

# CHAPTER-I

## Introduction

### 1.1 Background of the study:

The word 'Bank' developed from Italian word "Banco" which means a bench for keeping lending and changing of money or coins in the market by money lenders , changers respectively,

Before the origin and development of the bank people used to borrow the loan from land lord, merchant, goldsmith etc. But now, due to the implantation of the bank the people need not knock their door.

Banks are among the most important financial institutions in the economy of the country. Bank is a business establishment that safeguards people's money and uses it to make loans and investments. A bank is an organization concerned with the accumulation of the ideal money of the general public for the purpose of advancing to others for expenditure of investment.

A bank is the institution, which accepts deposits from the public and inters advance s loans by creating credit. Banks are the institution that provides the funding required starting the business to those with skills and desire to operate the business collecting from those with the money but no skill or time to operate the business. Bank is a resource of mobilizing institution, which accepts deposit from various sources and invest such accumulated resources in the fields of agriculture, commercial, trade and industry.

Bank is related monetary transaction, it accepts money as deposit from depositors by saving account, current account, and fixed account and also lends the different types of loan to different purpose. It provides and takes certain amount as interest to depositors and loan borrower respectively.

Commercial banks are the 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 i resources in such areas. In additional flexible monetary and credit policy improve to prevailing slowdown in the economic activities to alleviate sluggish credit expansion to the private sector from the banking sectors. Rural people underdeveloped countries like Nepal need various banking facilities. In most of the countries, the rural sector of national income of developing countries comes from the very rural sector. In fact that rural development of 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 enterprises. It also needs efficiently manage its own working capital investment in working capital and we can consider deposits and short-term borrowings as a part of current liabilities.

## **1.2 History of commercial and joint venture Banks in Nepal**

As the growth of banking in Nepal is not so long as compared to other development in banking system of Nepal is far behind. Nepal had to wait for long time to come to the present banking position. After restoration of democracy different industries were established. The Biratnagar jute mill was established in 1993 B.S. Likewise, Nepal Bank Ltd. was established in 1994 B. S. In this way the industries have been flourishing day by day , in 2013B.S. , five year plan was started which could make efforts to way development of industrial and banking sectors . After the people's movement of 2046B.S. company act 2053 was introduced. By the improve company act, the industries were free to establish and play the key role to develop nation by financing.

A commercial bank has been defined as the institution which receives deposit of money or of credit and which seeks profits through the extension and sell of its own credit commercial banks contribute significantly in the financial system of the country.

“Commercial bank is the corporation which accepts demand deposit subjects of check out makes short term loan to business enterprises regard less of the scope of its other sources”(American institution of banking, 1972:1).

Commercial banks play an important role in affairs of the economy in various ways. Commercial banks are the largest and most diversified intermediaries in ranks as of assets held and liabilities issue. The salient features of commercial banks lies in fact not in their assets but in their liabilities. By mobilizing communities saving and diverting them into productive channels commercial banks expand the tempo and appreciate the value of aggregate economic activity of the economy.

#### **Objectives of joint venture banks:**

- To provide new services.
- To create competitive investment.
- To introduce new methods and technology in banking services.
- To provide more resources for investment.

### **1.3 Profile of sample commercial bank :**

In this study, performance of Everest bank limited, Himalayan bank limited, Nabil bank limited, Nepal Bangladesh bank limited and Standard Chartered bank Nepal limited are compared in the field of working capital management. Here, short glimpse of these venture banks are given below,

#### **A. Everest bank Limited (EBL):**

Everest Bank Limited started its operations in 1994 with a view and objectives of extending professionalized and efficient banking service to various segments of the society. EBL joined hands with Punjab National Bank (PNB) India as joint venture partner in 1997. The bank is providing its services through a wide network of 18 branches across the nation and over 250 correspondents across the globe. All the major branch of the bank are connected through Anywhere Branch Banking System (ABBS) a facility which enables a customer to do banking transaction from any of the branches irrespective of their having accounts in other branch. The bank in association with Smart Choice Technology (SCT) is providing ATM service for its customers. EBL Debit card can be accessed at more than 50 ATMs and over 250 point of sales across the nation. The banking is also managing the SCT ATM at Tribhuvan International Airport for the convenience of the customers and the travelers, the first and the only bank in the Nepal to place ATM outlet at the airport.

The bank recognizes the value of offering a complete range of service. It is pioneered in extending various customers various friendly products such as home loan, education loan, EBL flexi loan, EBL

property plus (Future lease rentals), home equity loan, car lone, loan against shares, loan against life insurance policies and loan for professionals(annual report 2002/03)securities board, Nepal, p-34)

**B. Himalayan Bank Limited (HBL):**

Himalayan Bank Limited was established in 1992 by the distinguished business personalities of Nepal in partnership with Himalayan bank limited. One of the largest commercial bank of Pakistan, banks operation was commenced form January 1993. it is the first commercial bank of Nepal with maximum shareholding by the Nepalese private sector. Besides commercial activities, the banks also offer industrial and merchant banking facilities. The bank present has the five branches in Kathmandu valley and seven branches outside the valley. The bank is operating a counter in the premise of the royal palace.

The bank has a very aggressive plan of establishing more branches in different part of the kingdom in near future. The bank's policy is to extend quality and personalized service to its customers as possible, the bank, as far as possible, offers tailors made facilities to its clients based on the unique needs and requirement, more efficient services to its customers. Himalaya bank has been adopting innovative latest banking technology. It has not been only helped the bank constantly improve its service level but also kept it prepared for future adoption if new technology. Himalayan bank has listed on Nepal stock exchange in July 5, 1993. The participation of the bank is 51% Nepalese promoters, 14% general public and 20% Habib Bank Pakistan. In this way only 20% is foreign ownership in this bank.

### **C. NABIL Bank Ltd (NABIL)**

NABIL Bank Limited, the first foreign joint venture bank of Nepal, started operations in July 1984. NABIL was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, NABIL provides a full range of commercial banking services through its 47 points of representation across the kingdom and over 170 reputed correspondent banks across the globe.

NABIL, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business.

Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes ATMs, credit cards, State-of

Art, world-renowned software from Infosys Technologies System, Bangalore, India, Internet banking system and Tele banking system.

#### **D. Standard Chartered Bank Nepal Limited (SCBNL)**

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1985 as Nepal Grind lays bank limited. It was established under the company act 1965 as second joint venture bank in Nepal. SCBNL is the joint venture operation registered in Nepal, with 50% of the shares held by standard chartered Grind lays bank 33% by Nepal bank limited and 17% by the Nepalese public.

Standard Chartered is the world's leading emerging markets bank with more than 500 offices across over 50 countries primarily in Asia. standard chartered bank completes 150 year of operation in 2003 ([www.standardchrtered.com.np](http://www.standardchrtered.com.np)) standard chartered bank limited focuses mainly on corporate and consumer banking catering to a wide range customers form individuals, to mid-market local corporate multinationals and large public sector companies as well as embassies aid agencies, airlines, hotels and government corporations. The bank has been the pioneer in introducing customer- focused products and services in the country. According to the service annuals report 2060, it's authorized capital, issued capital and paid up capital all are equal i.e. Rs. 339548800. The share participation of the bank is 50% national ownership and 50% foreign ownership, 33.34% share owned by commercial bank and 16.66% share owned public out of national ownership.

The bank provides excellent performance, stringent compliance culture and introduction of new technology and successful strategy of diversifying into new products. SCBNL has listed on Nepal exchange in July 4, 1988 (annual report 2002/03 securities board, Nepal, p-31).

#### **1.4 Focus of the Study:**

The present study working capital management of joint venture banks is intended to analyze the joint venture banks practice in working capital management and to examine management performance in these segments of the financial management. No business can operate successfully and effectively without the effectively and efficient management of working capital. Adequate working capital will be helpful to keep the solvency position, goodwill and creditor worthless as well as building capability to fall the financial bottleneck excess and over the working capital is not for the organization. So these should be optimum balance of the working capital. Working capital is the oil that lubricates the wheels of business without adequate oil machine grind to what and a business with inadequate working capital will do likewise. There might not be many business firms in the world, where beside investment in fixed assets fund would not be needed for carrying on day to day operation to meet the day to day operation of the business. Therefore, working capital is the lifeblood of the business enterprises.

“Working capital management usually is considered to involve the administration of current assets namely cash, marketable securities, receivables and inventories and the administration of current liabilities” (*Van Horne, 1973: 384*).

Effective and efficient management of finance plays a key role for the success of each and every organization. So, working capital plays as significant role in every

respect and more variable resources of the organization (i.e. human) should be managed effectively to manage the working capital management. Adequate working capital brings security and confidence with various advantages such as better terms of purchase, cash, discount, bank loans and favorable rate of interest.

Due to such importance the researcher has taken this subject for detailed study. The study is directed towards the working capital management of different selected Nepalese commercial joint venture banks to analyze. Working capital to find out major bleeps and suggestive recommendation to solve the working capital management that selected company's objectives can be achieved.

### **1.5 Statement of the problem:**

Banking plays a significant role in the economic development of the country by extending credit to the people. Although commercial bank in Nepal is making remarkable progress and growth. It's not without the problem .At the present context, the main problem faced by the business sector as well as bank is the unstable political and economic condition of the country.

Another problem faced by the commercial bank is the lack of optimal structure. There are so many problems in the commercial banks i.e. EBL, HBL, NABIL and SCBNL. There are not appropriate training and orientation class about the business operation. There is other main problem of commercial bank is effective management policy, planning, organization, staffing, co-ordination, controlling, resources. Some major problems are listed below:

- It is facing the problem of limited market, as the trade and industry of our country are in front stage.
- Due to poor economic condition of the people of our country, banking transaction could not be increased.
- Due to lack of proper knowledge of banking services of large people.



- People show less interest in investing. In shares of commercial bank as compare to government bank. Therefore, there is less attraction toward Insurances Company.
- Political flexibility is other major problems of the bank income statement and balance sheet of it are not keep properly.

### **1.6 Hypothesis of the study:**

A hypothesis is a conjectural statement of the relationship between two or more variable. Hypothesis is always declarative sentences from they are generally or specifically variable to variable.

Every research has to be started with certain assumption and presumption through which subsequent study might prove or disapprove. Without hypothesis the effectiveness of research is not possible. To know the scope of study, nature of data to collect and the one to be discarded. The hypothesis helps organizing the collected data in every systematic way and its facts stand the mid-point towards directing towards particulars way of finding tentative solution to the questions of how and why.

In order to evaluate the problem and to meet the objectives of the study following null hypothesis (Ho) is formulated.

- There is no significant different in cash balance and bank balance.
- There is no significant different between current assets and total current assets in regard of average proportion increase.
- There is no significant difference in the net profit.
- The relationship between cash balance and current assets does not differ regard of average proportion increase.

### **1.7 Objective of the study:**

The main objective of this study is to examine the management of working capital On Everest bank limited, Himalayan bank limited, Nabil Bank limited, and Standard Chartered Bank Limited. The specific objectives of the stands 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, HBL, NABIL, and SCBL.
- ❖ 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, HBL, NABIL, and SCBNL in the future.
- ❖ To show how working capital determines the strength and weakness.
- ❖ To evaluate and analyze the net profit of selected banks.

### **1.8 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 co-ordinate the different functional areas of business concern. The success or failure of any organization depends on its strategy, which is affective by working capital management. Working capital management is 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 valuating 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 co-ordinate 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 customer 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 reform 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, HBL, NABIL, and SCBNL is considerably important.

### **1.9 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 five year. The limitations of the study are as follows:

- ❖ The study has been limited to the comparative analysis of working capital management.
- ❖ The study has mainly based on secondary data and to some extent to primary data too.
- ❖ Only limited financial tools and Techniques has been used the analysis.
- ❖ Only data of EBL, HBL, NABIL, and SCBNL has been collected.
- ❖ The study has only cover five year period of time.

### **1.10 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 presentation and Analysis.
5. Summary, conclusion &Recommendation.

The chapter one is the introductory which deals with background and of the study, profile of EBL, HBL, NABIL, and SCBNL. Focus of the study, Statement of the problems, objective of the study, hypothesis of the study, significant of the study, and limitation of the study.

The second chapter deals with the review of literature relating to concept of working capital management, types of working capital policy, determinant of working capital, principal 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 tool 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 is with the summary of the study. Various conclusions for drawn from the study and recommendation are provided for improving the future performance.

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

## **CHAPTER-II**

### **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 newer 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 joint venture banks of Nepal concerned a number of different management experts and students of MBS\MBA have under taken studies. They have described the working capital management of various enterprises.

The purpose of this chapter is to provide on insight into working capital management and to give a bird eye view of different expert’s thoughts regarding theory of working capital 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 loan agency function etc. They

provided short-term, medium term and long term loans to trade and industry” (*Fward, Cotlel, Smith: 1976: 02*).

With regards of commercial banks, a writer has concluded, “Commercial banks under takes the payment of subscription, premium rents and collection of Cheque, bills promissory note etc. on behalf of its customer other banks and financial operations” (*Shekhar and Shekhar: 1999: 05*).

The commercial banks 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 behalf of their customers providing that they are paid for their services.” (*NCB: 2031*)

American institution of Banking defines commercial bank, as “Commercial Bank is a corporation which accepts demand deposits subjects to cheques and makes short-term loan to business enterprises, regardless of the scope of its 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) (*American Institute of Banking: 1972: 345*).

As a summary of the above definition, the commercial banks are those financial institutions which perform widest range of economies 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.

### **2.3 Nature of working capital:**

Working capital is needed for day-to-day operation, in the business. Therefore, it can be consider as the life-blood for any business.

The management of working capital has a definitive effect on the profitability and the contribution of its existence in the business is the great important as it

deserves adequate planning of W\C requirement. Efficient and the optimum utilization of fixed assets to which is of great importance also depend upon the availability of adequate w\c. Thus, working capital deals with the nature of current assets and current liabilities. The conversion process of current assets that includes cash, inventories and current receivable etc. Must be possible to get readily available cash within one year to meet current obligations. In a managed way the current payable. Short-term bank loan, outstanding expenses etc. Short within one year as they become due.

W/C has a volatile nature. This nature presents problems and constraints in financing working capital need. The volatile nature of working capital refers to the change to total current assets.

Working capital is essentially circulating in nature. It can compare is a river in constantly. Thus the nature of working capital is not fixed. It is changeable at different times on the basis of transaction of goods.

#### **2.4 Concept of working capital:**

Working capital one of the two components of financial management. It is life blood and never of a bank. It is essential to facilitate the smooth operation of a bank. Adequate amount of working capital will be helpful in keeping solvency position, goodwill and credit worthiness as well as building capability to face the financial problem effectively and efficiently. Thus, the bank should keep a sound working capital position. Both excessive as well as inadequate working capital positions are dangerous to the firm. Therefore, a firm should maintain an optimal working capital position.

“Working capital management is the functional area of finance that covers all current accounts of the bank. It is concerned with the adequacy of current accounts as well as level of risk posed by current liabilities. It is a discipline that seeks proper policies for managing current assets and current liabilities and practical techniques for maximizing the benefits from managing working capital” (*Hampton 1998, 117*).

“Working capital management typically has been defined as the management of the current assets and current liabilities of a firm” (*Weston and Brigham, 1996, 332*).



Concept of working capital can be classified into following type:

**A. Gross concept:**

Gross concept of working capital means sum of current assets only. Current assets are those assets which can be converted into cash within short period of normally according cycles. Current assets include cash, marketable securities, sundry debtors, bills receivables, inventory etc.

“Gross working capital is the administrative of the firm’s current assets and the financing needed to supports of the current assets.” (Van Horne 2002, 104) from the view the of I.M. Pandey, gross working capital refers to the firm’s investment in current assets, Current assets are the assets which can be converted into cash within on according year and includes cash, debtors, stock short- term securities and bills receivables.

In a simple term, gross concept of working capital means investment in current assets. In other words, gross concept of w\c is the total amount of available for financing of current assets. Thus, the goods concepts of working capital assets. Thus, the gross concepts of working capital are the capital invested in total current assets of the enterprises.

The gross concept of the working capital focus on the two aspects of current assets management, which are,

- ❖ Optimal investment in current assets and
- ❖ Financing of current assets.

One major point to be considered is that level of investment in current should higher be neither accepts nor should be optimal according to the need of business. Another important aspect is to make necessary arrangements for the financing of current assets. The major currents assets are:

- ❖ Cash in hand
- ❖ Cash at bank
- ❖ Bills receivable
- ❖ Debtors(Less Bad debts)
- ❖ Marketable securities
- ❖ Prepaid expenses

- ❖ Accrued income
- ❖ Inventory

**B. Net concept:**

Net concept refers to the difference between current assets and current liabilities. In other words, it can be defined as the excess of current assets over current liabilities. Net working capital can be positive or negative. A positive net working capital arise when current assets exceeds current liabilities, whereas negative working capital occurs when current liabilities exceeds current assets.

