

# CHAPTER-ONE

## INTRODUCTION

### **1.1 Background**

The Kingdom of Nepal covers an area of 147,181 square kilometers, and stretches 145-241 kilometers north to south and 850 kilometers west to east. "Nepal is one of the least developed countries in the world with a per capita income of less than \$ 200 per annum. Geographically, Nepal is a landlocked country sandwiched between China and India and has a very small economy compared with that of these two neighboring countries. Measured in terms of the size of GDP, the Chinese or Indian economies are respectively 115 times and 85 times larger than the Nepalese economy."<sup>1</sup>

The economic plight of Nepal is neither satisfactory nor praiseworthy. Rapid economic development is important for all countries of the world. It is more urgent for the least developed countries like ours. In this context, it is but natural that existing agricultural predominance in our country has to be reduced. Nepal like other developing countries has been facing the problem of accelerating the pace of economic development. The other reason behind the lack of economic development is that the majority of Nepalese are illiterate, which has restricted the people to primitive and traditional forms of occupation.

In context to Nepal, today, banking sector has become one of the major sectors. However, only few Nepalese knows the significance of bank and banking activities. People are unaware of the fact that in any plan of economic development, banking occupies a position of strategic importance. Banking services are extremely important in a free market economy. They generally serve two primary purposes. First, by supplying customers with the basic medium of exchange (cash, checking accounts, and credit cards), bank play a key role in the way goods and services are purchased. Without these familiar methods of payment, goods previously have to be exchanged by barter (trading one goods for another), which is extremely time-consuming and inefficient. Second, by accepting money deposits from the savers and then lending the money to borrowers, banks encourage the flow of money to productive uses and investments. This in turn allows the economy to grow. Without this flow, savings would sit idle in someone's safe or pocket, money would not be available to be borrowed by anyone, people would not be able to purchase cars or houses, and businesses would not blossoms as they do now. Thus, bank makes a better use of money and mobilizes the people savings in productive sector. It helps in

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<sup>1</sup> Yubaraj Khatiwada, *Some Aspects of Monetary Policy in Nepal*, South Asian Publishers Pvt. Limited, NewDelhi, 1994, p. 1.

every aspect to the government. In fact, banks are the nerve center of the economy and the barometer of economic prosperity.

"A bank is an institution whose debts (bank deposits) are widely accepted in settlement of their people's debts to each other."<sup>2</sup>

In the words of Kent," A bank is an organization whose principal operations are concerned with the accumulation of the temporarily idle money of the general public for the purpose of advancing to other for expenditure."

In the words of Banking Regulation Act of India," Banking means the accepting for the purpose of lending or investment of deposit of money from the public repayable on demand or otherwise, and withdrawal by cheques, draft or otherwise."

In the words of U.S. Law," Any institution offering deposits subject to withdrawal on demand and making loans of a commercial or business nature is a bank."

Banking is of ancient origin, though little is known about it prior to the 13<sup>th</sup> century. Many of the early "bank" dealt primarily with coin and bullion, much of their business being money changing and the supplying of foreign and domestic coin of the correct weight and fineness. An important early group of banking institutions was the merchant bankers. Gradually, they developed with time and need of human wants and now have come to in modern type. "The importance of banking development, however, was realized only recently, and therefore, the banking system in the country has a very short history. It was only after the establishment of Nepal Bank Limited in 1994 B.S., that the histories of organized banking system begin in the country."<sup>3</sup> Rastriya Banijya Bank established in 2022 B.S. followed the process. With the establishment of RBB and ADB, banking service spread to both the urban and rural areas.

Once these people got the banking services, they were expecting improvement and efficiency. However, excess political and bureaucratic interference and absence of modern managerial concept in these institutions was hurdle in this regard. Banking service to the satisfaction of customers was a far cry. These factors led the government to encourage joint venture in banking sectors. The government's policy of allowing foreign joint venture banks to operate in Nepal is basically targeted to encourage local traditional run commercial banks to enhance their banking capacity through competition, efficiency, modernization via, computerization and promote customer services.

Thus, the banks have to develop various strategies to gain competitive edge over the rest of the banks. Among various strategies, the bank has to

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<sup>2</sup> R.S Sayers, *Modern Banking*, Oxford Clearendon Press, India, 1967, p. 3.

<sup>3</sup> Gunanidhi Sharma, *Monetary Structure of the Nepalese Economy*, South Asian Publishers, New Delhi, 1987, p. 52.

develop; one of the most important strategies to develop is efficient and effective working capital management. Working capital is defined as all the short term assets such as cash, marketable securities, accounts receivables and inventories which are used in the daily operations of the business. Since working capital management is quite essential to conduct daily operations of each and every business organizations, it is regarded as the life-blood and nerve knot of a business firm. Thus, the present study aims to analyze the working capital management of the three JVBs operating in Nepal with the help of secondary data for the period 2003/04 to 2009/10.

## **1.2 History of Commercial and Joint Venture Banks in Nepal**

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

"Commercial bank is the corporation which accepts demand deposits subject to cheques and makes short term loans to business enterprises regardless of the scope of its other sources."<sup>4</sup>

"The name commercial bank was first used to indicate that the loans extended were short term loans to business, though loans later were extended to consumers, governments and other non-business institution as well. In general, the assets of commercial banks tend to be more liquid and carry less than the assets held by other financial intermediaries."<sup>5</sup>

Commercial banks play an important role in affairs of the economy in various ways. Commercial banks are the largest and most diversified intermediaries in ranges of assets held and liabilities issues. The salient feature of commercial banks lies, in fact not in their assets, but in their liabilities. The operations of commercial banks record the economic pulse of the economy. The size and composition of their transactions mirror the economic happening in the country. They are as essential instrument of accelerated growth in a developing economy. By mobilizing community savings and diverting them into productive channels, Commercial banks expand the tempo and appreciate the Value of aggregate economic activity in the economy. In Nepal, Commercial banking started with the establishment of "Nepal Bank Limited" under the Nepal Bank Act 1993 B.S. The authorized capital was contributed by the government (51%) and remaining by public (49%). Nepal Bank Limited was established in 1994 B.S.

The concept of joint venture was a revolutionary concept in the banking history. Banks operating in the form of joint venture is known as Joint Venture

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<sup>4</sup> American Institution of Banking, *Principle of Banking Operation*, USA, 1972, p. 1.

<sup>5</sup> *The New Encyclopedia Britannica*, USA, 1991, Vol. 3.

Bank. Joint Venture Bank is an effect of strategic alliances- an arrangement in which two corporations combine forces to form a cooperative partnership in order to share risk of development, to offset one's weaknesses with strengths of other and alike others. In Nepal, JVBs are registered under the commercial bank act, 2021 B.S. and operated under the commercial bank act, 2031 B.S. They have joint venture between Nepalese investor and their parent foreign banks. The parent foreign bank occupies certain percentage of shares not exceeding 50% and applies their international management and network. The financial and non-financial institutions as well as private sector share the domestic portion of the investment.

