypothesis ($H_1$) is rejected i.e. there is no significant difference in current liabilities of the three JVBs.

iii.  After the testing of Hypothesis on the basis of cash and bank balance, it was found that the computed value of F i.e. 3.90 was greater than its tabulated value i.e. 3.55. Therefore, null hypothesis (H0) is rejected and alternative hypothesis (H1) is accepted i.e. there is a significant difference in cash and bank balance of the three JVBs.

iv.  After the testing of Hypothesis on the basis of net profit, it was found that the computed value of F i.e. 15.58 was greater than its tabulated value i.e. 3.55. Therefore, null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted i.e. there is a significant difference in net profit of the three JVBs.

v.  After the testing of Hypothesis on the basis of net working capital, it was found that the computed value of F i.e. 8.52 was greater than its tabulated value i.e. 3.55. Therefore, null hypothesis ($H_0$) is rejected and alternative hypothesis ($H_1$) is accepted i.e. there is a significant difference in net working capital of the three JVBs.

**5.3** **Recommendation**

Many countries of the world after the end of world war have come under economic liberalization and open market systems. In Nepal also, the elected democratic government has endeavored to enhance the pace of country's economic development with its new economic policies, various reforms and programmes like the declaration of new industry policy, foreign investment under the one window policy, and so on. In this contest, it has been thought irrelevant to influence business units by dictating their activities in certain lines. Thus, any industry, business or financial unit operating because of HMG's liberal, benevolent policies and programmes require their responsibility and commitment towards the society as well. The Nepalese companies cannot overlook this necessary precondition of economic welfare. So time itself demands some changes and alterations in the preconceived policies and programmes no matter how well they were furnished. A few timely recommendations for these companies have been prescribed below.

Based on the analysis and the findings of the study of the three JVBs, following recommendations can be advanced to overcome weakness and inefficiency and continue with the proper, systematic and smooth operation of the bank-

    i.    The study is based on secondary data and includes only three JVBs and seven years data due to time constraint. So research based on primary data including more number of JVBs and maximum number of years may be a good option to choose for.

    ii.    All these three JVBs should have a regular check on current assets to identify the adequate and inadequate amount of current assets as both hampers the smooth operation of the banks as well as avoids risk in management of working capital.

    iii.    The average net working capital of EBL and HBL are negative so these banks should try to increase these values.

    iv.    The three JVBs should concentrate on the investment in receivables as it tends to be quite high. To accomplish this objective, the bank should concentrate on tight credit policy, providing reward to the good customers or punishing the defaulters.

v.     To generate more profit all these three JVBs should concentrate more on safer loans and advances.

vi.    The fixed assets of all these three JVBs should be valued properly as per the current market value and depreciate them accordingly.

vii.   The three JVBs should retain more of its profit, as they are doing during the study, to reinvest and to increase net worth.

viii.  Since the average net profit of HBL is comparatively lower than the EBL and NSBI LTD, so HBL is suggested to improve its average net profit in order to remain competent in the market. This objective can be accomplished by increasing income sources as well as decreasing cost or expenditures.

ix.    Since all these three JVBs are maintaining higher liquidity than the directives of NRB, it is suggested that idle fund should not be maintained as it incurs opportunity cost. They should provide short term loan that matures within short span of time and can easily be rediscounted instead of maintaining higher cash balances to remain liquidity.

x.     Since the average net worth of HBL is comparatively lower than the EBL and NSBI LTD, so HBL is suggested to improve its average net worth. This objective can be accomplished by retaining earnings or maintaining lower dividend payout ratio.

xi.    It is well known that new players are entering the banking sector every now and then with very modern technologies and innovative products and services, creating immense competition within this sector. These may allow them to attract more customers resulting in shifting from one bank to another. So, all these three JVBs should keep on upgrading its system in order to be competitive.

xii.   As Nepal has already become a member of the World Trade Organization which provides tremendous opportunities to the banking sector, the selected three JVBs should form different strategies and maintain a competitive edge over others to catch such opportunities.

xiii.  Finally, since all these three JVBs are profit-oriented, they should also not forget their social responsibilities. Today, thinking about

how to make the banking system friendlier to the small and medium businesses and the poor Nepalese more generally is what social responsibility demands.

# Bibliography

Gupta, D. P., *The Banking System*, UNCTAD/GATT, (1998) Geneva

Hampton J. john, *Financial Decision Making,* (1983), Prentice Hall of India Pvt. Ltd.
         New Delhi

Jain and Khan, '*Financial Management text and problem*, Third Edition, Tata
         MC Graw Hill Pvt. Ltd. New Delhi.

K.C. Niraj (2000), *Comparative Study of Working Capital Management of NBL and*
         *NABIL*, Unpublished master's degree thesis, submitted to Faculty of
         Management, Tribhuvan University, Kathmandu.

Khatiwada, Niraj 2008 '*A comparative study on Working Capital*
         *Management of Everest Bank Limited & Nepal SBI Bank Limited,*'.