“Net working capital is the difference between current assets minus current liabilities” (*Gitman, 1996:150*).

Net concept of working capital is broader term a site includes both current assets and current liabilities. Current liabilities are those liabilities. Which are intended to be paid in ordinary course of business within a short period of normally one accounting year? It includes:

- ❖ Bills payable
- ❖ Creditors
- ❖ Outstanding expenses
- ❖ Advanced incomes
- ❖ Bank overdraft
- ❖ Sort term loan etc.

At last it can be concluded that both gross and net working capital are important aspects of working capital management. These two concepts are complimentary to each other. A choice of these two concepts by the firm or industry depends upon the purpose of the firm. It’s true that current assets must be higher than current liabilities otherwise the firm may go into liquidation.

**2.5 Classification of working capital:**

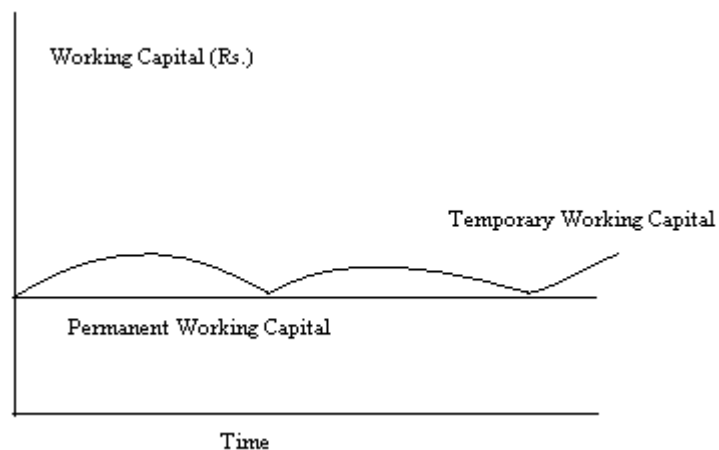
Working capital can be classified into two types as given below:

**A. Permanent working capital:**

Permanent working capital is the minimum 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 surviving 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.

**B. 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. The relationship of permanent and temporary working capital over the period is shown in figure:



The figure shows that permanent working capital for the firm is stable over the time and time and variable working capital fluctuates over the time. However it

should be noted that the need for permanent working capital also increases over the time for growing firm. Therefore, the permanent working capital line is not necessarily the horizontal as shown in the figure. In such case, it is sloping upward.

## **2.6 Principles of working capital Management:**

Working capital management is based on the following principles:

### **A. Principle of risk variation:**

Risk means the inability of firm to maintain sufficient amount of W/C to pay its liabilities. There is a definite relationship between the degree of risk and rate of return. As a concern assumes more risk, the opportunity of gain or loss increase accordingly. If the size of working capital goes up, the amount of risk goes down and the opportunity for loss or gain. It's likewise adversely affected.

### **B. Principle of cost of capital:**

Capital can be collected from different sources i.e. firm shares debentures etc, and each of these sources has their own cost of capital. Cost of capital means the cost that a firm has to bear to collect the capital.

### **C. principle of maturity position:**

A firm should make every attempt to relate maturities of obligations to its flow of internally created funds. It should be noted that a greater risk is generated with greater disparity.

### **D. Principle of equity position:**

Principle of equity position advocates that the amount of working capital invested in each segment should be an equality justified by a concerned equity position every rupee invested in the working capital should be contributed to net worth of the concern.

## **2.7 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 long between the sales of goods and receipt of cash. There is 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 maximization 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 scale 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 needs the following motives:

### **A. The transitional Motive:**

According to transaction motive, a firm holds cash and inventories to facility. Smooth production and sales operation in regular. Thus, the firm needs the working capital to meet the transaction motive.

### **B. The precautionary 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 slowdown in collection of account receivables, reconciliation of order for tools and some other unexpected emergency. Thus the firm needs the working capital to meet any contingencies in future.

### **C. The speculative motive:**

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

- a) An opportunity of profit making investment.
- b) An opportunities of purchasing raw materials at reduced price on payment of immediate cash
- c) To speculation on interest rate and
- d) To make purchase at favorable price etc. Thus, the firms need the working capital to meet the speculation motive

### **2.8 Financing of working capital:**

Working capital means the excess of current assets over current liabilities. Financing means the different ways and methods of making arrangements of funds that is needed to create working capital. Every firm should make arrangements to finance its current assets. Raising the funds from current liabilities of long debt can finance current assets. What proportion of current assets should be financial by current liabilities and what proportion should by long firm debt are determined by working capital financing policies. However, a number of financing mixes are available to the financing managers. 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 earnings and long-term debt financing institution is major sources of long-term financing.

#### **ii) Short-term financing:**

A firm must arrange its short firm credit in advance. The sources of short-term financing of working capital are 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 payable. It depends upon the term trade credit.(Horne1994:471)

**Bank credit:**

Bank credit is the primary institutional sources for working capital financing. For the purpose of bank credit, amount of working capital requirements to be estimated 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 requirement of the security. The types of loan provided by commercial banks are loan arrangement, overdraft commercial papers etc.

**iii) Spontaneous financing:**

Spontaneous 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 sources 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 consent rates his power in short term versus long term financing.

There are three basic approaches for determining an appropriate working capital financing mix, they are:

**a) Matching /Hedging Approach:**

Under this approaches, emphasis is given on matching the period of assets be financing with the period of sources of funds to be used in other words, the firm finances its short-term needs with short-term funds and long needs with long term funds. Hedging approach is a method of financing where each asset would be offset with financing instruments of the same appropriate maturity.

**b) Conservative Approach:**

A firm is said to be following conservative approach when it depends more on long term fund for financing needs. In other words, under this approach, the firm uses long term sources of funds for financing need and use of short-term funds is limited only to emergency situation.

Under a conservative plan, the firm finances its permanent assets and a part of temporary current assets with long term financing. Since the conservative plan relies heavily on long term financing and therefore is less risky. The cost of financing increases because conservative approach use long term sources for current assets.

**c) Aggressive Approach:**

The approach that lies in between hedging and conservative approach is known as aggressive approach. Under this approach a major part of total current assets should be financed by short – term sources and a part of long- term investment also should be financed by short- term sources.

According to Van Horne, “The greater portion of the permanent assets need financed with short –term sources or debt, the more aggressive the financing is said to be.”

In aggressive policy the liquidity position will be low and risk will be high. Therefore when there is used more short- term financing, it is assumed to be following aggressive policy.

**2.9 Determinants of working capital Management:**

Working capital is one of the most important elements that need to be considered for sustainable development of business organization. A firm should maintain adequate capital to run its business. Both excessive as well as inadequate working capital is dangerous. Every organization is established to earn maximum profit therefore to achieve its objectives adequate working capital must be maintained.

The working capital need of every organization differs. There are no set of rules and regulations for the formulation of working capital its depends upon the require of the firm. There are different factors that affect the working capital. The entire factor is equally important and need to be analyzed separately. Thus, an



analysis of different factors should be done that directly or indirectly determines the size of working capital. These factors are:

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

The working capital requirements of a firm is basically related to size of the firm is bigger than it requires more working capital whereas small firm needs less working capital relatively to public utilities.

**ii) Manufacturing cycle:**

Working capital requirement of an enterprises 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 produced 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) Available of credit:**

Availability of credit facility is another factor that affects the working capital requirements. If the creditor avails 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 is requires to run the firm otherwise more working capital is requires to operate the firm smoothly.

**vi) Growth and Expansion:**

Growth and expansion also affect the working capital management of firm. However it is difficult to precise, determine the firm 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 assets 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 influence the working capital requirement 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 operating efficiency. If a firm had strong operating efficiency then it needs lesser amount of working capital and vice versa.

**ix) Profit Margin:**

The level of profit margin differs from to firm. It depends upon the nature and quality of product, marketing management and monopoly power than 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.

**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 prevail 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.

### **2.10 Review of Books:**

Some available books about working capital management are received 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 further 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 capital and their effective management techniques. The cash, marketable securities, receivable and inventory for the efficient management of cash, they have also explained the major sources and firms of short-term financing, such as trade credit, loans from commercial banks and commercial paper.

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

I.M Pandey has described various aspects of working capital management into five chapters. The first chapter deals with the concepts of working capital, need for working capital, determinants off 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 described the management of receivable, in which

he has dealt with goals of credit policy credit procedures for individual, he has described the need to hold inventories objectives of inventory management, techniques, selective inventory control technique and financing manager's role in inventory management (*Pandey: 1994: 665-666*).

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 liabilities 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 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 year out of the current assets of account payable bills payable bank overdraft and outstanding expenses.

The goal of working capital management the firm current assets and current liabilities in such a way that a satisfactory level of working capital is maintain to insolvent and may be forced into bankrupt. The current assets should be large enough to cover its current liabilities in order to ensure a reasonable margin of safety. 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. Therefore the main theme of the theory of working capital management (*Khan and Jain: 1993: 603*)

Surrender 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 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 (permanent and variable) to be maintained. The long-term sources such as stock issues debt and bonds are appropriate to use for the permanent type of current assets only if the spontaneous type of short-term sources are not enough to not available to cover the required sized of permanent current assets" (*Pradhan: 2000*).

## 2.11 Review of Journals and Articles

Some of the journals and articles published by management expert in working capital management have required in this section.

Mr. Buddhi Prasad Acharya an NTC chartered account, have 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 resource. He writes, "It has become possible to maximize profit utilizing internal resource 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 further profitability trend provided will get improved further more in comparison to current trend provided the revenue structure from national and international service remain within as certain limit at unchanged tariff situation" (*Acharya*)

In another article, published by Dr. K. Acharya. Two major problems: operational problems and organizational problems regarding the working capital management in Nepalese PEs have been described. The operational problems according to Dr. Acharya listed in the first part are increase of more 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 breakeven analysis, funds 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 have been never considered a managerial job.

In the second part, Dr. Acharya has listed the organizational problem in the PEs. In most of the PEs there is a lack of regular internal and external audit system as well as evaluation of financial results. Similarly, while a very few PEs have been able to present their capital requirement functioning of finance department is not satisfactory and some PEs are even facing the underutilization 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 modern scientific tools used to 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 this situation will erode the efficiency of the concern (*Acharya: 1985*).

## **2.12 Review of Dissertation**

In the time of research on secondary sources, it was reviewed that some students from Tribhuwan 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 below:

Prem Kumar Shrestha, 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 balance holds the largest portion and has fluctuating trend. Due to the lack of definite credit and collection policy the receivables 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 hot bad. It is due to decrease trend of current liabilities. Although, the mill is earning profit its profitability position is not encouraging one because its return on total assets is not high enough (*Shrestha: 1994*)

Keshav Gadtaula, 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 financial and statistical tools. He used ratio analysis, trend analysis funds flow analysis, standard deviations, coefficient 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.
- A Current asset to sales ratio was not constant in every year.

- Increasing position of sundry debtors indicates stock 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.
- Net working capital turnover ratio of the company was lower indicating the inefficient utilization of working capital (*Gadtaula: 1994*)

Based on the findings, he recommended that inventory should be well managed and inventory budgets should be fixed on the basis of actual requirement, in venture harms and its demand, liquidity position to maximum sales. He also suggested the NTDC management for effective sales promotion (i.e. advertisement fompaigns), sound labor and personal 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. 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 those 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 resolving low profitability and concluded that the efficiency 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 setting minimum target rate of return to minimize the gap of achievement (*Shrestha: 1994*).

## **CHAPTER-III**

### **Research Methodology**

#### **3.1 Introduction:**

Research methodology is other important aspect of the thesis writing. Research methodology is systematic and scientific method or technique that is used in handling problem by the research. In other words, research methodology provides the various tools and techniques are regard to the problem also provides the various instructions as regard to the methods and process associate with over all study. Research methodology is every helpful in identifying the research problems. In fact, research is a scientific investigation.

"During each research work accomplishes the objectives effectively. Specified method and process should follow which is called research methodology. According to F.N. Kerlinger." Research methodology is vital and absolutely indispensable part of social scientific and education research. Without research methodology, modern social science and educational research would still be in the Dark Age.

Research is the scientific and systematic process. It includes all types of investigation requiring solution to the problems. The scientific and systematic process of research involves activities of identifying problems. Collecting facts and information tabulating and research the data, selecting hypothesis, analyzing the fact and reaching certain conclusion with a view of finding answer to the problems.

In Nepal, there are different kinds of companies are established to earn profit in our society. Some companies have been working efficiently. Since, establishment and some companies have been closed due to poor management performance. In this context this study attempt to analyze the "working capital management" in Nepalese joint venture banks. In order to fulfill this objective, every study needs an appropriate research methodology to discover the better result of the investigation. In other words, an appropriate research methodology has to be followed to achieve ultimate goals.

#### **3.2 Research Design:**



Research design refers to the conceptual structure within which 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 as the outline of a plan to test the hypothesis and should include all the procedures that follow. It is said that the formidable problem of design of 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".

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 guideposts 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 description 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 Populations and sample:**

This study is directly concerned in the population and trended in the population and sampling data. Population data which are not originally collected but rather obtained from the NSE website to data 115 listed in [www.nepalstock.com](http://www.nepalstock.com) in Nepal exchange limited whose shares are not traded in stock market. Out of 115 listed companies the selected 3 samples have been taken for the study of Nepalese non-manufacturing companies or commercial banks. The financial statement of the total no. of commercial bank in Nepal from the data of their establishment till today constitutes the population for the present study.

The published balance sheet and profit and loss account of different companies have been used to examine the working capital management in Nepalese joint venture banks. The financial statement i.e. published balance and loss account of different selected banks from their established up to.

Finally, sample has been taken from, which actually starts, from the population with a view to show the total population for the study which actually starts from the year. Since, the census study of the bank is neither feasible nor desirable, sample has been choosing from them, which companies the financial statement of the banks.

### **3.4 sources of data:**

Analysis of data means to study the tabulated material in order to determine inherent facts or meaning. It involves breaking down the existing complex factors in to similar 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, different trends outstanding factors etc.

This research would include both primary and secondary data. Data collected by the research or through agent for the first time from related field and possessive original chapter are known as primary data. Primary data also called field sources. on the other hand, data collected by some else used already and are made available to other in the firm of published statistic are known as secondary data. Once primary data have been used, it loses its primary characteristics and becomes secondary. The different between primary data and secondary data is a matter of relativity. Primary data are generally used in other 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 propose 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 in 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 statement 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 report some provides study made regarding in this field, newspaper, journals, booklets and article related to this study, publication of Ministry of finance, Ministry of industry, Central Bureau of statistics, National planning commission and similar reports submitted 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**

Ratio analysis is the expression of the relationship between two items either form balance sheet or form incomes statement of or both statements. Ratio is useful techniques to interpret the financial statement so that the strength and weakness of a firm as well as its historical performance sand current financial condition can be determined.

"Ratio is the numerical or an individual relationship between tow figures. It is expressing one on. In terms of another i.e. one figure divided by another no. in order to calculate the ratio" (*Jain and Narang: 1988: 416*)

"A ratio is a yardstick that provides a measure of relationship between two accounting figures. It is defined as the indicated quotient of two mathematical expression and as the relationship between two or more things." (*Pandey: 1988: 501*)

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 positin of a firm. It is the one that help ot make rational deciosions 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 management of the selected banks.

### 3.6.2 Average

The most popular and widely used measure of representing the entire data by the one value is known as average. Its value obtained by adding together all items and the summation of items is divided by the number of sample periods. If the past items of the sample periods are  $x$ , numbers of periods are then  $(\bar{X})$  is defined by:

$$\bar{X} = \frac{X_1 + X_2 + \dots + X_n}{n} = \frac{\sum x}{n}$$

Where,  $\sum x$  = the sum of the observations and

$N$  = no. of years

Higher the value of mean  $\bar{X}$  the probability position is regarded as sound.

### 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 calculated to supplement the relative measure, coefficient of variation. It is usually denoted by  $\sigma$  (small sigma). Standard deviation is the positive square root from their arithmetic mean of the square of the deviation of given observation from their arithmetic mean. Thus, if  $x_1, x_2, x_3, \dots$  is a set of 'n' observation then the standard deviation is given by,

$$\sigma = \sqrt{\frac{\sum(x - \bar{x})^2}{N}}$$

### 3.6.4 Trend Percentage Method:

In working analysis the direction of change over a period of years is of crucial important. For trend analysis the used of index number is generally advocated. The producer followed is to assign the number of 100 to item of other years in relation to

the base year, This producer may be called as trend of other year in relation to the base year this producer may called as trend percentage method.