There were many JVBs established after 2040 B.S. The inception of "Nabil Bank Limited in 2041.03.29 (12<sup>th</sup> July 1984) as a first Joint Venture Bank proved to be a milestone in the history of banking. Nabil Bank Limited gave a new ray of hope to the sluggish financial sector. The second JVBs "Nepal Indosuez Bank Limited"<sup>6</sup> were established in 2043 B.S. after the incorporation of NIBL, a new Joint Venture Bank under the name of "Nepal Grindlays Bank Limited"<sup>7</sup> was established in 10<sup>th</sup> Magh 2043 B.S. It is the third JVBs of Nepal." After the establishment of NGBL, More JVBs were come into existence after the initiation of government's policy of economic liberalization and privatizations in 2049 B.S."<sup>8</sup> They are Himalayan Bank Limited (2049), Nepal SBI Bank Limited (2050), Nepal Bangladesh Bank Limited (2051), Everest Bank Limited (2051), Bank of Kathmandu (2052) and so on. These JVBs came into existence to develop the economic conditions of the nation.

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<sup>6</sup> Annual Report, *Nepal Investment Bank Limited*.

<sup>7</sup> Annual Report, *Nepal Grindlays Bank Limited*.

<sup>8</sup> *Gorkhapatra*, Nepal National Daily, Ashad 3<sup>rd</sup>, 2053.

### **About the bank: Nabil Bank Limited**

In the liberalized environment of Nepal, banking service has become highly competitive and customer oriented. Nepal Arab Bank Limited is one of the leading commercial bank in the banking scenario of Nepal. The bank was formally established as the third commercial bank in 2041 B.S. (July 12, 1984 A.D.). From their very inception in 1984 as the first joint venture bank to commence operations in kingdom of Nepal they have been a leader in terms of bringing the very best international standard banking practices, products and services. Initially Dubai bank Limited invested 50% of equity shares of Nabil bank. The shares owned by Dubai bank Limited were transferred to Emirates Bank International Limited and later on to National Bank Limited, Dubai.

Nabil bank was regulated with the authorized capital of Rs. 500 million, an issued capital of Rs. 492 million and Rs. 492 million as paid up capital. Today Nabil bank is a leader in the financial sector in Nepal. With a network that has 47 points of representation spread across the kingdom; complimented by a network of ATMs and now Nabilnet and NabilTele the ease of access of accounts and information for the convenient of their customers.

They are a full service bank providing an entire range of products and services, starting with deposit accounts in local and foreign currency, Visa and MasterCard denominated in rupees and dollars, Visa Electron debit cards, Personal Lending products for Auto, Home and Personal loans, Trade Finance products, Treasury services and Corporate Financing. The main aim of the bank is to be able to meet the entire gamut of financial requirements that is why they pride themselves in being 'Your Bank at Your Service'.

### **About the bank: Himalayan Bank Limited**

After the opening of Nepalese door to foreign commercial banks during mid eighties, Nepal took pride in growth and progress in the banking industries. With this development by his Majesty government, Himalayan Bank Limited was set up in the private sector. Himalayan Bank Limited was incorporated in 1992 by a few distinguished business personalities of Nepal in partnership with Employees Provident Fund and Habib Bank Limited, one of the largest commercial bank of Pakistan. Banking operation commenced from January 1993. It is the first commercial bank of Nepal whose maximum shares are held by the Nepalese private sector. Besides commercial banking services, the bank also offers industrial and merchant banking services. It is the fourth joint venture bank in Nepal established under the Commercial Act 2031 B.S.

At the launch period, HBL had authorized capital of Rs. 240 million, issued capital of Rs. 120 million and paid up capital of Rs. 60 million. HBL has always been committed to providing a quality service to its valued customers, with a personal touch. The Bank, wherever possible, offers tailor made facilities

to its clients, based on the unique needs and requirements of different clients. To further extend the reliable and efficient services to its valued customers, Himalayan Bank has adopted the latest banking technology. This has not only helped the Bank to constantly improve its service level but has also prepared the Bank for future adaptation to new technology. The Bank already offers unique services such as SMS Banking and Internet Banking to customers and will be introducing more services like these in the near future.

The Bank has five branches in Kathmandu Valley at the following locations: Thamel, New Road, Maharajgunj, Pulchowk (Patan) and Suryavinayak (moved from Nagarkot). In addition, the bank also has nine other branches outside Kathmandu Valley in Banepa, Tandi, Bharatpur, Birgunj, Hetauda, Bhairawa, Biratnagar, Pokhara, Dharan and Butwal. The Bank will be aggressively opening new branches at different parts of the Kingdom to serve its customers better.

HBL is pioneer to bring products like credit cards, ATM and tele-banking, cheques that are hard to counterfeit and so forth. It also provides a full range of banking products and services such as current, savings, call and term deposit accounts, fund transfer services, safe deposit lockers, priority banking, home banking, auto loan, home loan, foreign exchange services, personal loan, corporate employee accounts, letters of credit, commercial lending, etc.; catering to a wide range of customers from individuals, to mid-market local corporate to multinationals and large public sector companies, as well as embassies, aid agencies, airlines, hotels and government corporations.

### **About the bank: Standard Chartered Bank Nepal Limited**

Standard Chartered Bank Nepal Limited enjoys the status the largest bank currently operating in Nepal .it has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the bank is an integral part of standard Chartered group who has 75% ownership in the company with 25% shares owned by the Nepalese public. The Bank has been the pioneer in introducing 'customer focused' products and services in the country and aspires to continue to be a leader in introducing new products and highest level of service delivery. It is the first Bank in Nepal that has implemented the Anti-Money Laundering policy and applied the 'Know Your Customer' procedure on all the customer accounts.

SCBNL was regulated with the authorized capital of Rs 100 Million, an issued capital of Rs. 50 million and Rs. 30 million paid up capital. An integral part of the only international banking Group currently operating in Nepal, the Bank enjoys an impeccable reputation of a leading financial institution in the country. With 11 points of representation (7 Branches) and 9 ATMs across the Kingdom and with over 300 local staff, Standard Chartered Bank Nepal Ltd. is in a position to service its customers through a large domestic network. In

addition to which the global network of Standard Chartered Group gives the Bank the unique opportunity to provide truly international banking in Nepal.

Standard Chartered Group employs 30,000 people in over 500 locations in more than 50 countries in the Asia Pacific Region, South Asia, the Middle East, Africa, the United Kingdom and the Americas. It is one of the world's most international banks, with a management team comprising 79 nationalities. The Bank is trusted across its network for its standard of governance and its commitment to making a difference in the communities in which it operates.