Kothari, C.R. 1984 '*Quantitative Techniques*, Vikash Publishing Pvt. Ltd. New
         Delhi,.

Mishra R.K. & S. Ravshankar, 1985, '*Current Perspective in public*
         *Enterprises Management, Janta Publication,* New Delhi,.

Nepal Rastra Bank, 2009 , '*Annual Report'*, Kathmandu.

Pandey, I.M., *Financial Management*, 8th Edition, Vikash Publication House,
         New Delhi.

Pradhan, Surrendra, 2000, *Basic of Financial Management*, Educational
         Enterprises,.

Shrestha, Sunity and Dhurba, Prasad, 2057, '*Statistical method in*
         *management*, Taleju Prakashan, Kathmandu.

Shrestha, Manohar Krishna (1982-83). *Working Capital Management in pes, A*
         *Study on Financial Results and constraints*, A quarterly ISDOC
         Bulletin, Kathmandu, Vol.8.

Shekhar and Shekhar, *Banking the Theory and Practice (1999),* Vikash Publishing
         House Pvt. Ltd., New Delhi.

Shrestha Raghu Krishna : (1994) *An Evaluation of Working Capital Management of*

        *Bottler's Nepal Ltd.*, An unpublished Master's Degree Thesis Faculty of Management T.U., Nepal

Van Horne, C. James (1994). *Financial Management and Policy*, 12th edition, Pretice Hall of India, New Delhi.

Wolff L. Howard and Pant, P.R. (2005), *Social Science Research and Thesis Writing,* 4th edition. Buddha Academic enterprises, Kathmandu, Nepal.

W. Reed Fward, Rechard V.Cotlel, Rechard K. Smith, (1976) *Commercial Banking*, Prentice Hall of India Pvt. Ltd. New Delhi.

Weston, J. Fred & Brigham, Eugene F. (1996) *Managerial Finance*, 11th Edition, The

        Dryden Press, Chicago.

Wright, Don & Valentine, Wally (1997) ,*Business of Banking Drydden Press*, Orland.

Websites
www.Everestbak.com
www.Himalayanbank.com
www.Nepalstock.com
www.SBIbank.com

# Bibliography

Gupta, D. P., *The Banking System*, UNCTAD/GATT, (1998) Geneva

Hampton J. john, *Financial Decision Making,* (1983), Prentice Hall of India Pvt. Ltd.
        New Delhi

Jain and Khan, '*Financial Management text and problem*, Third Edition, Tata
        MC Graw Hill Pvt. Ltd. New Delhi.

K.C. Niraj (2000), *Comparative Study of Working Capital Management of NBL and*
        *NABIL*, Unpublished master's degree thesis, submitted to Faculty of
        Management, Tribhuvan University, Kathmandu.

Khatiwada, Niraj 2008 '*A comparative study on Working Capital*
        *Management of Everest Bank Limited & Nepal SBI Bank Limited,*'.

Kothari, C.R. 1984 '*Quantitative Techniques*, Vikash Publishing Pvt. Ltd. New
        Delhi,.

Mishra R.K. & S. Ravshankar, 1985, '*Current Perspective in public*
        *Enterprises Management, Janta Publication,* New Delhi,.

Nepal Rastra Bank, 2009 , '*Annual Report'*, Kathmandu.

Pandey, I.M., *Financial Management*, 8th Edition, Vikash Publication House,
        New Delhi.

Pradhan, Surrendra, 2000, *Basic of Financial Management*, Educational
        Enterprises,.

Shrestha, Sunity and Dhurba, Prasad, 2057, '*Statistical method in*
        *management*, Taleju Prakashan, Kathmandu.

Shrestha, Manohar Krishna (1982-83). *Working Capital Management in pes, A*
        *Study on Financial Results and constraints*, A quarterly ISDOC
        Bulletin, Kathmandu, Vol.8.

Shekhar and Shekhar, *Banking the Theory and Practice (1999),* Vikash Publishing
House Pvt. Ltd., New Delhi.

Shrestha Raghu Krishna : (1994) *An Evaluation of Working Capital Management of*
*Bottler's Nepal Ltd.*, An unpublished Master's Degree Thesis Faculty
of Management T.U., Nepal

Van Horne, C. James (1994). *Financial Management and Policy*, 12$^{th}$ edition,
Pretice Hall of India, New Delhi.

Wolff L. Howard and Pant, P.R. (2005), *Social Science Research and Thesis*
*Writing,* 4$^{th}$ edition. Buddha Academic enterprises, Kathmandu,
Nepal.

W. Reed Fward, Rechard V.Cotlel, Rechard K. Smith, (1976) *Commercial*
*Banking*, Prentice Hall of India Pvt. Ltd. New Delhi.

Weston, J. Fred & Brigham, Eugene F. (1996) *Managerial Finance*, 11th Edition,
The
Dryden Press, Chicago.

Wright, Don & Valentine, Wally (1997) ,*Business of Banking Drydden Press*,
Orland.


Websites
www.Everestbak.com
www.Himalayanbank.com
www.Nepalstock.com
www.SBIbank.com