There are various phenomena which change with the passage of time. Index number is statistical device assigned to measure the relative change in the level of phenomena (variable or group of variable) with respect to time, geographical location or other characteristic. So, index no. is a device for measuring change in the magnitude of the phenomena from time to time event from place to place. The careful study of relative change that has taken place in the past helps the forecast to future trend and deadeners.

Trend percentage method is used to in the study to evaluate trends of relative items of working capital. Trend percentage of each study year can be calculated the following formula:

$$\text{Trend \%} = \frac{\text{CurrentYearPrice}}{\text{Fixedbaselastyearprice}} \times 100$$

### **3.6.5 Correlation Analysis:**

The correlation coefficient analysis refer to the tools used in measuring the closeness of the relationship between two variables. The term correlation (co-variation) indicates the relationship between two such variable in which with change in the value of one variable. The value of the other variables also change. If two or more quantities vary in sympathy so that the movement in other, they are said to be correlated.

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

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

Thus, correlation is a statistical tool, with the help of which we can determine whether or not two or more variable are correlated and if they are correlated to 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.

$$R = \frac{\sum(x-\bar{x})(y-\bar{y})}{\sqrt{\sum(x-\bar{x})^2} \cdot \sqrt{\sum(y-\bar{y})^2}}$$

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

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.

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

Where,  $\sigma$  = Standard Deviation

$\bar{x}$  = Arithmetic Mean

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

Probable error is an old measurement of ascertaining the reliability of the pearsonian co-efficient of correlation. If  $r$  is the calculated correlation co-efficient in a sample of 'N' pairs of observation, then its standard error. Usually by S.E. ( $r$ ) is given by,

$$S.E. (r) = \frac{1-r^2}{\sqrt{N}}$$

Probable error of the coefficient of correlation can also be calculated from S.E. of the co-efficient of correlation by the following formula.

$$\text{P.E. (r)} = 0.6745 \times \text{S.E. (r)}$$

$$= 0.6745 \times \frac{1-r^2}{\sqrt{N}}$$

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 (ANOVA):**

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 difference 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 population having the same mean.

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

## **CHAPTER-IV**

### **PRESENTATION AND ANALYSIS OF DATA**

#### **4.1 Introduction:**

This chapter i.e., "Presentation and analysis of data" is the most important chapter. Where the result of the research of the result work is presented and analysis is done accordingly. The tools and techniques of working capital analysis as mentioned in the research methodology are used here to achieve the objective of the study. The presentation and analysis of the data in this study have done to evaluate the working capital position through the financial data available for research work.

Analysis and interpretation of data involves an attempt to determine the significance and meaning of financial data, so that a judgment in past activities can be made and a forecast may be done of the prospect for future earning ability to pay interest debt a maturity both current as well as long term and profitability. The analysis and interpretation of data requires of comprehensive and intelligent as well as the determining of relationship with other data to facilitate comparison.

In the study presentation and analysis of data has been conducted based on the objectives of the study. Therefore, here data are collected from various secondary sources, are presented and analyzed. Data collected for the analysis of the working capital mgmt are presented in the forms of table and are analyzed with the help of widely accepted financial mgmt, ratio analysis, correction analysis, trend analysis and analysis of variance.

#### **4.2 Analysis of Ratio:**

Ratio analysis is that tool which is used to analyze the financial statements. It is a widely used tool for the financial analysis. It is defined as the systematic use for ratio to interpret the financial statement so that strength and weakness of the firm as well as its historical performance and current financial condition can be determined. Ratio analysis is a technique commonly employed by analyst examining a company's financial statement. Analysis of selected accounting ratio allows a bank manager to



evaluate the bank's current performance overtime, and its performance relative that of competitors bank. The study done here only consist those ratio's which is related to working capital mgmt. of the selected banks.

#### **4.2.1 Cash and Bank Balance to Current Assets:**

Cash and bank balance are the liquid form of currents assets. That is also known as liquid assets. It plays vital role to achieve effective mgmt. of working capital in all business enterprises. Cash and bank balance provides liquidity to the firm and is a major and important source of working capital. The purpose of holding cash is to meet the day-to-day business requirements. It enable calculated as:

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

The ratio should not be large because indicates poor cash mgmt. i.e., low ratio indicates sound mgmt and high ratio weak mgmt. policy.

**Table-1****Cash and Bank Balance to current assets Ratio**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	Cash & Bank Balance (1)	Current Assets(2)	Ratio(1/2)	Cash & Bank Balance (1)	Current Assets	Ratio
2064/65	2668	26789	9.96%	1965	35380	5.55%
2065/66	6165	36489	16.90%	4217	38368	10.99%
2066/67	7819	40920	19.11%	4173	41656	10.02%
2067/68	6123	45766	13.38%	3697	45459	8.13%
2068/69	10361	55266	18.75%	6625	53059	12.49%
Average	6627.2	41046	16.15%	4135.4	42784.4	9.67%
S.D.			0.034825355			0.024011768
C.V.			21.57%			24.84%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	Cash & Bank Balance (1)	Current Assets	Ratio	Cash & Bank Balance (1)	Current Assets	Ratio
2064/65	4622	36354	12.71%	4246	33218	12.78%
2065/66	3923	43207	9.08%	5199	40450	12.85%
2066/67	4516	51298	8.80%	3597	40095	8.97%
2067/68	4908	57158	8.59%	7254	43704	16.60%
2068/69	5119	21652	23.64%	8490	41588	20.41%
Average	4617.6	41933.8	11.01%	5757.2	39811	14.46%
S.D.			0.057419476			0.038848324
C.V.			52.14%			26.86%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL, HBL, NABIL and SCBNL

The above table highlights the proportion of cash and bank balance to current assets of EBL, HBL NABIL and SCBNL over the five years, starting from the year 2064/65 to 2068/69.

The average proportion of cash and bank balance to current assets of Everest bank limited is the highest among the three other banks with 16.15%. This means Everest bank limited had maintained highest liquidity as compared to other banks.

Similarly, the C.V of EBL is the least among other banks that means EBL is uniform and consistent than Other banks.

#### **4.2.2 Cash And Bank Balance To total Assets**

Cash and bank are the most significant assets that are needed to run any business organization. This ratio measures the proportion of cash and bank balance out of the total assets. In other words, this ratio indicates the relationship between cash and bank balance to total assets. The proportion of liquid cash in comparison to the total assets shows the investment in cash out of the total assets. Higher ratio means low risk, which provides more W/C but if excess earn nothing profitability will decline automatically. It can be calculated as:

$$\text{Cash and bank balance to total assets} = \frac{\text{Cash and Bank Balance}}{\text{Total Assets}}$$

The low ratio indicates the decrease in risk and profitability and the high ratio indicates the increase in the W/c.

**Table-2****Cash and bank balance to Total Assets Ratio**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	Cash & Bank Balance (1)	Total Assets(2)	Ratio(1/2)	Cash & Bank Balance (1)	Total Assets	Ratio
2064/65	2668	27149	9.83%	4246	36175	11.74%
2065/66	6165	36916	16.70%	5199	39320	13.22%
2066/67	7819	41383	18.89%	3597	42717	8.42%
2067/68	6123	46236	13.24%	7254	46736	15.52%
2068/69	10361	55813	18.56%	8490	54364	15.62%
Average			15.97%	5757.2	43862.4	13.13%
S.D.			0.03452750			0.02674835
C.V.			21.62%			20.38%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	Cash & Bank Balance (1)	Total Assets(2)	Ratio	Cash & Bank Balance (1)	Total Assets(2)	Ratio
2064/65	4622	37132	12.45%	4246	33335	12.74%
2065/66	3923	43867	8.94%	5199	40587	12.81%
2066/67	4516	52079	8.67%	3597	40213	8.94%
2067/68	4908	58099	8.45%	7254	43810	16.56%
2068/69	5119	63257	8.09%	8490	41677	20.37%
Average	4617.6	50886.8	9.07%	5757.2	39924.4	14.42%
S.D.			0.01588206			0.03880564
C.V.			17.50%			26.91%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL, HBL, NABIL and SCBNL

The above table highlights the proportion of cash and bank balance to total assets of EBL, HBL, NABIL and SCBNL over the five year, starting from the 2064/665 to 2068/69. The average proportion of EBL is the highest proportion of

EBL is recorded with 15.97% and lowest proportion of NABIL with 9.07%.So, it clearly reveals that NABIL had poor cash management in average as compared to other three banks.

#### **4.2.3 Current Assets to Total Assets:**

Current assets are those assets, which can easily converted into cash within a short period (within one year).Current assets depend upon the nature on the business. It is important for the day-to-day operation of the business concern. The current assets to total show the percentage of firm's total inverted in form of current assets. Higher percentage indicates greater liquidity position and lower risk of being insolvent. It can be calculated as:

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

Higher the ratio higher the profitability and vice-versa.

**Table-3****Currents assets to total assets Ratio**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	Current Assets (1)	Total Assets(2)	Ratio(1/2)	Current Assets (1)	Total Assets	Ratio
2064/65	26789	27149	98.67%	35380	36175	97.80%
2065/66	36489	36916	98.84%	38368	39320	97.58%
2066/67	40920	41383	98.88%	41656	42717	97.52%
2067/68	45766	46236	98.98%	45459	46736	97.27%
2068/69	55266	55813	99.02%	53059	54364	97.60%
Average	41046	41499.4	98.91%	42784.4	43862.4	97.54%
S.D.	9471.3354 29		0.00121 7206	6137.1639 25		0.0017192 76
C.V.	23.07%		0.12%	14.34%		0.18%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	Current Assets (1)	Total Assets(2)	Ratio	Current Assets (1)	Total Assets(2)	Ratio
2064/65	36354	37132	97.90%	33218	33335	99.65%
2065/66	43207	43867	98.50%	40450	40587	99.66%
2066/67	51298	52079	98.50%	40095	40213	99.71%
2067/68	57158	58099	98.38%	43704	43810	99.76%
2068/69	21652	63257	34.23%	41588	41677	99.79%
Average	41933.8	50886.8	82.41%	39811	39924.4	99.72%
S.D.			0.25637 5775			0.00053 1289
C.V.			31.11%			0.05%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL, HBL, NABIL and SCBNL

The above table highlights the proportion of Current assets to total assets of EBL, HBL NABIL and SCBNL over the five years, starting from the year 2064/65 to 2068/69. The average proportion of current assets to total assets of SCBNL is highest with 99.72% and NABIL has lowest proportion with 82.41%. The average proportion of current assets to total assets of SCBNL is greater in comparison to other three banks.

The average C.V. of current assets to total assets for five year of NABIL is Highest with 31.11% whereas of SCBNL has lowest average C.V. of 0.05%. Thus, as regard to the consistency maintained by the four JVBS, EBL is more un-consistent or un-uniform between four JVBS. In other words, there is more fluctuation in current assets to total assets of HBL, NABIL EBL and SCBNL.

#### **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 only of the vital aspect of the firm and plays a key role of sources 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:

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

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 mechanize has been put through.

**Table-4****Current Assets to Fixed Assets Ratio**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	Current Assets (1)	Fixed Assets(2)	Ratio(1/2)	Current Assets (1)	Fixed Assets(2)	Ratio
2064/65	26789	361	7420.78%	35380	795	4450.31%
2065/66	36489	427	8545.43%	38368	952	4030.25%
2066/67	40920	463	8838.01%	41656	1061	3926.11%
2067/68	45766	460	9949.13%	45459	1187	3829.74%
2068/69	55266	547	10103.47%	53059	1305	4065.82%
Average	41046	451.6	9089.02%	42784.4	1060	4036.26%
S.D.	9471.3354		9.8399419	6137.1639		2.1175960
C.V.	23.07%		10.83%	14.34%		5.25%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	Current Assets (1)	Fixed Assets(2)	Ratio	Current Assets (1)	Fixed Assets(2)	Ratio
2064/65	36354	598	6079.26%	33218	117	28391.45%
2065/66	43207	660	6546.52%	40450	137	29525.55%
2066/67	51298	781	6568.25%	40095	118	33978.81%
2067/68	57158	941	6074.18%	43704	106	41230.19%
2068/69	21652	41605	52.04%	41588	89	46728.09%
Average	41933.8	8917	470.27%	39811	113.4	35106.70%
S.D.	12357.759		25.152156	3529.0169		70.190632
C.V.	29.47%		534.85%	8.86%		19.99%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL, HBL, NABIL and SCBNL

The above table highlights the proportion of currents to fixed assets of EBL, HBL, NABIL and SCBNL from 2064/65 to 2068/69 .The average proportion of SCBNL is greater in comparison to other three banks. As higher ratio indicates higher amount of current assets maintained by the bank in comparison to the fixed assets. So,



the higher ratio accompanied by the profit of SCBNL indicates that the business of SCBNL is expanding.

The C.V. of current assets to fixed assets for 5 successive year of four banks are more un-consistent or un-uniform In other words, there is more fluctuation in current assets to fixed assets ratio .

#### **4.2.5 Net Working Capital to Current Assets:**

Net working capital means total current liability. Working capital plays a significant role and is one of the most important functions of the financial manager. Neither excess nor deficit W/C is desirable for an organization, thus, the firm should maintain optimal level of W/C. The ratio calculated here indicates the relationship between net W/C and C.A. It can be calculated as:

$$\text{Net working capital to current Assets} = \frac{\text{NetWorkingCapital}}{\text{CurrentAssets}}$$

Where,

$$\text{Net working capital} = \text{Total Current Assets} - \text{Total current liability}$$

**Table-5****Net working capital to current assets of EBL and HBL**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd				
	Total Current Assets (1)	Total Current Liabilities (2)	Net Working Capital (1-2=3))	Ratio (3/1)	Total Current Assets (1)	Total Current Liabilities (2)	Net Working Capital (1-2=3))	Ratio (3/1)
2064/65	26789	25229	1560	1.0618336	35380	33663	1717	4.85%
2065/66	36489	35778	711	1.0198725	38368	36201	2167	5.65%
2066/67	40920	38624	2296	1.0594449	41656	39278	2378	5.71%
2067/68	45766	43124	2642	1.0612652	45459	42741	2718	5.98%
2068/69	55266	51636	3630	1.0702998	53059	49732	3327	6.27%
Average	41046	38878.2	2167.8	0.0528139	42784.4	40323	2461.4	6.10%
S.D.				0.017735197				0.004739194
C.V.				33.58%				7.76%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.				
	Total Current Assets (1)	Total Current Liabilities (2)	Net Working Capital (1-2=3))	Ratio (3/1)	Total Current Assets (1)	Total Current Liabilities (2)	Net Working Capital (1-2=3))	Ratio (3/1)
2064/65	36354	34696	1658	4.56%	33218	30844	2374	7.70%
2065/66	43207	40738	2469	5.71%	40450	37536	2914	7.76%
2066/67	51298	48246	3052	5.95%	40095	36844	3251	8.82%
2067/68	57158	53528	3630	6.35%	43704	40133	3571	8.90%
2068/69	21652	20212	1440	6.65%	41588	37556	4032	10.74%
Average	41933.8		2449.8	5.84%	39811		3228.4	8.11%
S.D.				0.007186565				0.010998857
C.V.				12.30%				13.56%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL and HBL, NABIL and SCBNL

The table highlights the proportion of net working capital to current assets of EBL, HBL, NABIL and SCBNL from 2064/65 to 2068/69. The average proportion of net working capital to current assets of SCBNL is greater in comparison to the three banks.

The C.V. of net working capital to current assets for five successive years as regard to the consistency maintained by the two JVBS, HBL is more consistent or uniform than the two JVBS because the C.V. of HBL (i.e. 7.76%) is lower than that of

the EBL and SCBNL. In other words, there is more fluctuation in net working capital to current assets of EBL than the HBL.

#### **4.2.6 Current Assets to Current Liabilities:**

Working capital has direct relationship between current assets and current liability. This ratio indicates the firm's ability to cover its current liability with its available for each rupee of current liability.

Cash, marketable securities, account receivables and inventories are generally included under current assets on other hand current liability included account payable short-term notes payable, current maturity of long term debts and other accrued expenses. It can be calculated as:

$$\text{Current assets to current liabilities} = \frac{\text{Current assets}}{\text{Current Liabilities}}$$

Generally, 2:1 ratio is considered to be standard ratio. Higher ratio is favorable for the business but, if the ratio exceeds two, it indicated idle fund. Low ratio indicates the short-term solvency or poor liquidity position.