It offers a full range of banking products and services in Consumer and Wholesale banking such as current, savings, call and term deposit accounts in Local & Foreign currency, fund transfer services, credit card services, 24 hour ATM services, safe deposit lockers, foreign exchange services, priority banking, home banking, auto loan, home loan, personal loan, SMS banking, corporate employee accounts, letters of credit, commercial Lending (Working Capital), etc.; catering to a wide range of customers from individuals, to mid-market local corporate to multinationals and large public sector companies, as well as embassies, aid agencies, airlines, hotels and government corporations.

### **1.3 Focus of the Study**

The present study "Working Capital Management of the JVBs Nabil Bank Limited, Himalayan Bank Limited and Standard Chartered Bank Nepal Limited" is intended to analyze the JVBs practice in working capital management and to examine management performance in this segment of financial management. This information will help to determine the extent of efficiency and effectiveness of the three JVBs in respect of managing working capital to the optimum level. Besides, this study also focuses on the relationship between current assets and current liabilities and relationship of other variables, which affect the working capital management of the three JVBs during past seven years up to 2010 A.D.

All the companies need a proper financial management for successful operation because financial management is universally involved in the management of private enterprises as well as public enterprises as oxygen in atmosphere. Therefore, financial management is a major component of company. Financial management has full responsibility about financial problems of the firm. It provides many ideas about how to utilize optimally the limited funds in the firm. So, proper financial management is necessary to achieve the objectives for every company. The study of financial management remains incomplete without study of working capital management.

Working capital is the oil that lubricates the wheels of business. Without adequate oil, machines grind to a halt and a business with inadequate working capitates will do like-wise. There might not be many business firms in the world where, besides investment in fixed assets, funds would not be needed for carrying on day to day operations of the business. Probably, the daily cash

receipts may be adequate to meet the day to day expenses of the dealings in some business concerns. But in most of them it is essentials that a certain proportion of funds are kept invested in the form of different current assets like inventories, receivables, cash and marketable securities. Liquidity and profitability are two important and major aspects of corporate business life. No firm can survive, if it has no liquidity. A firm may exist without making profits but cannot without liquidity. A firm not making profits may be treated as sick but, one having no liquidity may soon meet its downfall and ultimately die. Working capital management has thus become a basic and broad measure of judging the performance of a business firm.

“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.”<sup>9</sup>

Working capital, thus, consists of four main components: cash, marketable securities, inventory, and accounts receivable. The management of current assets (normally converted into cash within an accounting year) and current liabilities (generally discharged within one year) and the interrelationship that exists between them may be termed as working capital management. Working capital management is also known as current assets management because it requires much of the financial manager’s time. A common thread underlines all current assets management. For each type of assets, firms face a fundamental tradeoff: current assets (that is, working capital) are necessary to conduct business and the greater the holding of current assets, the smaller the danger of running out, hence the lower the firm’s operating risk. However, holding working capital is costly- if inventories are too large, then the firm will have assets, which earn a zero or even negative return if storage and spoilage costs are high. And, of course, firms must use capital to buy assets such as inventory; this capital has a cost, and this increase the downward drag from excessive holding of inventories (or receivables or even cash). So there is pressure to hold the amount of working capital to the minimum consistent with running the business without interruption.

“Working capital may be regarded as the life-blood of a business. Its effective provision can do much to ensure the success of business while its inefficient management can lead not only to loss of profit but also ultimate downfall of what otherwise might be considered as a promising concern, much has been rightly made of the long term planning in the use of working capital is immeasurable .”<sup>10</sup> An enlightened management should, therefore, maintain a right amount of working capital on a continuous basis. Only then a proper functioning of the business operations will be ensured. Sound financial and statistical techniques, supported by judgemental, should be used to predict the quantum of working capital needed at different time periods.

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<sup>9</sup> J.C. Van Horne, *Financial Management & Policy*, Prentice Hall of India Private Limited, 1973, p. 384.

<sup>10</sup> P.K. Kulmany, *Financial Management*, Himalaya Publishing House Mumbai, 1983, p. 385.



It is quite known that operating a company effectively and efficiently is more important than establishing it. Thus, the researcher has taken this subject for detailed study, keeping in mind all the above facts which play a pivot role in upliftment of any organizations. The main focus of the study is, thus, stressed towards the comparative study of working capital management of the selected JVBs viz. NABIL, HBL, and SCBNL, to analyze the working capital, to find out major bleeps and suggestive recommendations to the selected companies to accomplish its objective of effective working capital management.

#### **1.4 Statement of the Problems**

Many times, in the event of the failure of a business the shortage of working capital funds is given out as its root cause. But in the ultimate analysis it may be the mismanagement of working capital funds of the business that could have converted an otherwise successful business into an unsuccessful one. Inadequacy of working capital is a symptom, and sometimes an excuse, but by no means the cause, of business failure. It is obvious from above that working capital should neither be too little nor too much; it must just be rightly balanced. Excessive and inadequate amount of working capital creates problem and hence the firm suffers from technical insolvency. Technical insolvency of the firm damages its long-term prospect. Therefore the management of the firm must be effective and efficient in managing the firm's working capital. Today, most of the private and public enterprises have well recognized the importance of proper working capital management. However, Nepalese enterprises and firms are still facing the problem of working capital management.

Banks are one of the apex entities of economy in any nation for promoting different business activities such as trade, industry and commerce. Hence, necessity of these institutions has been realized the most. Earlier only two banks were in operation namely Nepal Bank Limited and Rastriya Banijya Bank before the inception of JVBs. The government liberal policy as well as economic growth resulted in the introduction of many banks from the private sector. Although, JVBs are operationally more efficient, having better performance while comparing with local banks, but they are still facing many problems. The main locus of the statement of the problem is stressed towards the comparative study of working capital management of the selected JVBs viz. NABIL, HBL, and SCBNL. All the three mentioned JVBs have been competing in the same economic environment and financial market. Similarly, all the three banks are operating fully under computerized system to meet the growing competition in banking system.

Lack of appropriate training and oriental classes to their different level of employees, ineffective working capital management, lack of proper policy planning, organizing, controlling, reported resources and market information are hindering their prospective growth.

## **1.5 Research Questions**

The present study tries to explore the answer under the following key issues:

- ⇒ How far the three JVBs Nabil, HBL, SCBNL are being able to utilize its different assets?
- ⇒ Has the se JVBs followed a scientific and systematic management or not?
- ⇒ What factors have been taken by these JVBs in estimating the working capital need of a company?
- ⇒ How far these JVBs been able to utilize the working capital for generating adequate profitability?
- ⇒ How far have JVBs been able to convert the mobilized resources into investment?
- ⇒ Is there proper investment in each types of working capital in these JVBs?
- ⇒ Is the positive composition between current assets and current liability?
- ⇒ Which of the current assets are more problematic for these JVBs?
- ⇒ What type of opportunities and threats these bank faces?
- ⇒ What are the major strength and weakness of these banks?
- ⇒ Based on the above questions, which bank has faced more financial risk?

## **1.6 Hypothesis of the Study**

Every research has to start with certain assumptions and presumption through which subsequent study might prove and disapprove. It is the hypothesis round which entire process revolves. A hypothesis helps the researcher in proceeding further and finding solution of the problem, which he/she wants to study. Without hypothesis, the effectiveness of the research is not possible, to know the scope of study, nature of data to be collected and the one to be discarded. Again, the hypothesis helps in organizing the collected data in a very systematic way and in fact it stands at the mid-point of research directing towards particular way of finding tentative solution to the question of how and why.

A hypothesis is a conjectural statement, of the relationship between two or more variables. Hypothesis is always in declarative sentence form, and they relate either generally or specifically, variables to variables.

The selection of the topic has been made with a view to evaluating, analyzing and examining the working capital management of the Himalayan Bank Limited, Standard Chartered Bank Nepal Limited and Nabil Bank Limited in Nepal. It is true that these JVBs have a high capital employment ratio but unfortunately due to certain causes its development has not met the desired needs of the country. Therefore, it is assumed that the leading factor which has been obstructions and preventing the growth of these JVBs is mainly improper and inefficient management of working capital. If the working capital funds could

have been managed properly, the JVBs would have been put back upon a better financial footing.

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

- There is no significant difference in current assets of the three JVBs.
- There is no significant difference in current liabilities of the three JVBs.
- There is no significant difference in cash and bank balance of the three JVBs.
- There is no significant difference in net profit of the three JVBs.
- There is no significant difference in receivables of the three JVBs.
- There is no significant difference in net working capital of the three JVBs.

## **1.7 Objectives of the Study**

The primary objectives of the study is to identify the existing problems of the working capital management of selected different joint venture banks more over, following are the specific objectives of the study:

- To analyze the current assets and current liabilities of the selected banks understudy during the seven years period of 2003/2004 to 2009/2010.
- To evaluate and analyze the net profit of the selected joint venture banks.
- To examine the working capital with the help of trend analysis.
- To identify various working capital aspects of the selected banks.
- To provide constructive solutions for solving working capital management problems.

## **1.8 Need and Significance of the Study**

At present the JVBs are gaining a wide popularity through their efficient management and professional services and playing an eminent role in the economy. This study no doubt will have importance to various groups but in particular is directed to a certain groups of people/organizations.

The study of working capital management of NABIL Bank Limited, Himalayan Bank Limited, and Standard Chartered Bank Nepal Limited will be Beneficial to the following:

### **a) To the Shareholders:**

Shareholders are the true owners of the company. As they are taking a major risk by investing their large capital, so they deserve to get each and every information they seek for regarding the firm. This study will be useful to them for acquiring the answers to the following questions:

- How funds are utilized?
- To what extent they are gaining?
- Is the productivity of their limited resources satisfactory?

### **b) To the Management:**

This study will be helpful to go deeply into the various matters as to why the performance of their bank is better or worse than other joint venture banks. The management will be able to find out the loose areas and gaps, which can be corrected in near future.

**c) To the Policy-Makers:**

Officers of government, ministry, central bank, and security exchange and tax office can formulate appropriate policies, rules and regulations regarding the operations of the commercial banks with the help of this analysis.

**d) To the Reader:**

It will also provide a helping hand to those who are interested to study or conduct research about working capital management.

### **1.9 Limitations of the Study**

As every study has been conducted within certain limitations and assumptions, thus the present study has the following assumptions and limitations:

- a) The study is limited to working capital management.
- b) The study has been confined only three banks named NABIL bank Limited, Himalayan Bank Limited and Standard Chartered Bank Nepal Limited.
- c) The study is based mainly on secondary data, and to some extent, on primary data, too.
- d) The study covers seven years study from fiscal year 2003/2004 to 2009/2010.
- e) The information furnished by the staff members is assumed to be free from biasness and is regarded as complete.
- f) The data available in published annual reports have been assumed to be correct and true.
- g) Due to the time constraint not all the related areas are possible to cover in depth.
- h) Only limited financial tools and techniques are used for analysis. So this study may not be sufficient for depth analysis.

### **1.10 Organization of the Study**

The study comprises five chapters; each devoted to some aspects of the study of comparative study of Working Capital Management of Nepalese Joint Banks namely Nabil Bank Limited, Standard Chartered Bank Nepal Limited and Himalayan Bank Limited. Each chapter contains:-

Chapter-1	Introduction
Chapter-2	Review of Literature
Chapter-3	Research Methodology
Chapter-4	Presentation and Analysis of Data
Chapter-5	Summary, Conclusion and Recommendation

The contents of each of the chapter of this study are briefly mentioned here:

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

The second chapter is devoted to theoretical analysis and brief review of related literature. It discusses the theoretical framework and review of major related studies conducted before. The theoretical and review of related literature conducted in this part provide a framework with the help of which this study has been accomplished.

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

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

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

Finally bibliography and appendices have also been included in the last part of the study.

# CHAPTER-TWO

## REVIEW OF LITERATURE

### 2.1 Conceptual Review

The term working capital originated with the old Yankee peddles, who would load up his wagon with goods and then go off on his route to peddle his wares. The merchant was called working capital because it was what he actually sold, or “turned over,” to produce his profits. The wagon and horse were his fixed assets. He generally owned the horse and wagon, so they were financed with “equity” capital, but he borrowed the funds to buy the merchandise. These borrowings were called working capital loans, and they had to be repaid after each trip to demonstrate to the bank that the credit was sound. If the peddler was able to repay the loan, then the bank would make another loan, and banks that followed this procedure were said to be employing “Sound banking practices.”

Working capital management was studied as a part of economics in the beginning of the 19<sup>th</sup> century but today it is being studied as a separate entity. It is considered as the heart and soul of any business and working capital decision directly relates to everything that happens in business. Working capital policy affects every activity of business such as production, personnel, marketing, finance, etc. Working capital management ensures better liquidity stock control and profitability.