**Table-6****Current assets to current liability Ratio**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	Current Assets (1)	Current Liabilities(2)	Ratio(1/2)	Current Assets (1)	Current Liabilities(2)	Ratio(1/2)
2064/65	26789	25229	106.18%	35380	33663	105.10%
2065/66	36489	35778	101.99%	38368	36201	105.99%
2066/67	40920	38624	105.94%	41656	39278	106.05%
2067/68	45766	43124	106.13%	45459	42741	106.36%
2068/69	55266	51636	107.03%	53059	49732	106.69%
Average	41046	38878.2	105.58%	42784.4	40323	106.10%
S.D.			0.017735197			0.005310138
C.V.			1.68%			0.50%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	Current Assets (1)	Current Liabilities(2)	Ratio(1/2)	Current Assets (1)	Current Liabilities(2)	Ratio(1/2)
2064/65	36354	34696	104.78%	33218	30844	107.70%
2065/66	43207	40738	106.06%	40450	37536	107.76%
2066/67	51298	48246	106.33%	40095	36844	108.82%
2067/68	57158	53528	106.78%	43704	40133	108.90%
2068/69	21652	20212	107.12%	41588	37556	110.74%
Average	41933.8	39484	106.20%	39811	36582.6	108.82%
S.D.			0.008058899			0.010998857
C.V.			0.76%			1.01%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL, HBL, NABIL and SCBNL

The above table highlights the proportion of current assets to current liabilities of EBL and HBL from 2064/65 to 2068/69. The proportion of current assets and current liabilities for five successive years the average proportion of current assets and current liabilities of SCBNL is greater in comparison to the three banks. Therefore, current assets to current liabilities ratio maintained by SCBNL are better than the other banks. Higher ratio indicates better CA management maintained by the bank, which shows that the SCBNL has been able to maintain safety margin to protect the interest of the creditors and to provide the bank required in adverse circumstance.

The average C.V. of CA to CL ratio for five successive year of EBL is 14.34%, which is highest, and HBL has 0.5%, which is lowest average C.V. Thus, as regard to the consistency maintained by the four banks. EBL is more un-consistent or un- uniform than the other banks because the C.V. of EBL (i.e. 14.34%) is highest than that of the other three banks. In other words, there is more fluctuation in proportion of CA to CL of EBL than the other three banks.

#### **4.2.7 Return on Current Assets.**

Those assets, which can be converted into cash with in one accounting years, are known as current assets. Since Current assets have direct relationship with the day-to-day operations, these assets are the most effective assets to earn the net profit. Profit or return is the main factor for the existence of any business firm. The return on current assets measures the profit with respect to its total currents assets. It can be calculated as:

$$\text{Return on Current Assets} = \frac{\text{Net Profit after Tax (NPAT)}}{\text{Current Assets}}$$

Higher the ratio higher the utilization of Current assets, and Vice-versa.

**Table-7****Return on Current Assets Ratio**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	NPAT (1)	Current Assets(2)	Ratio(1/2)	NPAT (1)	Current Assets(2)	Ratio
2064/65	451	26789	1.68%	635	35380	1.79%
2065/66	638	36489	1.75%	752	38368	1.96%
2066/67	831	40920	2.03%	508	41656	1.22%
2067/68	931	45766	2.03%	893	45459	1.96%
2068/69	1090	55266	1.97%	958	53059	1.81%
Average	788.2	41046	1.92%	749.2	42784.4	1.75%
S.D.			0.001483173			0.002744298
C.V.			7.72%			15.67%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	NPAT (1)	Current Assets(2)	Ratio	NPAT (1)	Current Assets(2)	Ratio
2064/65	746	36354	2.05%	818	33218	2.46%
2065/66	1031	43207	2.39%	1025	40450	2.53%
2066/67	1140	51298	2.22%	1085	40095	2.71%
2067/68	1344	57158	2.35%	1119	43704	2.56%
2068/69	1700	21652	7.85%	1168	41588	2.81%
Average	1192.2	41933.8	2.84%	1043	39811	2.62%
S.D.			0.022424634			0.001253218
C.V.			78.88%			4.78%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL, HBL, NABIL and SCBNL

The above table highlights the portion of net profit after tax to current assets of EBL, HBL, NABIL and SCBNL from 2064\65 to 2068\69. The average proportion of net profit after tax to current assets NABIL is greater in comparison to the three Banks. It reveals that NABIL has been able to utilize its current assets more effectively than other three Banks. The average C.V. of Net profit after tax to current assets for five years of SCBNL is lowest. Thus, SCBNL has less risk than other three banks regarding utilization of current assets.

#### 4.2.8 Return on Total Assets

Return on total assets measures the profitability of all financial resources invested in the firm's assets. This ratio shows the relationship between Net profit after tax and total assets. In other words, it measures the success or failure of the firm to utilize the total assets. It is defined as net income divided by total assets. Return on total assets can be calculated by using the following formula:

$$\text{Return on Total Assets} = \frac{\text{NPAT}}{\text{TotalAssets}}$$

Higher ratio indicates the overall efficiency of the firm i. e. proper utilization of its entire resources, and lower ratio indicates lower proportion of non - performing assets. Higher ratio is better for the firm.

**Table -8****Return on Total Assets Ratio**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	NPAT (1)	Total Assets(2)	Ratio(1/2)	NPAT (1)	Total Assets	Ratio
2064/65	451	361	1.24%	635	36175	1.76%
2065/66	638	427	1.49%	752	39320	1.91%
2066/67	831	463	1.79%	508	42717	1.19%
2067/68	931	460	2.02%	893	46736	1.91%
2068/69	1090	547	1.99%	958	54364	1.76%
Average	788.2	451.6	1.74%	749.2	43862.4	1.71%
S.D.			0.298152			0.002673
C.V.			17.08%			15.65%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	NPAT (1)	Total Assets(2)	Ratio	NPAT (1)	Total Assets(2)	Ratio
2064/65	746	37132	2.01%	818	33335	2.45%
2065/66	1031	43867	2.35%	1025	40587	2.53%
2066/67	1140	52079	2.19%	1085	40213	2.70%
2067/68	1344	58099	2.31%	1119	43810	2.55%
2068/69	1700	63257	2.69%	1168	41677	2.80%
Average	1192.2	50886.8	2.34%	1043	39924.4	2.61%
S.D.			0.002233			0.00126
C.V.			9.53%			4.82%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL, HBL, NABIL and SCBNL

The table highlights the proportion of NPAT to total assets of EBL and HBL from 2064/65 to 2068/69. The proportion of NPAT to total assets for five successive years of EBL, HBL, NABIL and SCBNL. The average proportion of SCBNL is greater in comparison to the three Banks. It reveals to that SCBNL provide greater rate of return to its total assets, there by indicating that the bank has been able to utilize its available resources more effectively and efficiently in comparison to other three banks.



The average C.V. of NPAT To total assets for five successive years SCBNL has lowest C.V. and EBL has highest average there is more fluctuation in NPAT to total assets ratio of SCBNL than the EBL.

#### **4.2.9 Cash and Bank Balance to Current Liabilities:**

Cash is the most liquid form current assets. It is also even called as liquid assets. Cash plays a vital and significant role in any business firm. Ant shortage of cash may result into negative impact to a firm. Cash and current liability both comes under the component of the net working capital. There exist a positive relationship between cash and W/C. As cash increase, so does the W/C and vice-versa. On the other hand, there exist negative relationship between cash and current liability. Increase in one results in decrease of other. This ratio can be calculated as:

$$\text{Cash and bank balance to current liability} = \frac{\text{CashandBankBalance}}{\text{CurrentLiability}}$$

This ratio indicates the ability if a firm to pay its current liability. The standard ratio is 1:1 as the dues can be paid easily. Both high and low ratio than 1:1 is not favorable for a firm.

**Table-9****Cash and bank balance to current liability Ratio**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	Cash & Bank Balance (1)	Current Liabilities (2)	Ratio(1/2)	Cash & Bank Balance (1)	Current Liabilities (2)	Ratio(1/2)
2064/65	2668	25229	10.58%	1965	33663	5.84%
2065/66	6165	35778	17.23%	4217	36201	11.65%
2066/67	7819	38624	20.24%	4173	39278	10.62%
2067/68	6123	43124	14.20%	3697	42741	8.65%
2068/69	10361	51636	20.07%	6625	49732	13.32%
Average	6627.2	38878.2	17.05%	4135.4	40323	10.26%
S.D.			0.036785214			0.025803192
C.V.			21.58%			25.16%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	Cash & Bank Balance (1)	Current Liabilities (2)	Ratio(1/2)	Cash & Bank Balance (1)	Current Liabilities (2)	Ratio(1/2)
2064/65	4622	34696	13.32%	4246	30844	13.77%
2065/66	3923	40738	9.63%	5199	37536	13.85%
2066/67	4516	48246	9.36%	3597	36844	9.76%
2067/68	4908	53528	9.17%	7254	40133	18.07%
2068/69	5119	20212	25.33%	8490	37556	22.61%
Average	4617.6	39484	11.69%	5757.2	36582.6	15.74%
S.D.			0.061753544			0.043751189
C.V.			52.80%			27.80%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL, HBL, NABIL and SCBNL

The table highlights the proportion of cash and bank balance to current liability of EBL, HBL, NABIL and SCBNL from 2064/65 to 2068/69. The average proportion of EBL is higher in comparison to the four JVBS. Therefore, liquidity position based on cash and bank balance to current liability ratio maintained by EBL is better than the four JVBS. Higher ratio indicates higher amount of cash and bank balance maintained by the bank.

The average C.V. of cash and bank balance to current liability for five successive years of HBL is 21.58 percentage, which is lowest, and NABIL has 52.80, which is highest. Thus, as regard to the consistency maintained by the four JVBS, HBL is more consistent or uniform than the two JVBS except NABIL. In other words, there is more fluctuation in cash and bank balance to current liability of EBL than the NABIL.

#### **4.2.10 Long Term Debt to Equity Ratio:**

Debt means the funds collected from the outsider and long-term debt means amount borrowed for a long period of time. This ratio shows the relationship between the long-term debts borrowed fund and equity. This ratio also helps to judge the long term financial position of the company. The relationship between long term debt and owners equity is known as long-term debt to equity ratio. It can be calculated as:

$$\text{Long-term debt to equity ratio} = \frac{\text{Long-term debt}}{\text{Equity}}$$

High ratio indicates the large share of financial by the creditors as compared to that owner's. High ratio is not favorable to the creditors.

**Table-10****Long-term debt to Equity Ratio**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	Long Term Debt (1)	Equity (2)	Ratio(1/2)	Long Term Debt (1)	Equity (2)	Ratio(1/2)
2064/65	300	1920	15.63%	860	2512	34.24%
2065/66	300	2202	13.62%	500	3119	16.03%
2066/67	300	1758	17.06%	500	2758	18.13%
2067/68	250	3112	8.03%	500	3112	16.07%
2068/69	280	4177	6.70%	500	4632	10.79%
Average	286	2633.8	10.86%	572	3226.6	17.73%
S.D.			0.041230531			0.079702107
C.V.			37.97%			44.96%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	Long Term Debt (1)	Equity (2)	Ratio(1/2)	Long Term Debt (1)	Equity (2)	Ratio(1/2)
2064/65	240	2436	9.85%	300	2491	12.04%
2065/66	300	3129	9.59%	300	3051	9.83%
2066/67	300	3833	7.83%	350	3369	10.39%
2067/68	300	4571	6.56%	350	3677	9.52%
2068/69	340	5459	6.23%	360	4121	8.74%
Average	296	3885.6	7.62%	332	3341.8	9.93%
S.D.			0.014956382			0.011072982
C.V.			19.63%			11.15%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL, HBL, NABIL and SCBNL

The table highlights the proportion long term debt to equity ratio of EBL, HBL, NABIL and SCBNL from 2064/65 to 2068/69. The average proportion of HBL is greater in comparison to other JVBS. Therefore, from the shareholder point of view, investment in the share of HBL is considered to be satisfactory than other three banks 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, lower debt equity is generally viewed as favorable. Therefore, NABIL is Favorable as they provide safe investment.

#### **4.2.11 Net Worth to Total assets:**

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

$$\text{Net worth to total assets} = \frac{\text{NetWorth}}{\text{TotalAssets}}$$

The high ratio indicates the higher existence of Net worth in total assets, which is favorable condition for the firm.

**Table-11****Net worth to total assets ratio**

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	Net Worth (1)	Total Assets (2)	Ratio(1/2)	Net Worth (1)	Total Assets (2)	Ratio(1/2)
2064/65	2178	27149	8.02%	2512.99	36175	6.95%
2065/66	2047	36916	5.55%	3119.88	39320	7.93%
2066/67	2215	41383	5.35%	3439	42717	8.05%
2067/68	2435	46236	5.27%	3995	46736	8.55%
2068/69	2124	55813	3.81%	3997	54364	7.35%
Average	2199.8	41499.4	5.30%	3412.774	43862.4	7.78%
S.D.			0.013611421			0.005591616
C.V.			25.68%			7.19%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	Net Worth (1)	Total Assets (2)	Ratio(1/2)	Net Worth (1)	Total Assets (2)	Ratio(1/2)
2064/65	3125	37132	8.42%	2492	33335	7.48%
2065/66	3130	43867	7.14%	3052	40587	7.52%
2066/67	3132	52079	6.01%	3369	40213	8.38%
2067/68	3136	58099	5.40%	3677	43810	8.39%
2068/69	3211	63257	5.08%	3679	41677	8.83%
Average	3146.8	50886.8	6.18%	3253.8	39924.4	8.15%
S.D.			0.012256025			0.005323775
C.V.			19.82%			6.53%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL ,HBL,NABIL and SCBNL

The table highlights the proportion of net worth to total assets of EBL, HBL NABIL and SCBNL for five successive year's from 2064/65 to 2068/69. The average proportion of SCBNL is greater in comparison to the three JVBs. It reveals that average proportion of net worth to total assets favors SCBNL is more than the rest of the JVBs.

The average C.V. of Net worth to total assets for five years of EBL is highest with 25.68% and SCBNL has lowest with 6.53%.. Thus, as regard to the consistency maintained by the two JVBs. SCBNL is more consistent or uniform as compared

other banks because the C.V. of EBL (is 6.53%) is lower than that of other banks. In the other words, there is more fluctuation in net worth to total assets of other banks than the EBL.

#### **4.2.12 Return on owner's equity:**

Ultimately, the most important, or "bottom line", accounting ratio is the ratio of net income to owner's equity which measure the return on owner's equity. Shareholder invests funds in the firm's share in an anticipation of grater return in the near future. They purchase the share of the firm so that they could get higher return in the future and thus, it is the firm's responsibility to provide the shareholder reasonable return. Therefore, the basic purpose of the return on owner's equity is to measure the productivity of the shareholder equity. In other words' it, indicate the ability of the measurement to efficiently and effectively capitalize the shareholder fund in income generating purposes. It can be calculated as:

$$\text{Return on owner's equity} = \frac{\text{NetProfitAfterTax}}{\text{Owner'sEquity}}$$

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

Table-12  
Return on owner's equity Ratio

Figure in Million Rs.

Fiscal Year	Everest Bank Ltd.			Himalayan Bank Ltd		
	NPAT (1)	Equity (2)	Ratio(1/2)	NPAT (1)	Equity (2)	Ratio(1/2)
2064/65	451	1920	23.49%	635	2512	25.28%
2065/66	638	2202	28.97%	752	3119	24.11%
2066/67	831	1758	47.27%	508	2758	18.42%
2067/68	931	3112	29.92%	893	3112	28.70%
2068/69	1090	4177	26.10%	958	4632	20.68%
Average	788.2	2633.8	29.93%	749.2	3226.6	23.22%
S.D.			0.083705738			0.035850597
C.V.			27.97%			15.44%

Fiscal Year	Nabil Bank Ltd.			Standard Chartered Bank Ltd.		
	NPAT (1)	Equity (2)	Ratio(1/2)	NPAT (1)	Equity (2)	Ratio(1/2)
2064/65	746	2436	30.62%	818	2491	32.84%
2065/66	1031	3129	32.95%	1025	3051	33.60%
2066/67	1140	3833	29.74%	1085	3369	32.21%
2067/68	1344	4571	29.40%	1119	3677	30.43%
2068/69	1700	5459	31.14%	1168	4121	28.34%
Average	1192.2	3885.6	30.68%	1043	3341.8	31.21%
S.D.			0.012519965			0.018861033
C.V.			4.08%			6.04%

Sources: Comparative Balance Sheet and Profit and Loss account of EBL, HBL, NABIL and SCBNL

The table highlights the proportion of Return on owner's equity of EBL, HBL NABIL and SCBNL for five successive year's from 2064/65 to 2068/69. The average proportion of SCBNL is greater in comparison to the three JVBS. It reveals that SCBNL provides greater rate of return to their shareholder's equity than the other three banks.

The average C.V. of return on owner's equity for 5 years of NABIL is lowest then other three banks. Thus, as regard to the consistency maintained by the other three banks JVBS. NABIL is more consistency or uniform than EBL because the C.V. of HBL (i.e. 4.08%) is lower than other banks. In other words, there is more fluctuation in return on owner's equity of other three banks than NABIL.



### 4.3 Trend analysis

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 statement of a single year. In order to succeed in this dynamic world, it is quite important for a business analyst to find out the direction and tendency of business and to determine. It is 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 item over a period of time. Thus trend analysis is one of the important tool for the important tool for the bankers as it enable them to indicate the direction in which their business is going and on this methods of expressing trends which are listed below:-

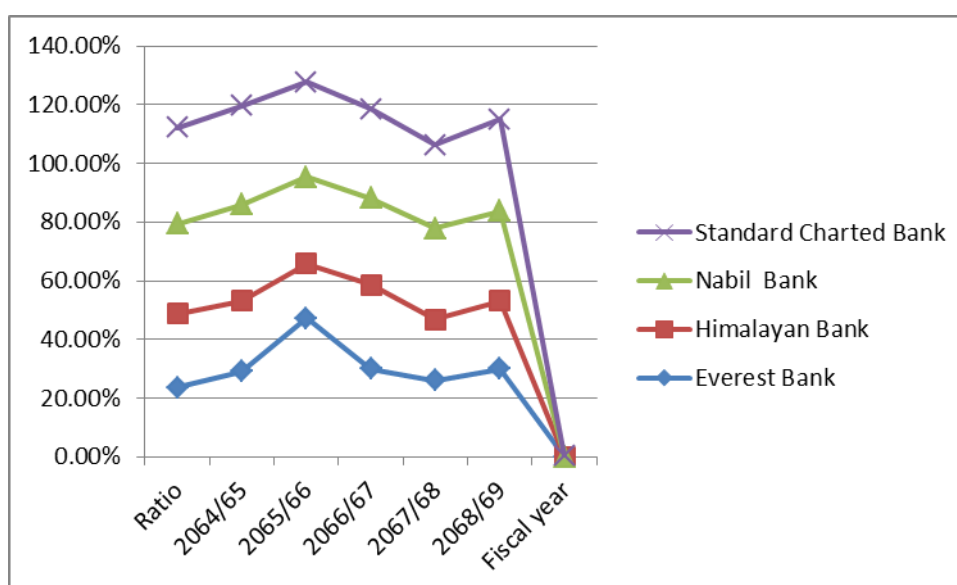
- Trend Ratio
- Graphs and Diagrams

Here graphs and diagrams have been used to express the trends of different item of four banks.

### 4.3.1 trend of current assets to current liabilities

Graph no: 1

Current Assets to Current Liabilities



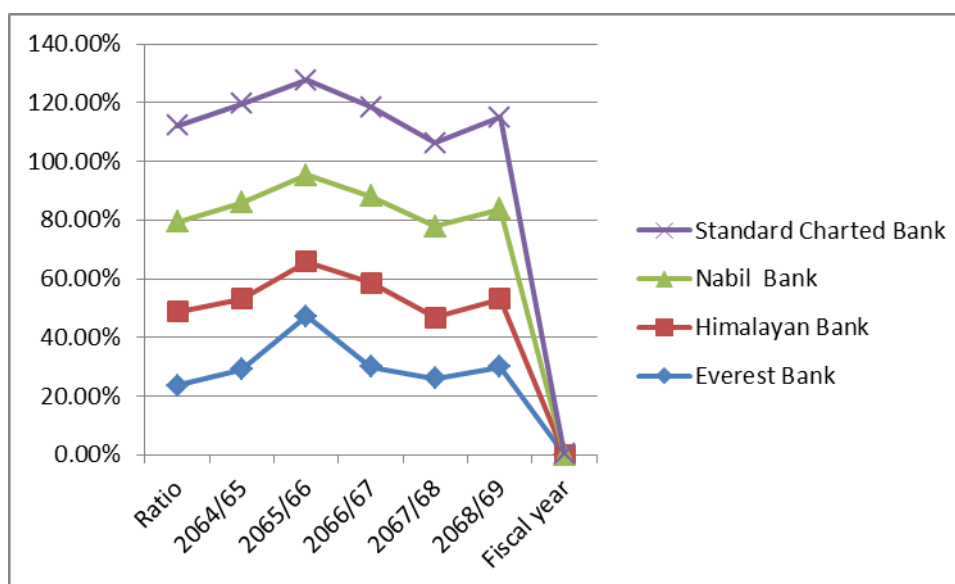
Sources: Table no: 6

The above graphs highlight the CA to CL trends of four banks from 2064/65 to 2068/69. The growth of CA to CL in comparison to the 5 years of SCBNL is highest in year 2067/68 with 20.37%. The current assets to current liabilities ratio of EBL and HBL shows the fluctuating trend through the periods under study as there is rise and fall in successive years. But the CA to CL ratio of NABIL marked an increasing trend throughout the period under study except in 2067/68. This indicates that the CA to CL ratio of EBL is better comparison to the Other Banks.

### 4.3.2 Trend of Cash and Bank balance to total Assets

Graph no: 2

Cash & Bank Balance to Total Assets

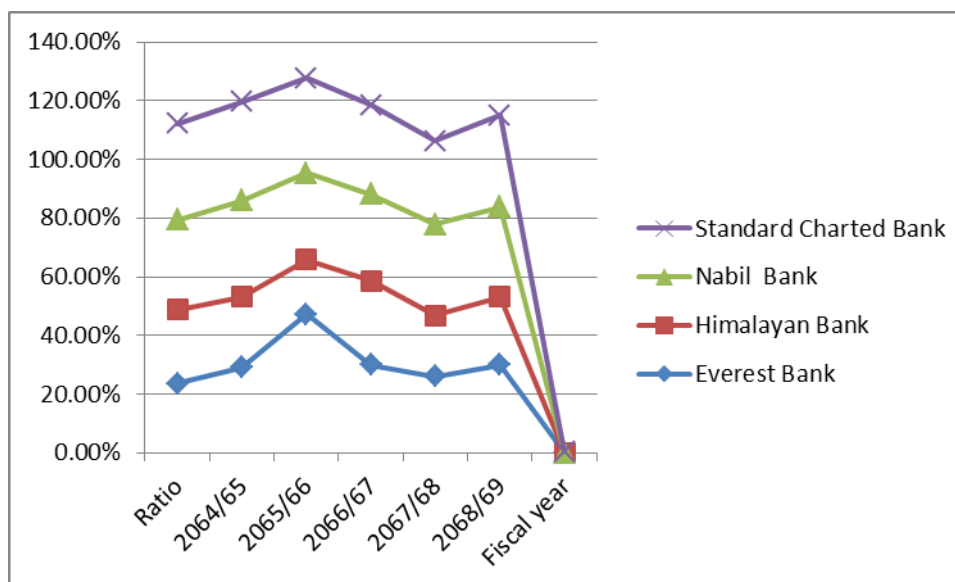


Source: Table no: 2

The above graph highlights the cash and bank balance to TA of four banks from 2064/65 to 2068/69. The cash and bank balance to TA in comparison to the 5 years SCBNL has highest ratio in 2065/66 with 32.21. . This indicates that the cash and bank balance to total assets of SCBNL is higher in comparison to the other banks which may be termed as good and worst as greater cash and bank balance to TA is good for the banks because it will increase their working capital and they can perform their operation smoothly where as it is worst because greater cash balance may indicate idle cash which incurs cost.

### 4.3.3 Trend of Current Assets to Total Assets

**Graph no: 3**  
**Current Assets to Total Assets**



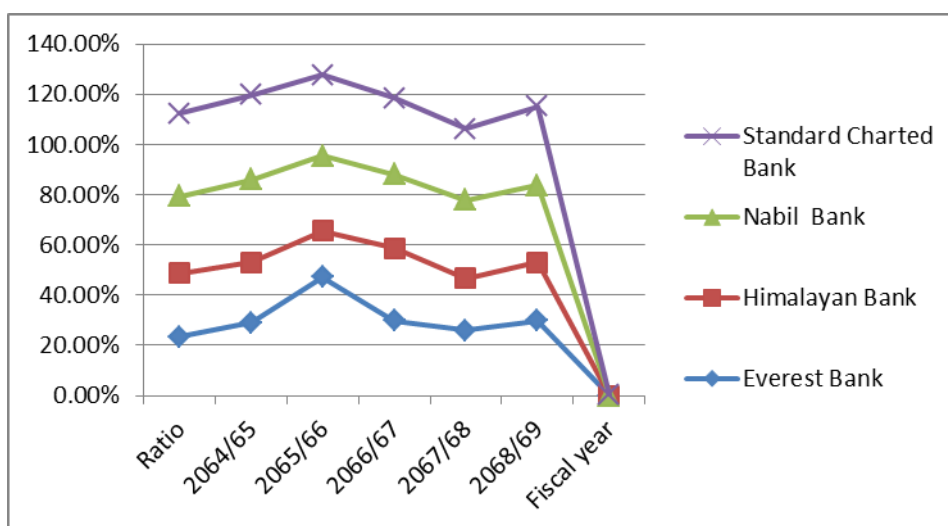
Source: Table No: 3

The above graphs highlight the CA to TA trends of four banks from 2064/65 to 2068/69. The CA to TA in comparison to the 5 years of EBL has highest ratio with 33.60% and average ratio with 32.84%. The CA to TA of EBL indicates highly fluctuating trend throughout the period under study. the CA to TA of SCBNL marked an increasing trend throughout the period under study except in 2067/68. this indicates that the current assets to total assets of SCBNL is better in comparison to the other three banks.

#### 4.3.4 Return on Total Assets

Graph no: 4

Return on Total Assets



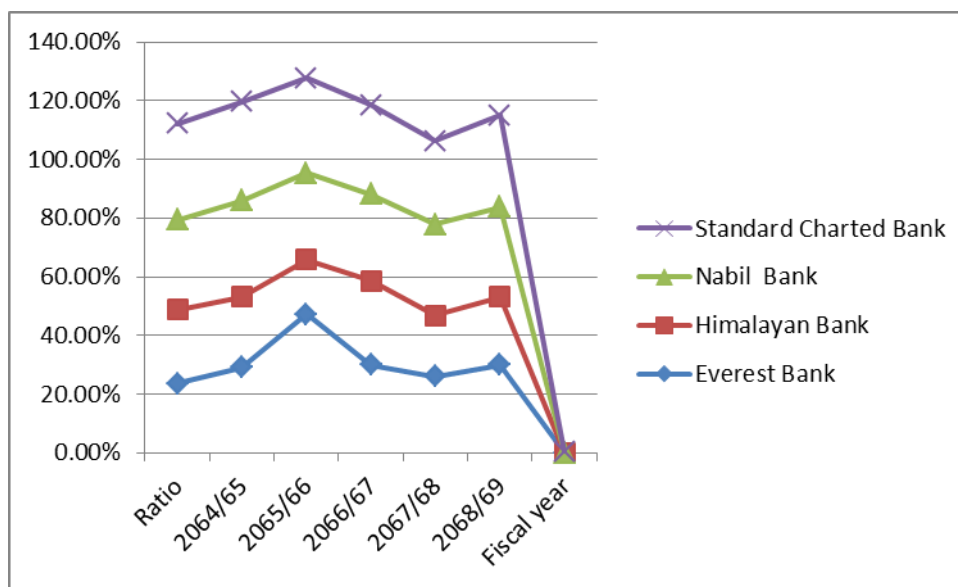
Source: Table no: 8

The above graph highlights the return on total assets of two banks from 2064/65 to 2068/69. The return on total assets in comparison to the 5 years of SCBNL has highest average ratio with 32.84%. The return on total assets of SCBNL indicates that increasing trend thought the period under study except in 2067/68. This indicates that the return on total assets of SCBNL is increasing trends.

### 4.3.5 Return on owner's equity

Graph no: 5

Return on Owner's Equity



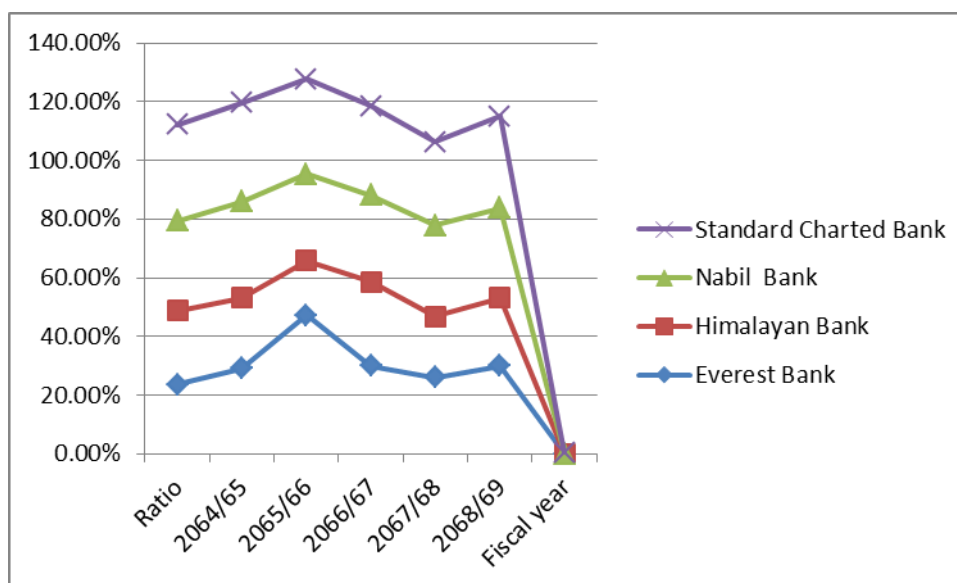
Source: Table no: 12

The above graph highlights the return on owner's equity trends of two banks from 2064/65 to 2068/69. The growth of return on owner's equity in comparison to the 5 year SCBNL has highest average ratio. The return on owner's equity of EBL shows the increasing trend except in the year 2067/68. The return on owner's equity of HBL shows the highly fluctuating trend throughout the period understudy. This indicates that the return on owner's equity of EBL is better comparison to the HBL because EBL is increasing trend.

### 4.3.6 Net Worth to Total Assets

Graph no: 6

Net Worth to Total Assets



Source: Table no: 11

The above graph highlights the Net worth to Total assets of four Banks from 2064/065 to 2068/069. The growth of net worth to total assets in comparison to the 5 year SCBNL has highest average ratio. The net worth to total assets of HBL shows the increasing trend expect in the year 2067/68. The net worth to total asset of HBL shows the fluctuating trend thought the period under study. This indicates that the net worth to total assets of HBL is better comparison to the EBL because HBL is increasing trend.

#### 4.4 Correlations and probable Error

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

Correlation may be defined as a statistical tool which helps to determine whether or not two or more variable are correlated and if they are correlative, what is the degree and direction of correlation. Correlation analysis does not tell anything about cause and effect relationship i.e. if there is high degree of correlation between variables, we cannot say which the cause is and which is the effect. The result of correlation is always between +1 and -1, when correlation ( $r$ ) = +1, it means there is perfect relationship between the variables and vice-versa. When  $r=0$  there is no relationship between the two variables.

Probable error is a statistical technique by the help of which significance of Karl Person co-efficient 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 it is greater than 6 times of P.E. it means 'r' is significant.



**4.4.1 Karl Pearson Correlation Coefficient and Probable Error of Current Assets and Current Liability of four Banks**

**Table–13**

Banks	Correlation(r)	P.E.	6×P.E.	Result
Everest	0.997878	0.0089	0.0533	r>6 P.E. Significant
Himalayan	0.999937	0.0036	0.0216	r>6P.E. Significant
Nabil	0.999763	0.0177	0.1062	r>6P.E. Significant
Standard chartered	0.994585	0.0178	0.1069	r>6P.E. Significant

(Source:Appendix 1)

The above table highlights the Karl Pearson Coefficient of Correlation and probable error of current assets and current liability of Everest, Himalayan, Nabil and Standard chartered bank ltd. the correlations tabulated are 0.997878, 0.999937, 0.999763 and 0.994585

Respectively from the above table we can say the way of conclusion that the highest degree of correlation in between current assets and Current Liabilities is 0.999937 of Himalayan Bank Ltd and lowest is that of Standard chartered bank ltd with 0.994585 correlation coefficient of Everest, Himalayan, Nabil and Standard chartered are 6 times more than P.E. So it is considered as significant.