"Sufficient working capital must be provided in order to take care of normal process of purchase of raw materials and supplies, turning out finished products, selling the products and waiting for payment to be made. If the original estimates of working capital are insufficient, some emergency measure must be resorted to or business comes to dead stop."<sup>11</sup>

Working capital management involves both setting working capital policy and carrying out that policy in day to day operations. At first glance, it might seem that the working capital management is not as important as capital budgeting is not as important as capital budgeting, dividend policy, and other decisions that determine a firm's long term direction. However, in today's world of intense global competition, working capital management is receiving increasing attention from managers striving for peak efficiency. In fact the goal of many leading companies today-including American Standard, Campbell Soup, General Electric, Quaker Oats, and Whirlpool-is zero working capital. Proponents of the zero working capital concept claims that a movement toward this goal not only generates cash but also speeds up production and helps businesses make more timely deliveries and operate more efficiently. The

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<sup>11</sup> W.H.Laugh, *Business Finance*, Ronald Press, New York, 1917, p. 355.

concept has its own definition of regarding working capital: Inventories + Receivables - Payables. The rationale here is (1) that inventories and receivables are the keys to making sales, but (2) that inventories can be financed by suppliers through accounts payable.

## **2.1.1 Working Capital Theories**

### **2.1.1.1 Nature of Working Capital / Conceptual Thoughts**

Working capital is essentially circulating nature. It is subject to fluctuations. It is influenced by the type, size and the length of the operating cycle of a business firm. The amount of working capital differs not only in different industries, but also from one firm to another firm in the same industry. It has been even compared with a river, which is always there, but that the water level is constantly changing. Thus, the nature of working capital is not fixed it is changeable at different time on the basis of transaction of goods.

Working capital, thus, has a volatile nature. This nature present some problems and contents in financing working capital need. The volatile nature of working capital refers to the change in total current assets. Thus, the nature of working capital is not static; it is changeable as per transactions of goods.

### **2.1.1.2 Management of Working Capital**

Working capital can be regarded as the life blood of the business firm. There might not be many business firms in the world where, besides investment in fixed assets, funds would not be needed for carrying on day to day operations of the business. Probably, the daily cash receipts may be adequate to meet the day to day expenses of the dealings in some business concerns. But in most of them it is essential that a certain proportion of funds be kept invested in the form of different current assets like inventories, receivables, cash and marketable securities, liquidity and profitability are two important and major aspects of corporate business life. No firm can survive, if it has no liquidity. A firm may exists without making profits but cannot survive without liquidity. A firm not making profits may treated as sick but, one having no liquidity may soon meet with its downfall and ultimately die. Working capital management has thus become a basic and broad measure of judging the performance of a business firm.

Technically, working capital management is an integral part of the financial management. The financial manager must determine the optimum level of working capital funds and also the optimum composition of current assets and current liabilities. He must ensure that the appropriate sources of funds are used to finance working capital and also see that short term liabilities of the business are met well in time.



### **2.1.1.3 Concept of Working Capital**

An enterprise needs not only fixed capital but also Working Capital. The working capital is the capital needed to conduct the day-to-day operations of a business. Working capital is, therefore, a border term and there are chances of misunderstanding it.

In fact, there are two concepts of working capital: gross concept and net concept which is highlighted below:

#### **A. Gross Concept**

In simple terms, gross concept of working capital may be defined as the total of current assets. In other words, if all expenses needed to run day-to-day operation of business, such as amount to be invested in the form of cash, finished goods receivables, etc. are put together, it is called working capital. This working capital and total current assets are synonymous. Gross concept is regarded as the quantitative nature.

"The term working capital refers to the gross working capital and it represents the amount of funds invested in total current assets; thus the gross working capital is the capital invested in total current assets of an enterprise".<sup>12</sup>

The gross working capital concepts focus attention on two aspects of current assets management which are listed below-

- Optimum investment in current assets.
- Financing of current assets.

The consideration of the level of investment in current assets should be avoiding two danger points- excessive and inadequate. Investment in current assets should be just adequate not more or less to the needs of business firm. Thus, gross concept of working capital is the sum of all current assets, which can be converted, in the ordinary course of business, into cash within one accounting year and includes:

- a) Cash in hand
- b) Cash at bank
- c) Bills receivable
- d) Debtors
- e) Marketable securities
- f) Prepaid Expenses or paid in advance
- g) Accrued or Outstanding income
- h) Short term loan and advances
- i) Short term investment
- j) Inventories

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<sup>12</sup> R.K Sharma and S.K.Gupta, *Management Accountancy Principles And Practices*, 7<sup>th</sup> edition 1996, p. 21.

- Raw materials
- Finished goods
- Work in progress
- Supplies

## B. Net Concept

In simple terms, net concept of working capital can be defined as the excess of current assets over current liabilities. Net concept is regarded as qualitative and time concept nature. L.J.Gitman has defined net concept of working capital as "the portion of a firm's current assets which are financed from long term funds".<sup>13</sup>

The net working capital concept focus attention on two aspects which are listed below-

- Indicate the liquidity position of the firm.
- Suggest the extent to which working capital needs may be financed by permanent source of funds.

The need for the net concept arises due to the fact that the gross concept fails to consider 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:

- a) Sundry creditors
- b) Bills payables
- c) Notes payables
- d) Account payables
- e) Bank overdraft
- f) Short term loan
- g) Provision for taxation
- h) Outstanding expenses
- i) Advance income
- j) Accrued income
- k) Accrued interest on loan and debentures
- l) Long term loan to mature within a year

Working capital has two concepts- the total of current assets (gross concept) and the excess of current assets over current liabilities (net concepts). Both these concepts of working capital have their own significance. "If the objective is to measure the size and extent to which current assets are being used, 'gross concept' is useful; whereas in evaluating the liquidity position of an undertaking 'net concept' becomes pertinent and preferable".<sup>14</sup>

<sup>13</sup> L.J.Gitman, *Principles of Managerial Finance*, 1976, p. 150.

<sup>14</sup> R.K.Mishra and S.Ravishanker, *Current Perspectives in Public Enterprise Management*, Ajanta Publication, New Delhi, 1985, p. 316.

In summary, it may be emphasized that gross and net concepts of working capital are two important facets of the working capital management. There is no precise way to determine the exact amount of gross, or net, working capital for every firm. The data and problems of each company should be analyzed to determine the amount of working capital.

#### **2.1.1.4 Types of Working Capital**

Working capital can be classified under the following heads:

##### **1. Permanent, fixed or regular working capital**

Permanent working capital is the minimum amount of current assets which is continuously required by the business to carry on its operations. This level of working capital should always be maintained by the business, so that it might in a position to run the business even during the dullest season of the year. It is only due to this characteristic that it is sometime also known as regular working capital.

Permanent working capital has the following characteristics:

- It is classified on time basis.
- It continuously varies from one asset to another and continues to remain in the business process.
- It also varies with the growth of business.

##### **2. Fluctuating, temporary, variable or seasonable working capital**

Fluctuating working capital is the extra amount of current assets particularly cash, receivables and inventory which are needed during the more active business season of the year. It is temporarily invested in current asset and its main features are:

- It is particularly paired to a concern of a seasonal or cycle nature.
- It is not always gainfully utilized, though it may change from one asset to another as fixed working capital does.