**4.4.2 Karl Pearson correlation coefficient and probable Error of current assets and total Assets of four Banks**

**Table-14**

Banks	Correlation(r)	P.E.	6×P.E.	Result
Everest	0.994585	0.0033	0.0198	r>6 P.E. is significant
Himalayan	0.9543	0.0399	0.2396	r>6 P.E. is significant
Nabil	0.9659	0.0307	0.1842	r>6 P.E. is significant
Standard Chartered	0.9732	0.0159	0.0954	r>6 P.E. is significant

(Source: Appendix1)

The above table highlights the Karl Pearson coefficient of correlation and probable error of current assets and total assets of Everest Bank Ltd., Himalayan Bank Ltd, Nabil bank ltd. and Standard chartered Bank ltd. The correlation tabulated is 0.994585, 0.9543, 0.9659 and 0.9732 respectively. From the above table we can say the way of conclusion that the highest degree of correlation in between CA and TA is 0.994585 of Everest Bank Ltd. And the lowest is that of Himalayan Bank Ltd with 0.9543. Since, it is six times more than P.E. it is considered as significant. There is a high degree positive correlation coefficient in between current assets and total assets of EBL and since, it is 6 times more than P.E., it is considered as significant.

## 4.5 Testing of Hypothesis with the help of T-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 t-test on the basis of current assets of two JVBs.

**Table-15**

Fiscal Year	Everest Bank Limited		Himalayan Bank Limited	
	$X_1$	$(X_1 - \bar{X}_1)^2$	$X_2$	$(X_2 - \bar{X}_2)^2$
2064/65	36354	31134168.04	33218	43467649
2065/66	43207	1621038.24	40450	408321
2066/67	51298	87688241.64	40095	80656
2067/68	57158	231776265.6	43704	15155449
2068/69	21652	411351411.2	41588	3157729
Total	$\sum X_1 =$ 209669	$\sum (X_1 - \bar{X}_1)^2 =$ 763571124.8	$\sum X_2 =$ 199055	$\sum (X_2 - \bar{X}_2)^2 =$ 62269804

Sources: Comparative Balance Sheet and Profit and Loss account of EBL and HBL

### Step-1 Hypothesis Formulation

Null hypothesis ( $H_0$ ):  $\mu_1 = \mu_2$  (i.e. there is no significant difference in average CA of two JVBs).

Alternative hypothesis ( $H_1$ ):  $\mu_1 \neq \mu_2$  (i.e. there is significant difference in average CA of two JVBs).

### Step-2: Test of Statistics

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left( \frac{1}{h_1} + \frac{1}{h_2} \right)}} = \frac{2161.93 - 2966.30}{\sqrt{2165776.22 \left( \frac{1}{5} + \frac{1}{5} \right)}} \\ = \frac{-4.37}{930.76}$$

$$\therefore |t| = 1.2437$$

Where,

$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2} \\ = \frac{14185578.73 + 3140631.03}{5 + 5 - 2} = 2165776.22$$

Degree of Freedom

$$= n_1 + n_2 - 2$$

$$= 5 + 5 - 2 = 8$$

Step-3: Tabulated value of t at 5% level of significance for two tailed test and for 8 d.f. is 2.306.

Step-4: Decision: Since, calculated value of t is less than the tabulated value, the null hypothesis  $H_0$  is accepted. So, we conclude that there is no significant difference in average CA of two JVBs.

**Table-16**

Fiscal Year	Nabil Bank Limited		Standard Chartered Bank Limited	
	$X_1$	$(X_1 - \bar{X}_1)^2$	$X_2$	$(X_2 - \bar{X}_2)^2$
2064/65	26789	1800802.96	35380	1800802.96
2065/66	36489	1800964	38368	1800964
2066/67	40920	325481.66	41656	325481.66
2067/68	45766	2708.16	45459	2708.16
2068/69	55266	10255621.95	53059	10255621.95
Total	$\sum X_1 =$ 209669	$\sum (X_1 - \bar{X}_1)^2 =$ 763571124.8	$\sum X_2 =$ 199055	$\sum (X_2 - \bar{X}_2)^2 =$ 62269804

Sources: Comparative Balance Sheet and Profit and Loss account of NABIL and SCBNL

#### Step-1 Hypothesis Formulation

Null hypothesis ( $H_0$ ):  $\mu_1 = \mu_2$  (i.e. there is no significant difference in average CA of two JVBs).

Alternative hypothesis (H<sub>1</sub>):  $\mu_1 \neq \mu_2$  (i.e. there is significant difference in average CA of two JVBs).

Step-2: Test of Statistics

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left( \frac{1}{h_1} + \frac{1}{h_2} \right)}} = \frac{41933.8 - 39811}{\sqrt{103230116.1 \left( \frac{1}{5} + \frac{1}{5} \right)}}$$

$$= \frac{10614}{6425.8887}$$

$$\therefore |t| = 1.6518$$

Where,

$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}$$

$$= \frac{763571124.8 + 62269804}{5 + 5 - 2} = 103230116.1$$

Degree of Freedom

$$= n_1 + n_2 - 2$$

$$= 5 + 5 - 2 = 8$$

Step-3: Tabulated value of t at 5% level of significance for two tailed test and for 8 d.f. is 2.306.

Step-4:Decision: Since, calculated value of t is less than the tabulated value, the null hypothesis  $H_0$  is accepted. So, we conclude that there is no significant difference in average CA of two JVBs.

#### **4.5.2 Testing of Hypothesis on the basis of Current Liability**

The following null hypothesis has been tested by the help of applying the t-test on the basis of current liability of two JVBs.

Step-1:Hypothesis Formulation

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

Alternative hypothesis ( $H_1$ ):  $\mu_1 \neq \mu_2$  (i.e. there is significant difference in average CL of the two JVBs).

Computation of Test Statistics

**Table-17**

Fiscal Year	Everest Bank Limited		Himalayan Bank Limited	
	$X_1$	$(X_1 - \bar{X}_1)^2$	$X_2$	$(X_2 - \bar{X}_2)^2$
2061/062	25229	222793.44	33663	14830.37
2062/063	35778	6430.44	36201	26364.02
2063/064	38624	593808.95	39278	17649.12
2064/065	43124	502.21	42741	239.01
2065/066	51636	38392.48	49732	24957.68
Total	$\sum X_1 = 4871.14$	$\sum (X_1 - \bar{X}_1)^2 = 861927.52$	$\sum X_2 = 4305.55$	$\sum (X_2 - \bar{X}_2)^2 = 84040.2$

Sources: Comparative Balance Sheet and Profit and Loss account of EBL and HBL

Step-2: Test of Statistics

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left( \frac{1}{h_1} + \frac{1}{h_2} \right)}} = \frac{974.22 - 861.11}{\sqrt{187174.33 \left( \frac{1}{5} + \frac{1}{5} \right)}}$$

$$= \frac{113.11}{273.62} = 0.41$$

$$\therefore t = 1.47$$

Where,



$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}$$

$$= \frac{861927.52 + 635467.16}{5 + 5 - 2} = 187174.33$$

Degree of Freedom

$$= n_1 + n_2 - 2$$

$$= 5 + 5 - 2 = 8$$

Step-3: Tabulated value of t at 5% level of significance for two tailed test and for 8 d.f. is 2.306.

Step-4: Decision: Since calculated value of t is less than the table value of t, the null hypothesis  $H_0$  is accepted. So, we conclude that there is no significance difference in the average CL of two JVBs.

**Table-18**

Fiscal Year	Nabil Bank Limited		Standard Chartered Bank Limited	
	$X_1$	$(X_1 - \bar{X}_1)^2$	$X_2$	$(X_2 - \bar{X}_2)^2$
2064/65	34696	1800802.96	30844	1800802.96
2065/66	40738	1800964	37536	1800964
2066/67	48246	325481.66	36844	325481.66
2067/68	53528	2708.16	40133	2708.16
2068/69	20212	10255621.95	37556	10255621.95
Total	$\sum X_1 =$ 197420	$\sum (X_1 - \bar{X}_1)^2 =$ 47461679.2	$\sum X_2 =$ 182913	$\sum (X_2 - \bar{X}_2)^2 =$ 669914024

Sources: Comparative Balance Sheet and Profit and Loss account of NABIL and SCBNL

Step-2: Test of Statistics

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left( \frac{1}{h_1} + \frac{1}{h_2} \right)}} = \frac{39484 - 36582.6}{\sqrt{89671962.9 \left( \frac{1}{5} + \frac{1}{5} \right)}}$$

$$= \frac{2901.4}{1894.1056} = 0.41$$

$$\therefore t = 1.53$$

Where,

$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}$$

$$= \frac{861927.52 + 635467.16}{5 + 5 - 2} = 187174.33$$

Degree of Freedom

$$= n_1 + n_2 - 2$$

$$= 5 + 5 - 2 = 8$$

Step-3: Tabulated value of t at 5% level of significance for two tailed test and for 8 d.f. is 2.306.

Step-4: Decision: Since calculated value of t is less than the table value of t, the null hypothesis  $H_0$  is accepted. So, we conclude that there is no significance difference in the average CL of two JVBs.

### 4.5.3 Testing of Hypothesis on the basis of Networking Capital

The following null hypothesis has been tested by the help of applying the t-test on the basis of Net working capital of two banks.

**Table-19**

Fiscal Year	Everest Bank Limited		Himalayan Bank Limited	
	$X_1$	$(X_1 - \bar{X}_1)^2$	$X_2$	$(X_2 - \bar{X}_2)^2$
2064/65	1560	756778.20	1717	400119.50
2065/66	711	1592164.48	2167	6612.94
2066/67	2296	1798522.39	2378	401829.21
2067/68	2642	5544.29	2718	1030448.31
2068/69	3630	11548986.62	3327	1199046.9
Total	$\sum X_1 =$ 9938.56	$\sum (X_1 - \bar{X}_1)^2 =$ 15701995.98	$\sum X_2 =$ 10525.98	$\sum (X_2 - \bar{X}_2)^2 =$ 3038056.86

Sources: Comparative Balance Sheet and Profit and Loss account of EBL and HBL

#### Step-1: Hypothesis Formulation

Null Hypothesis ( $H_0$ ):  $\mu_1 = \mu_2$  (i.e. there is no significant difference in the average NW/C of the two Banks).

Alternative hypothesis ( $H_1$ ):  $\mu_1 \neq \mu_2$  (i.e. there is significant difference in average NW/C of the two Banks).

#### Step-2: Test of Statistics

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left( \frac{1}{h_1} + \frac{1}{h_2} \right)}} = \frac{1987.71 - 2105.21}{\sqrt{2342506.60 \left( \frac{1}{5} + \frac{1}{5} \right)}}$$

$$= \frac{-117.5}{967.99} = -0.12$$

$$\therefore |t| = 0.12$$

Where,

$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}$$

$$= \frac{15701995.98 + 3038056.86}{5 + 5 - 2}$$

$$= 2342506.60$$

Degree of Freedom

$$= n_1 + n_2 - 2$$

$$= 5 + 5 - 2$$

$$= 8$$

Step-3: Tabulated value of t at 5% level of significance for two tailed test and for 8 d.f. is 2.306.

Step-4: Decision: Since calculated value of t is less than the tabulated value of t, the null hypothesis  $H_0$  is accepted. So, we conclude that there is no significance difference in the average NW/C of two Banks.

**Table-20**

Fiscal Year	Nabil Bank Limited		Standard Chartered Bank Limited	
	$X_1$	$(X_1 - \bar{X}_1)^2$	$X_2$	$(X_2 - \bar{X}_2)^2$
2064/65	1658	1800802.96	2374	1800802.96
2065/66	2469	1800964	2914	1800964
2066/67	3052	325481.66	3251	325481.66
2067/68	3630	2708.16	3571	2708.16
2068/69	1440	10255621.95	4032	10255621.95
Total	$\sum X_1 =$ 12249	$\sum (X_1 - \bar{X}_1)^2 =$ 3402528.8	$\sum X_2 =$ 16142	$\sum (X_2 - \bar{X}_2)^2 =$ 1592505.2

Sources: Comparative Balance Sheet and Profit and Loss account of NABIL and SCBNL

Step-1: Hypothesis Formulation

Null Hypothesis ( $H_0$ ):  $\mu_1 = \mu_2$  (i.e. there is no significant difference in the average NW/C of the two Banks).

Alternative hypothesis ( $H_1$ ):  $\mu_1 \neq \mu_2$  (i.e. there is significant difference in average NW/C of the two Banks).

Step-2: Test of Statistics

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left( \frac{1}{h_1} + \frac{1}{h_2} \right)}} = \frac{2449.8 - 3228.4}{\sqrt{624379.25 \left( \frac{1}{5} + \frac{1}{5} \right)}}$$

$$= \frac{-778.6}{750.87} = -1.0369$$

$$\therefore |t| = 1.0369$$

Where,

$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}$$

$$= \frac{3402528.8 + 1592505.2}{5 + 5 - 2}$$

$$= 624379.25$$

Degree of Freedom

$$= n_1 + n_2 - 2$$

$$= 5 + 5 - 2$$

$$= 8$$

Step-3: Tabulated value of t at 5% level of significance for two tailed test and for 8 d.f. is 2.306.

Step-4: Decision: Since calculated value of t is less than the tabulated value of t, the null hypothesis  $H_0$  is accepted. So, we conclude that there is no significance difference in the average NW/C of two Banks.

#### 4.5.4 Testing of Hypothesis on the basis of Cash and Bank Balance

The following null hypothesis has been tested by the help of applying the t-test on the basis of cash and Bank balance of two banks.

**Table-21**

Fiscal Year	Everest Bank Limited		Himalayan Bank Limited	
	$X_1$	$(X_1 - \bar{X}_1)^2$	$X_2$	$(X_2 - \bar{X}_2)^2$
2064/65	2668	20346865.56	1965	299.29
2065/66	6165	16062220.37	4217	78299.23
2066/67	7819	10044589.26	4173	57518.43
2067/68	6123	8368118.27	3697	301433.94
2068/69	10361	364369.18	6625	1105357.85
Total	$\sum X_1 = 13826.72$	$\sum (X_1 - \bar{X}_1)^2 = 55186165.64$	$\sum X_2 = 9985.83$	$\sum (X_2 - \bar{X}_2)^2 = 1542908.74$

Sources: Comparative Balance Sheet and Profit and Loss account of EBL and HBL

Step-1: Hypothesis Formulation

Null Hypothesis ( $H_0$ ):  $\mu_1 = \mu_2$  (i.e. there is no significant difference in the average Cash and Bank Balance of the two JVBs).



Alternative hypothesis (H<sub>1</sub>):  $\mu_1 \neq \mu_2$  (i.e. there is significant difference in average Cash and Bank Balance of the two JVBs).

Step-2: Test of Statistics

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left( \frac{1}{h_1} + \frac{1}{h_2} \right)}} = \frac{5560.74 - 1997.17}{\sqrt{7091134.31 \left( \frac{1}{5} + \frac{1}{5} \right)}}$$

$$= \frac{3563.57}{1684.18} = 2.12$$

$$\therefore t = 2.12$$

Where,

$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}$$

$$= \frac{55186165.64 + 1542908.74}{5 + 5 - 2}$$

$$= 7091134.31$$

Degree of Freedom

$$= n_1 + n_2 - 2$$

$$= 5 + 5 - 2$$

$$= 8$$

Step-3: Tabulated value of t at 5% level of significance for two tailed test and for 8 d.f. is 2.306.

Step-4: Decision: Since calculated value of t is less than the tabulated value of t, the null hypothesis H<sub>0</sub> is accepted. So, we conclude that there is no significance difference in the average Cash and Bank Balance of the two JVBs

**Table-22**

Fiscal Year	Nabil Bank Limited		Standard Chartered Bank Limited	
	$X_1$	$(X_1 - \bar{X}_1)^2$	$X_2$	$(X_2 - \bar{X}_2)^2$
2064/65	4622	1800802.96	4246	1800802.96
2065/66	3923	1800964	5199	1800964
2066/67	4516	325481.66	3597	325481.66
2067/68	4908	2708.16	7254	2708.16
2068/69	5119	10255621.95	8490	10255621.95
Total	$\sum X_1 =$ 23088	$\sum (X_1 - \bar{X}_1)^2 =$ 828545.2	$\sum X_2 =$ 28786	$\sum (X_2 - \bar{X}_2)^2 =$ 16970382.8

Sources: Comparative Balance Sheet and Profit and Loss account of NABIL and SCBNL

**Step-1: Hypothesis Formulation**

Null Hypothesis ( $H_0$ ):  $\mu_1 = \mu_2$  (i.e. there is no significant difference in the average Cash and Bank Balance of the two JVBs).

Alternative hypothesis ( $H_1$ ):  $\mu_1 \neq \mu_2$  (i.e. there is significant difference in average Cash and Bank Balance of the two JVBs).

**Step-2: Test of Statistics**

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left( \frac{1}{h_1} + \frac{1}{h_2} \right)}} = \frac{4617.6 - 5757.2}{\sqrt{4572159.84 \left( \frac{1}{5} + \frac{1}{5} \right)}}$$

$$= \frac{-1139.6}{427.85} = 2.6635$$

$$\therefore t = 2.6635$$

Where,

$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}$$

$$= \frac{828545.2 + 1697038.8}{5 + 5 - 2}$$

$$= 4572159.84$$

Degree of Freedom

$$= n_1 + n_2 - 2$$

$$= 5 + 5 - 2$$

$$= 8$$

Step-3: Tabulated value of t at 5% level of significance for two tailed test and for 8 d.f. is 2.306.

Step-4: Decision: Since calculated value of t is greater than the tabulated value of t, the null hypothesis  $H_0$  is rejected. So, we conclude that there is significance difference in the average Cash and Bank Balance of the two JVBs.

#### 4.5.5 Testing of Hypothesis on the basis of Net Profit after Tax

The following null hypothesis has been tested by the help of applying the t-test on the basis of NPAT of two banks.

**Table-23**

Fiscal Year	Everest Bank Limited		Himalayan Bank Limited	
	$X_1$	$(X_1 - \bar{X}_1)^2$	$X_2$	$(X_2 - \bar{X}_2)^2$
2064/65	451	36160.83	635	48827.74
2065/66	638	14660.37	752	5153.80
2066/67	831	3839.04	508	1401.01
2067/68	931	8621.12	893	11367.82
2068/69	1090	78601.73	958	49988.02
Total	$\sum X_1 =$ 1791.86	$\sum (X_1 - \bar{X}_1)^2 =$ 141883.09	$\sum X_2 =$ 2646.26	$\sum (X_2 - \bar{X}_2)^2 =$ 116738.39

Sources: Comparative Balance Sheet and Profit and Loss account of EBL and HBL

Step-1: Hypothesis Formulation

Null Hypothesis ( $H_0$ ):  $\mu_1 = \mu_2$  (i.e. there is no significant difference in the average NPAT of the two Banks).

Alternative hypothesis (H<sub>1</sub>):  $\mu_1 \neq \mu_2$  (i.e. there is significant difference in average NPAT of the two Banks).

Step-2: Test of Statistics

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left( \frac{1}{h_1} + \frac{1}{h_2} \right)}} = \frac{358.37 - 529.25}{\sqrt{32327.68 \left( \frac{1}{5} + \frac{1}{5} \right)}}$$

$$= \frac{-170.88}{113.71} = -1.50$$

$$\therefore |t| = 1.50$$

Where,

$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}$$

$$= \frac{141883.09 + 74114}{5 + 5 - 2}$$

$$= 32327.68$$

Degree of Freedom

$$= n_1 + n_2 - 2$$

$$= 5 + 5 - 2 = 8$$

Step-3: Tabulated value of t at 5% level of significance for two tailed test and for 8 d.f. is 2.306.

Step-4: Decision: Since calculated value of t is greater than the tabulated value of t, the null hypothesis H<sub>0</sub> is rejected. So, we conclude that there is significance difference in the average NPAT of the two Banks

**Table-24**

Fiscal Year	Nabil Bank Limited		Standard chartered Bank Limited	
	$X_1$	$(X_1 - \bar{X}_1)^2$	$X_2$	$(X_2 - \bar{X}_2)^2$
2064/65	746	36160.83	818	48827.74
2065/66	1031	14660.37	1025	5153.80
2066/67	1140	3839.04	1085	1401.01
2067/68	1344	8621.12	1119	11367.82
2068/69	1700	78601.73	1168	49988.02
Total	$\sum X_1 =$ 5961	$\sum (X_1 - \bar{X}_1)^2 =$ 508708.8	$\sum X_2 =$ 1043	$\sum (X_2 - \bar{X}_2)^2 =$ 74114

Sources: Comparative Balance Sheet and Profit and Loss account of NABIL and SCBNL

Step-1:Hypothesis Formulation

Null Hypothesis ( $H_0$ ):  $\mu_1 = \mu_2$  (i.e. there is no significant difference in the average NPAT of the two Banks).

Alternative hypothesis ( $H_1$ ):  $\mu_1 \neq \mu_2$  (i.e. there is significant difference in average NPAT of the two Banks).

Step-2: Test of Statistics

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left( \frac{1}{h_1} + \frac{1}{h_2} \right)}} = \frac{1192.2 - 1043}{\sqrt{72852.85 \left( \frac{1}{5} + \frac{1}{5} \right)}}$$

$$= \frac{149.2}{54.1825} = 2.7499$$

$$\therefore |t| = 2.7499$$

Where,

$$S^2 = \frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}$$

$$= \frac{508708.8 + 116738.39}{5 + 5 - 2}$$

$$= 72852.85$$

Degree of Freedom

$$= n_1 + n_2 - 2$$

$$= 5 + 5 - 2 = 8$$

Step-3: Tabulated value of t at 5% level of significance for two tailed test and for 8 d.f. is 2.306.

Step-4: Decision: Since calculated value of t is greater than the tabulated value of t, the null hypothesis  $H_0$  is rejected. So, we conclude that there is significance difference in the average NPAT of the two Banks.

## **CHAPTER–V**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Summary**

Financial institution plays an important role in the economic growth of any country. They help to mobilize the frizzed and scattered saving of the people and play an intermediary role to make investment of the collected fund in the different productive sector. They help to fulfill the requirement of trade and industry in the country and plays great role in reducing poverty, rising employment opportunity and rising people's life standard.

Working capital management is considered to involve the administration of current assets namely cash, marketable securities, receivable and inventories and the administration of current liabilities. Working capital is the oil that lubricants the wheel of business. Working capital is the oil that lubricants the wheels of business. Working capital is the lifeblood of business. Its effective management can do much to ensure the success of business, while its in effective management can lead not only loss but also the downfall of what otherwise might be considered as a promising concern. Here, the current study has been conducted on “The working capital management of four joint venture Banks.” Everest, Himalayan, Nabil and standard Chartered Bank Limited have been taken as sample.

Here, the present is organized into five chapters, which includes introduction, review of literature, research methodology, presentation and analysis of data and summary recommendation and conclusion.

The first chapter is the introductory and deal with background focus of study, statement of problem, hypothesis of the study, objective of the study, need and significance of the study, limitation of the study and organization of the study.

The second chapter is the theoretical analysis and brief review of literature. While conducting the study review of major scholars, books published reports related



to this topic etc. have been done. The presented study has been done with the assistance of theoretical framework provided in this part.

The third chapter is the research methodology. In this chapter, decisions have been done as to research design, population and sample, sources of data, data collected and data analysis tools.

The fourth chapter is the major part of the study. It deals with the presentation and major findings of the study. Here, needed data for the analysis are presented, analyzed and interpreted.

The fifth chapter is the final chapter of the study. This chapter is the summary of the four earlier chapters. Here, conclusion of the study is made and the attempt to offer various suggestions and recommendations for the improvements are reviewed.

In order to carry out 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 conclusion desired from study of analysis of ratios, trend analysis, correlation analysis and probable error, and the hypothesis testing are summarized below:-

### **5.2.1 Analysis of Ratios:**

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

After the study of cash and bank balance to current assets ratio of the four banks, it has been found that the mean cash and bank balance to current assets ratio shows Everest Bank has maintain higher than other three banks ratios. On the basis of

the C.V. during the study the ratio of Everest Bank is higher fluctuating than the other three banks.

After the study of cash & bank to total assets of four banks, it has been found that the mean cash and bank to total assets ratio of Everest Bank is quite fluctuating, whereas Himalayan Bank is quite similar ratio. On the basis of the C.V. Everest and Himalayan Banks are more fluctuating.

After the study of CA to TA of two banks, it has been found that the means CA to TA ratio of Everest bank is quiet fluctuate, whereas Nabil bank has quite similar ratio. On the basis of the CV Everest and Standard Chartered Bank are quite fluctuating.

After the study of CA to FA two banks, it has been found that the mean CA to TA ratio of Everest Bank is quite fluctuate, whereas Himalayan Bank is quite similar ratio. On the basis of the CV Nabil and Standard chartered Bank are quite fluctuating.

After the study of CA to fixed Assets of the two banks it has been found the mean CA to fixed assets ratio shows that the ratio of Everest and Himalayan Banks are quite fluctuate on the basis of the C.V. during the study, the ratio of Everest Bank is more fluctuating than Himalayan Bank.

After the study of CA to CL of four banks the mean CA to CL ratio shows that the ratio of Standard charted and Himalayan Banks are quite similar ratio. On the basis of C.V. during the study, there is higher fluctuation in the ratio of HBL than the EBL.

After the study of return on current assets of the four Banks, it has been found the mean return on CA ratio shows that the ratio of Everest Bank is quite similar and Himalayan Bank is quite fluctuating. On the basis of CV during the study, there is higher fluctuation in the ratio of HBL than the EBL.

After the study of cash and bank balance to current liabilities ratio of four banks. It has been found that the mean cash and bank balance to current liabilities ratio shows that the ratio of Everest Bank is quite fluctuating and Himalayan bank is

quite similar ratio. On the basis of C.V. during the study, there is higher fluctuation in ratio of NABIL than the EBL.

After the study of long term debt to equity ratio of four banks. It has been found the mean long term debt to equity ratio shows that the ratio of NABIL and SCBNL are quite similar. On the basis of CV during the study there is higher fluctuation in ratio of HBL than the EBL.

After the study of return on owner's equity ratio of four banks. It has been found the mean return on owner's equity ratio shows that the ratio of Everest Bank and Nabil Banks are quite similar. On the basis of C.V. during the study, there is higher fluctuation in ratio of EBL than the NABIL.

After the study of Net worth to total assets ratio of four banks. It has been found that SCBNL have been able to maintain higher mean net worth to total assets ratio in comparison to the four banks. .The average net working capital maintain by Nabil bank is between high and low or adequate. By the help of proper working capital management Nabil bank has earn high average NPAT. So we can conclude working capital determines the strength and weakness. Again on the basis of C.V. the ratio during the study period, there is higher fluctuation in the ratio of EBL than the SCBNL.

### **5.2.2 Trend Analysis**

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

1. After the study of CA to CL trends of four banks from 2064/2065 to 2068/2069, the current assets to current liabilities ratio of EBL and HBL shows the fluctuating trend through the periods under study as there is rise and fall in successive years. But the CA to CL ratio of NABIL marked an increasing trend throughout the period understudy except in 2067/68. This indicates that the CA to CL ratio of EBL is better comparison to the Other

Banks This indicates that the CA to CL ratio of EBL is better comparison to the other three banks.

2. After the study of cash and bank balance to TA trends of four banks from 2064/65 to 2068/69., The cash and bank balance to TA in comparison to the 5 years SCBNL has highest ratio in 2065/66. This indicates that the cash and bank balance to total assets of SCBNL is higher in comparison to the other banks.
3. After the study of CA to TA trends of four banks from 2064/65 to 2068/69.. The CA to TA in comparison to the 5 years of EBL has highest ratio The CA to TA of EBL indicates highly fluctuating trend throughout the period under study. the CA to TA of SCBNL marked an increasing trend throughout the period under study except in 2067/68.this indicates that the current assets to total assets of SCBNL is better in comparison to the other three banks.
4. After the study of return on total assets trends of four banks 2064/65 to 2068/69. The return on total assets in comparison to the 5 years of SCBNL has highest average ratio. The return on total assets of SCBNL indicates that increasing trend thought the period under study except in 2067/68. This indicates that the return on total assets of SCBNL is increasing trends.
5. After the study of return on owner's equity trends of four banks from 2064/65 to 2068/69. The growth of return on owner's equity in comparison to the 5 year SCBNL has highest average ratio. The return on owner's equity of EBL shows the increasing trend except in the year 2067/68. The return on owner's equity of HBL shows the highly fluctuating trend throughout the period understudy. This indicates that the return on owner's equity of EBL is better comparison to the HBL because EBL is increasing trend.
6. After the study of Net worth to Total assets of four Banks from 2064/065 to 2068/069. The growth of net worth to total assets in comparison to the 5 year SCBNL has highest average ratio. The net worth to total assets of HBL shows

the increasing trend expect in the year 2067/68. The net worth to total asset of HBL shows the fluctuating trend thought the period under study. This indicates that the net worth to total assets of HBL is better comparison to the EBL because HBL is increasing trend.

### **5.2.3 Correlation Analysis and Probable Error**

The major findings or conclusion derived from the study of correlation analysis and probable error is summarized below:-

1. After the study of correlation and probable error between current assets and current liabilities of Correlation coefficient of Everest, Himalayan, Nabil and Standard chartered Bank limited, the highest degree of correlation in between CA to CL is 0.9999 of Himalayan Bank Ltd and lowest is that of Standard Chartered Bank Ltd with 0.9945. Correlation coefficient of Everest, Himalayan, Nabil and Standard chartered are 6 times more than P.E. So it is considered as significant.
2. After the study of correlation and probable error between CA to TA of Everest, Himalayan, Nabil and Standard chartered, the correlation tabulated is 0.994585, 0.9543, 0.9659 and 0.9732 respectively .From the study we can say the way of conclusion that the highest degree of correlation in between CA and TA is 0.994585 of Everest Bank Ltd. And the lowest is that of Himalayan Bank Ltd with 0.9543 0.5083. Since, it is six time more than P.E. it is considered as significant. There is a high degree positive correlation coefficient in between current assets and total assets of EBL and since, it is 6 times more than P.E., it is considered as significant.

#### **5.2.4 Testing of Hypothesis with the help of T-test**

The major findings or conclusions derived from the study of hypothesis testing with the t-test are summarized below:-

1. After testing the hypothesis on the basis of current assets, it has been found that the computed value of t i.e. 1.2437 and 1.6518 is less than its tabulated value i.e. 2.306. Therefore,  $H_0$  is accepted i.e. there is no significant difference in the average CA of four banks.
2. After testing the hypothesis on the basis of current liabilities, it has been found that the computed value of t i.e. 1.47 and 1.53 is lower than its tabulated value i.e. 2.306. Therefore,  $H_0$  is accepted i.e. there is no significant difference in the average CL of four banks.
3. After testing the hypothesis on the basis of net working capital, it has been found that the computed value of t i.e. 0.12 and 1.0369 is lower than its tabulated value i.e. 2.306. Therefore,  $H_0$  is accepted i.e. there is no significant difference in the average net working capital of four banks.
4. After testing the hypothesis on the basis of cash and bank balance, it has been found that the computed value of t i.e. 2.12 is lower than its tabulated value i.e. 2.306. Therefore,  $H_0$  is accepted i.e. there is no significant difference in the average cash and bank balance of two banks. But after testing the hypothesis on the basis of cash and bank balance of Nabil and Standard Chartered Bank it has been found that the computed value of t i.e. 2.6635 is higher than its tabulated value i.e. 2.306. Therefore,  $H_0$  is rejected i.e. there is significant difference in the average cash and bank balance of two banks.
5. After testing the hypothesis on the basis of Net profit after tax, it has been found that the computed value of t i.e. 1.50 is lower than its tabulated value i.e. 2.306. Therefore,  $H_0$  is accepted i.e. there is no significant difference in the average NPAT of two banks. But after testing the hypothesis on the basis of Net profit after tax of Nabil and Standard Chartered Bank it has been found that the computed value of t i.e. 2.7499 is higher than its tabulated value i.e.

2.306. Therefore,  $H_0$  is rejected i.e. there is significant difference in the average NPAT of two banks.

### **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 programs like the declaration of new industry policy, foreign investment under the one window policy, and so on. In this context, 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 programmed 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 programs 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 four Banks, following recommendations can be advanced to overcome weakness and inefficiency and continue with the proper, systematic and smooth operation of the bank:-

- The average net profit earned by Himalayan Bank Limited is comparatively lower than Everest, Nabil and Standard chartered Bank limited. So, it is suggested to Himalayan Bank Limited to invest in more productive sectors, curtail unnecessary expenditure to increase its profit.
- Since the average net working capital of EBL is comparatively lower than the HBL, NABIL and SCBNL, so, EBL is suggested to maintain its average net working capital for effective operation and to grab the opportunity.
- Since all these four 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 balance to remain liquidity.