##### **3. Balance sheet working capital**

The working capital which is calculated from the items appearing in the balance sheet is known as balance sheet working capital. Gross working capital is represented by the total of current assets, and net working capital is represented by the excess of current assets over current liabilities.

##### **4. Cash working capital**

The working capital is calculated on the basis of items appearing in the profit and loss account of a business. It shows the actual flow of money at a

particular time and is considered to be the most realistic manner of showing working capital management. It is based on the operating cycle concept which has assumed a great significance in financial management in recent years. The reason is that cash working capital shows the adequacy of the cash flow.

## **5. Negative working capital**

When current liabilities exceed current assets, such a situation is termed as deficit of working capital. Kennedy and Mc Mullen observe, " a working capital deficit exists if current liabilities exceed current assets."

### **2.1.1.5 Need and Importance of Working Capital**

Working capital management has acquired important position and great significance in the recent past. It has been emphasized that a business should maintain a sound working capital position. It should have adequate capital to run its business operations. Both excessive as well as inadequate working capital positions are dangerous from the firm's point of view. Excessive working capital means idle fund which earn no profits for the firm. Paucity of working capital not only impairs firm's profitability but also results in production interruption and inefficiencies.

There are many aspects of working capital management which make it an important function of the financial manager among them some are mentioned below:

- a) It enables a concern to operate its business more efficiently, because there is no delay in obtaining raw materials etc.
- b) It enhances the creditability and goodwill of the firm.
- c) It makes it possible for a business to meet all its current obligations well in time and to take advantage of cash discount.
- d) It enables the concern to hold its own even during a period of business depression.
- e) It helps in the upliftment of the morale of the management and employees.
- f) It enables a concern to extend favorable credit terms to customers.
- g) It ensures regular return to the investor.

### **2.1.1.6 Principles of Working Capital Management**

The Financial manager should consider the following principles while exercising working capital management:

#### **a) Principle of Risk Variation**

The word risk here refers to the immobility of a concern in maintaining sufficient working capital to pay for its liabilities. If working capital varies relative to sales, the level of risk that a concern assumes will also vary, and the opportunity of loss or gain will increase. In other words, there is a definite

relationship between the degree of risk and the rate of return. As a concern assumes more risk, the opportunity of gain or loss increase accordingly. As the level of working capital relative to sales decreases, the degree of risk increases. Thus, if the size of working capital goes up, the amount of risk goes down and the opportunity for loss/ gain is likewise adversely affected.

#### **b) Principle of Cost of Capital**

There are different sources of finance, for each source has a different cost of capital. It should be kept in mind that the cost of capital is in inverse proportion to risk.

#### **c) Principle of Maturity of Obligation**

A firm should make every attempt to relate maturities of obligation 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**

According to this principle, the amount of working capital invested in each segment should be adequately justified by a concern's equity position. Every rupee invested in the working capital should contribute to the net worth of the concern.

### **2.1.1.7 Determinants of Working Capital**

The firm should maintain a sound working capital position. It should have adequate capital to run its business operations. Both excessive as well as inadequate working capital positions are dangerous from the firm's point of view. Excessive working capital means idle fund which earns no profit for the firm. Paucity of working capital not only impairs firm's profitability but also results in production interruptions and inefficiencies.

The working capital is determined by a wide variety of factors. These factors however affect different enterprises differently. They also vary from time to time. Therefore, it is often said that there are no set rules or formulas to determine the level of the working capital of a firm. In fact a large number of factors affect the working capital requirements and all factors plays different importance. Thus, an analysis of related factors should be made in order to determine the size of investment in working capital. These factors are highlighted below-

- a) Manufacturing Cycle
- b) Nature and Size of Business
- c) Business Cycle Fluctuations
- d) Credit Policy
- e) Growth and Expansion Activities
- f) Availability of Credit
- g) Price Level Change
- h) Technological Development
- i) Profit Level
- j) Level of Tax
- k) Transportation and Communication Facilities

### **2.1.1.8 Effects of Excessive Working Capital**

The firm should maintain adequate working capital to run its business operation in a continuous basis. But it does not mean that the firm should maintain working capital more than its requirement because excessive working capital means idle funds which earn no profits for the firm. There are many negative effects of excessive working capital which can be highlighted below-

- It results in unnecessary accumulation of inventories which may result the chances of inventory waste, theft, mishandling and losses increase.
- It indicates defective credit policy and slack collection period which may result higher bad debts incidence that adversely affects profits.
- It may increase the tendency of the firm to accumulate inventories to make speculative profits grow. This may tend to make dividend policy liberal and difficult to cope with in future when the firm is unable to make speculative profits.

- It may tempt the firm to overtrade which will engulf the financial soundness of the firm.
- It makes management complacent which degenerates into managerial inefficiency.

### **2.1.1.9 Effects of Inadequate Working Capital**

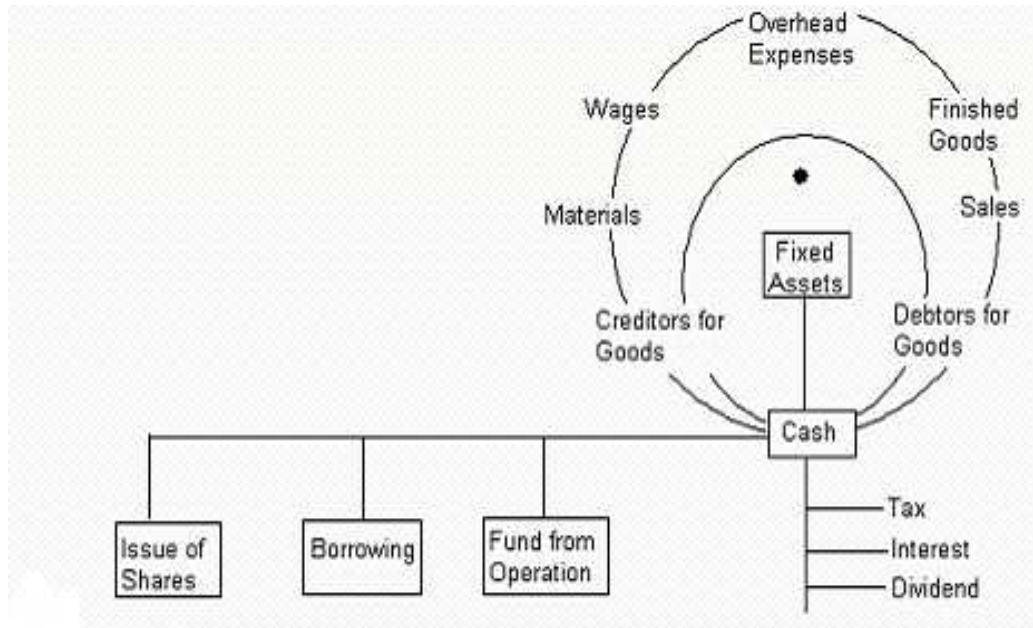
It is known from above that there are negative effects of maintaining excessive working capital but it does not mean that the firm should maintain working capital less than its requirement because paucity of working capital not only impairs firm's profitability but also results in production interruptions and inefficiencies. There are many negative effects of excessive working capital which can be highlighted below-

- a) It makes difficult for the firm to undertake profitable projects for non availability of the working capital funds and thus results in stagnates of growth.
- b) The rate of return on investment slumps because fixed assets cannot be efficiently utilized for the lack of working capital funds.
- c) It makes impossible to utilize production facilities fully due to unavailability of buying sufficient raw materials.
- d) It becomes difficult to implement operating plans and achieve the firm's profit target.
- e) Paucity of working capital funds renders the firm unable to avail attractive credit opportunities.
- f) It may not be able to make regular repair and maintenance of plant, machineries and tools to boost up production and reduce the unit cost of production.
- g) The firm may loose its reputation when it is not in a position to honour its short term obligations. As a result, the firm faces tight credit terms.

### **2.1.1.10 Circulation System of Working Capital**

The knowledge of the circulation system of working capital is very vital for the study of working capital management. Generally, the funds necessary for the operation of the business are acquired from the issue of shares, the issue of debentures, and other long term arrangements and from operations of business. The fund available from the above sources is used to purchase fixed assets, viz., plant and machinery, land and buildings and some other fixed assets, while the remaining part of the funds is used for day to day operations of the business, i.e. to pay creditors for raw materials purchased and to pay wages and overhead expenses for the raw materials processed. This allows the firm to have finished goods stocks and further sale of these finished stocks leads to generate cash or create account receivables. This procedure leads to profit generation and some part of the profit is used to pay tax, interest and dividends, while the remaining part is ploughed back in the business. This cycle goes on constantly throughout the life of business.

The working capital circulation system as described above is diagrammatically presented in the figure below-



**Figure:1 Circulation System of Working Capital**

### **2.1.1.11 Test of Working Capital**

Generally there are four tests of the working capital policy which are discussed below-

#### **i. Level of Working Capital**

With the careful analysis of the movements of the working capital in successive periods, the level of the working capital should be kept up.

#### **ii. Structural Health**

Structural health of the various components of the working capital should be considered. It is very vital to have a sound structural relationship among all the components which includes in the working capital from the view-point of liquidity.



### **iii. Circulation**

Circulation is one of the important features of the liquidity position. Ratios can be calculated to show the average period needed for the conversion of raw materials into finished stock, the finished stock into sales and the sales into cash.

### **iv. Liquidity**

Liquidity position is regarded as the more crucial and significant test to measure the working capital policy. The ratios which can be used for this purpose includes-current assets to current liabilities, inventory to current assets, quick assets to current liabilities, quick resources to current assets, and working capital to current assets.

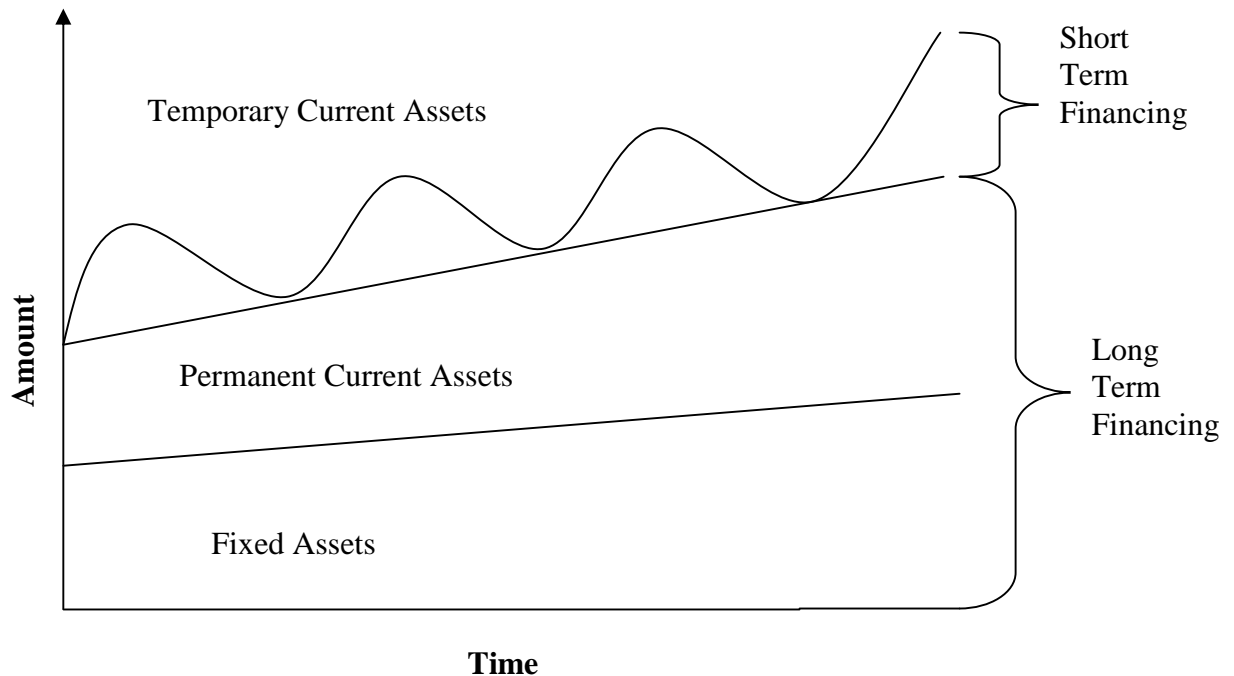
#### **2.1.1.12 Financing of Working Capital**

The term financing of working capital means making arrangement of funds which equals to the amount of working capital. Each and every firm must find out the sources of funds to finance its current assets. Current assets of a concern are financed by spontaneous current liabilities such as trade creditors, bank overdraft, short term loans and provisions, and long term sources such as share capital, debentures, retained earnings and debt from financial institutions. The relevant question that arises in current assets financing is: what should be the relative proportion of short term sources of financing and long term sources of finance. The following three approaches for determining an appropriate working capital financing mix have been applied in practice:

#### **a) Matching Approach**

Under this approach, the firm can adopt a financing approach which involves the matching of expected life of assets with the expected life of the source of funds raised to finance assets. In simple sense, the firm finances its short term needs with short term funds and long term needs with long term funds.