- Since the average net worth of EBL is comparatively lower than the HBL, NABIL and SCBNL, so, EBL is suggested to improve its average net worth. This objective can be accomplished by retaining earnings or maintaining lower dividend payout ratio.
- As Nepal has already become a member of the world Trade organization which provides tremendous opportunities to the banking sector, the selected four JVBs should form different strategies and maintain a competitive edge over others to catch such opportunities.
- Since, time is never constant and keeps changing. So all these four JVBs should be competent enough to change themselves as per time to survive and to explore new opportunities.
- All these four banks are profit oriented but they should not forget their social responsibility, should be customer friendly and should contribute in social welfare of the society as per capacity.



## Karl Pearson Correlation Coefficient of Current Assets and Current Liabilities

### Everest Bank

The data have been coded by ( Rs. in Million)

Fiscal Year	CA(X)	CL(Y)	$\bar{X}$	$X-\bar{X}$	$(X-\bar{X})^2$	$\bar{Y}$	$Y-\bar{Y}$	$(Y-\bar{Y})^2$	$(X-\bar{X})\times(Y-\bar{Y})$
2064/065	26789	25229	41046	14257	203262049	38887.2	-13658	186540964	194724957.4
2065/066	36489	35778	41046	-4557	20766249	38887.2	-3109.2	9667124.6	14168624.4
2066/067	40920	38624	41046	-126	15876	38887.2	-263.2	69274.2	33163.2
2067/068	45766	43124	41046	4720	2227840	38887.2	4236.8	17950474.2	19997696
2068/069	55266	51636	41046	14220	202208400	38887.2	12748.8	162531901	181287936
Total	$\Sigma X =$ 205230	$\Sigma Y =$ 194391	$\Sigma \bar{X} =$ 205230	$\Sigma(X-\bar{X}) =$ =205230	$\Sigma(X-\bar{X})^2 =$ 428480414	$\Sigma \bar{Y} =$ 194436	$\Sigma(Y-\bar{Y}) =$ =428480414	$\Sigma(Y-\bar{Y})^2 =$ = 194436	$\Sigma(X-\bar{X}) \times (Y-\bar{Y}) =$ 410212377

$$\bar{X} = \frac{\Sigma X}{N} = \frac{205230}{5} = 41046$$

$$\bar{Y} = \frac{\Sigma Y}{N} = \frac{194436}{5} = 38887.2$$

Karl's Pearson Coefficient of Correlation (r)

$$r = \frac{\Sigma(X-\bar{X})\times(Y-\bar{Y})}{\sqrt{\Sigma(X-\bar{X})^2} \sqrt{\Sigma(Y-\bar{Y})^2}}$$

$$= \frac{410212377}{\sqrt{428480414} \times \sqrt{194436}}$$

$$= 0.997878$$

## Correlation Co-efficient Current Assets and Current Liabilities

### Himalayan Bank

The data have been coded by( Rs. in Million)

Fiscal Year	CA(X)	CL(Y)	$\bar{X}$	$X-\bar{X}$	$(X-\bar{X})^2$	$\bar{Y}$	$Y-\bar{Y}$	$(Y-\bar{Y})^2$	$(X-\bar{X})\times(Y-\bar{Y})$
2064/065	35380	33663	42784	-7404.4	54825139.4	40323	-6660	44355600	49313304
2065/066	38368	36201	42784	-4416.4	19504589	40323	-4122	16990884	18204400.8
2066/067	41656	39278	42784	-1128.4	1273286.56	40323	-1045	1092025	1179178
2067/068	45459	42741	42784	2674.6	7153485.16	40323	2418	5846724	6467182.8
2068/069	53059	49732	42784	10274.6	105567405	40323	9409	88529281	96673711.4
Total	$\Sigma X =$ 213922	$\Sigma Y =$ 201615	$\Sigma \bar{X} =$ 42784.4	$\Sigma (X - \bar{X}) =$ =0	$\Sigma (X - \bar{X})^2 =$ 188323905	$\Sigma \bar{Y} =$ 40323	$\Sigma (Y - \bar{Y}) =$ =0	$\Sigma (Y - \bar{Y})^2 =$ 156814514	$\Sigma (X - \bar{X}) \times (Y - \bar{Y}) =$ 171837777

$$\bar{X} = \frac{\Sigma X}{N} = \frac{213922}{5} = 42784.4 \quad \bar{Y} = \frac{\Sigma Y}{N} = \frac{201615}{5} = 40323$$

Karl's Pearson Coefficient of Correlation (r)

$$r = \frac{\Sigma (x-\bar{x})\times(y-\bar{y})}{\sqrt{\Sigma (x-\bar{x})^2} \sqrt{\Sigma (y-\bar{y})^2}}$$

$$= \frac{410212377}{\sqrt{428480414} \times \sqrt{194436}}$$

$$= 0.999937$$

## Correlation Co-efficient Current Assets and Current Liabilities

### Nabil Bank

The data have been coded by( Rs. in Million)

Fiscal Year	CA(X)	CL(Y)	$\bar{X}$	$X-\bar{X}$	$(X-\bar{X})^2$	$\bar{Y}$	$Y-\bar{Y}$	$(Y-\bar{Y})^2$	$(X-\bar{X})\times(Y-\bar{Y})$
2064/065	36354	34696	41933	-5579	31125241	39484	-4788	22924944	26712252
2065/066	43207	40738	41933	1274	1623076	39484	1254	1572516	1597596
2066/067	51298	48246	41933	9365	87703225	39484	8762	76772644	82056130
2067/068	57158	53528	41933	15225	231800625	39484	14044	197233936	213819900
2068/069	21652	20212	41933	-20281	411318961	39484	-19272	371409984	390855432
Total	$\Sigma X =$ 209669	$\Sigma Y =$ 197420	$\Sigma \bar{X} =$ 41933	$\Sigma(X - \bar{X}) =$ =4	$\Sigma(X - \bar{X})^2$ 763571128	$\Sigma \bar{Y} =$ 39484	$\Sigma(Y - \bar{Y})$ =0	$\Sigma(Y - \bar{Y})^2$ =669914024	$\Sigma(X - \bar{X}) \times (Y - \bar{Y})$ =715041310

$$\bar{X} = \frac{\Sigma X}{N} = \frac{209669}{5} = 41933 \quad \bar{Y} = \frac{\Sigma Y}{N} = \frac{39484197420}{5} = 39484$$

Karl's Pearson Coefficient of Correlation (r)

$$r = \frac{\Sigma(x-\bar{x})\times(y-\bar{y})}{\sqrt{\Sigma(x-\bar{x})^2} \sqrt{\Sigma(y-\bar{y})^2}}$$

$$= \frac{71504341310}{\sqrt{763571128} \times \sqrt{669914024}}$$

$$= 0.999763$$

### Correlation Co-efficient Current Assets and Current Liabilities

#### Standard Chartered bank

The data have been coded by( Rs. in Million)

Fiscal Year	CA(X)	CL(Y)	$\bar{X}$	$X-\bar{X}$	$(X-\bar{X})^2$	$\bar{Y}$	$Y-\bar{Y}$	$(Y-\bar{Y})^2$	$(X-\bar{X}) \times (Y-\bar{Y})$
2064/065	33218	30844	39811	-6593	43467649	36582.6	-5738.6	32931530	37834589.8
2065/066	40450	37536	39811	639	408321	36582.6	953.4	908971.56	609222.6
2066/067	40095	36844	39811	284	80656	36582.6	261.4	68329.96	74237.6
2067/068	43704	40133	39811	3893	15155449	36582.6	3550.4	12605340.2	13821707.2
2068/069	41588	37556	39811	1777	3157729	36582.6	973.4	947507.56	1729731.8
Total	$\Sigma X =$ 199055	$\Sigma Y =$ 182913	$\Sigma \bar{X} =$ 39811	$\Sigma (X - \bar{X}) =$ =0	$\Sigma (X - \bar{X})^2 =$ 62269804	$\Sigma \bar{Y} =$ 36582.6	$\Sigma (Y - \bar{Y}) =$ =7.35	$\Sigma (Y - \bar{Y})^2 =$ 47461679.2	$\Sigma (X - \bar{X}) \times (Y - \bar{Y}) =$ 54069489

$$\bar{X} = \frac{\Sigma X}{N} = 199055/5 = 39811 \quad \bar{Y} = \frac{\Sigma Y}{N} = 182913/5 = 36582.6$$

Karl's Pearson Coefficient of Correlation (r)

$$r = \frac{\sum(x-\bar{x}) \times (y-\bar{y})}{\sqrt{\sum(x-\bar{x})^2} \sqrt{\sum(y-\bar{y})^2}}$$

$$= \frac{54069489}{\sqrt{62269804} \times \sqrt{47461679.2}}$$

$$= 0.994585$$

### Correlation Co-efficient Current Assets and Total Assets

#### Everest Bank

The data have been coded by( Rs. in Million)

Fiscal Year	CA(X)	CL(Y)	$\bar{X}$	$X-\bar{X}$	$(X-\bar{X})^2$	$\bar{Y}$	$Y-\bar{Y}$	$(Y-\bar{Y})^2$	$(X-\bar{X}) \times (Y-\bar{Y})$
2064/065	33218	30844	39811	-6593	43467649	36582.6	-5738.6	32931530	37834589.8
2065/066	40450	37536	39811	639	408321	36582.6	953.4	908971.56	609222.6
2066/067	40095	36844	39811	284	80656	36582.6	261.4	68329.96	74237.6
2067/068	43704	40133	39811	3893	15155449	36582.6	3550.4	12605340.2	13821707.2
2068/069	41588	37556	39811	1777	3157729	36582.6	973.4	947507.56	1729731.8
Total	$\sum X =$ 199055	$\sum Y =$ 182913	$\sum \bar{X} =$ 39811	$\sum (X - \bar{X}) =$ =0	$\sum (X - \bar{X})^2 =$ 62269804	$\sum \bar{Y} =$ 36582.6	$\sum (Y - \bar{Y}) =$ =7.35	$\sum (Y - \bar{Y})^2 =$ 47461679.2	$\sum (X - \bar{X}) \times (Y - \bar{Y}) =$ 54069489

$$\bar{X} = \frac{\sum X}{N} = \frac{199055}{5} = 39811 \quad \bar{Y} = \frac{\sum Y}{N} = \frac{182913}{5} = 36582.6$$

### Karl's Pearson Coefficient of Correlation (r)

$$r = \frac{\sum(x-\bar{x}) \times (y-\bar{y})}{\sqrt{\sum(x-\bar{x})^2} \sqrt{\sum(y-\bar{y})^2}}$$

$$= \frac{54069489}{\sqrt{62269804} \times \sqrt{47461679.2}}$$

$$= 0.994585$$

### Karl Pearson Correlation Coefficient of Current Assets and Total Assets

#### Himalayan Bank

The data have been coded by( Rs. in Million)

Fiscal Year	CA(X)	TA(Y)	$\bar{X}$	$x-\bar{X}$	$(X-\bar{X})^2$	$\bar{Y}$	$y-\bar{Y}$	$(Y-\bar{Y})^2$	$(X-\bar{X}) \times (Y-\bar{Y})$
2064/065	35380	27149	41046	-14257	203262049	41499.4	-14350	205933980	204593652.8
2065/066	38368	36916	41046	-4557	20766249	41499.4	-4583.4	21007555.6	20886553.8
2066/067	41656	41383	41046	-126	15876	41499.4	-116.4	13548.96	14666.4
2067/068	45459	46236	41046	4720	22278400	41499.4	4736.6	22435379.6	22356752
2068/069	53059	55813	41046	14220	202208400	41499.4	14313.6	204879145	203539392

Total	$\Sigma X =$ 205230	$\Sigma Y =$ 20749 7	$\Sigma \bar{X} =$ 41046	$\Sigma(X - \bar{X}) =$ =0	$\Sigma(X - \bar{X})^2 =$ 448530974	$\Sigma \bar{Y} =$ 41499.4	$\Sigma(Y - \bar{Y}) =$ =0	$\Sigma(Y - \bar{Y})^2 =$ 45426960 9	$\Sigma(X - \bar{X}) \times (Y - \bar{Y}) =$ 451391017
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$$\bar{X} = \frac{\Sigma X}{N} = 205230/5 = 41046 \quad \bar{Y} = \frac{\Sigma Y}{N} = 207497/5 = 41499.4$$

Karl's Pearson Coefficient of Correlation (r)

$$\begin{aligned}
 r &= \frac{\Sigma(X - \bar{X}) \times (Y - \bar{Y})}{\sqrt{\Sigma(X - \bar{X})^2} \sqrt{\Sigma(Y - \bar{Y})^2}} \\
 &= \frac{451391017}{\sqrt{448530974} \times \sqrt{454269601}} \\
 &= 0.9543
 \end{aligned}$$



## Karl Pearson Correlation Coefficient of Current Assets and Total Assets

### Nabil Bank

The data have been coded by( Rs. in Million)

Fiscal Year	CA(X)	TA(Y)	$\bar{X}$	$X-\bar{X}$	$(X-\bar{X})^2$	$\bar{Y}$	$Y-\bar{Y}$	$(Y-\bar{Y})^2$	$(X-\bar{X})\times(Y-\bar{Y})$
2064/065	36354	37132	41933.8	-14257	203262049	41499.4	-14350	205933980	204593652.8
2065/066	43207	43867	41933.8	-4557	20766249	41499.4	-4583.4	21007555.6	20886553.8
2066/067	51298	52079	41933.8	-126	15876	41499.4	-116.4	13548.96	14666.4
2067/068	57158	58099	41933.8	4720	22278400	41499.4	4736.6	22435379.6	22356752
2068/069	21652	63257	41933.8	14220	202208400	41499.4	14313.6	204879145	203539392
Total	$\Sigma X =$ 205230	$\Sigma Y =$ 207497	$\Sigma \bar{X} =$ 41046	$\Sigma(X-\bar{X}) =$ =0	$\Sigma(X-\bar{X})^2 =$ 448530984	$\Sigma \bar{Y} =$ 41499.4	$\Sigma(Y-\bar{Y}) =$ =0	$\Sigma(Y-\bar{Y})^2 =$ 454269609	$\Sigma(X-\bar{X}) \times (Y-\bar{Y}) =$ 451391023

$$\bar{X} = \frac{\Sigma X}{N} = \frac{205230}{5} = 41046 \quad \bar{Y} = \frac{\Sigma Y}{N} = \frac{207497}{5} = 41499.4$$

Karl's Pearson Coefficient of Correlation (r)

$$r = \frac{\Sigma(X-\bar{X})\times(Y-\bar{Y})}{\sqrt{\Sigma(X-\bar{X})^2} \sqrt{\Sigma(Y-\bar{Y})^2}}$$

$$= \frac{451391023}{\sqrt{448530984} \times \sqrt{454269609}}$$

$$= 0.9659$$

### Karl Pearson Correlation Coefficient of Current Assets and Total Assets

#### Standard Chartered Bank

The data have been coded by( Rs. in Million)

Fiscal Year	CA(X)	TA(Y)	$\bar{X}$	$X-\bar{X}$	$(X-\bar{X})^2$	$\bar{Y}$	$Y-\bar{Y}$	$(Y-\bar{Y})^2$	$(X-\bar{X}) \times (Y-\bar{Y})$
2064/065	33218	33335	39811	-6593	43467649	39924.4	-6589.4	43420192.4	43443914
2065/066	40450	40587	39811	639	408321	39924.4	662.6	439038.76	423401.4
2066/067	40095	40213	39811	284	80656	39924.4	288.6	83289.96	81962.4
2067/068	43704	43810	39811	3893	15155449	39924.4	3885.6	15097887.4	15126641
2068/069	41588	41677	39811	1777	3157729	39924.4	1752.6	3071606.76	3114370.2
Total	$\sum X = 199055$	$\sum Y = 199622$	$\sum \bar{X} = 39811$	$\sum (X - \bar{X}) = 0$	$\sum (X - \bar{X})^2 = 62269804$	$\sum \bar{Y} = 39924.4$	$\sum (Y - \bar{Y}) = 0$	$\sum (Y - \bar{Y})^2 = 62112015.2$	$\sum (X - \bar{X}) \times (Y - \bar{Y}) = 62190289$

$$\bar{X} = \frac{\sum X}{N} = \frac{199055}{5} = 39811 \quad \bar{Y} = \frac{\sum Y}{N} = \frac{199622}{5} = 39924.4$$

#### Karl's Pearson Coefficient of Correlation (r)

$$r = \frac{\sum (x-\bar{x}) \times (y-\bar{y})}{\sqrt{\sum (x-\bar{x})^2} \sqrt{\sum (y-\bar{y})^2}}$$

$$\begin{aligned} &= \frac{451391023}{\sqrt{622698040} \times \sqrt{62190289}} \\ &= 0.9732 \end{aligned}$$