The concept of matching approach can be made clear with the figure demonstrated below:



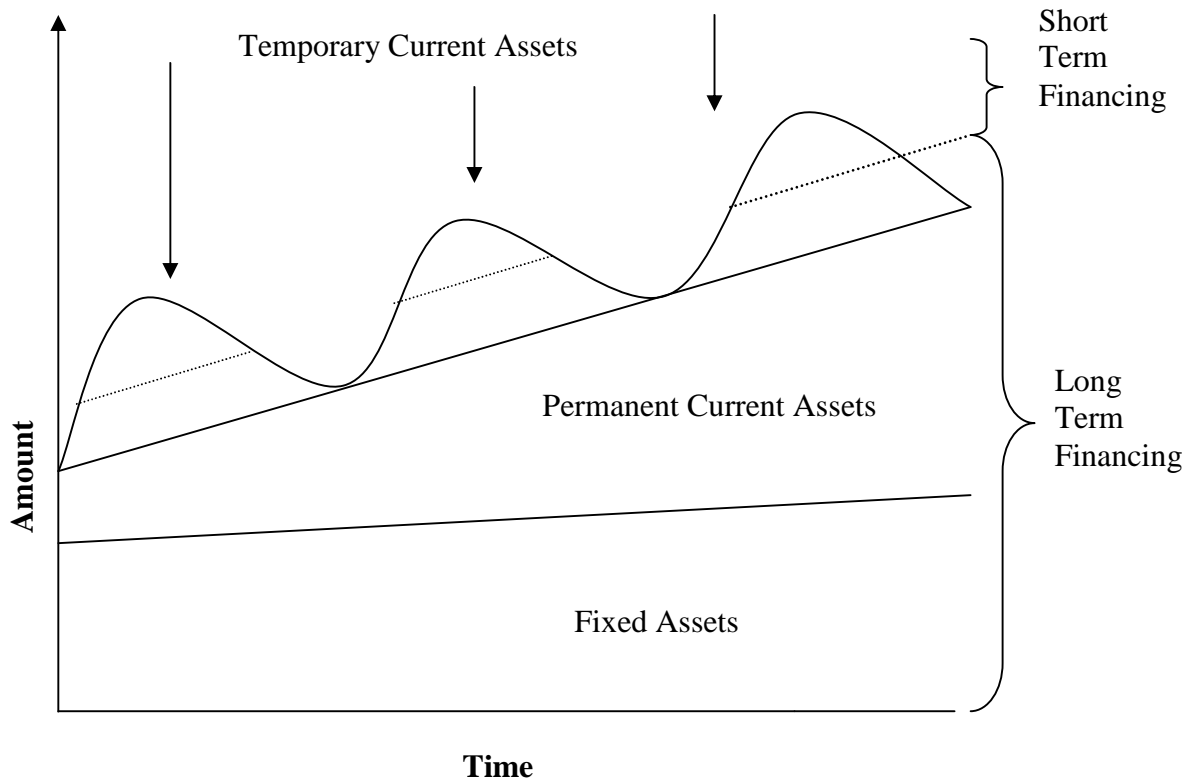
**Figure: 2 Matching Approach of Financing**

In the above figure, X-axis denotes time and Y-axis denotes amount. The figure clearly shows that under the matching approach only the short term variation shown at the top will be financed with a short term debt. Fixed assets would be financed with long term sources of funds.

### **b) Conservative Approach**

A firm may adopt a conservative approach in financing its working capital as an exact matching plan may not be possible in practice. Under this approach, the firm uses long term sources of funds for financing needs and the use of short term funds is limited only to emergency situations.

The concept of conservation approach can be made clear with the figure demonstrated below:



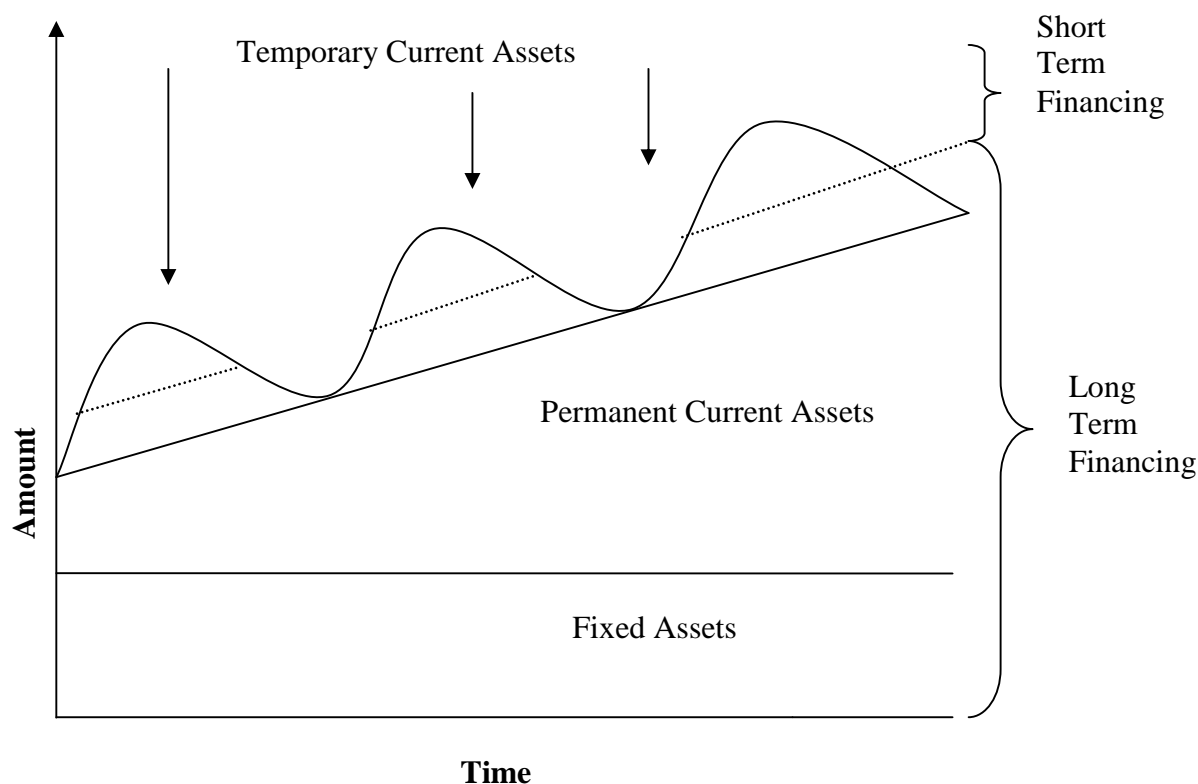
**Figure: 2 Conservative Approach of Financing**

In the above figure, X-axis denotes time and Y-axis denotes amount. The figure clearly shows that under conservative approach of financing long term funds are used to finance fixed assets permanent current assets and a part of temporary current assets.

### **c) Aggressive Approach**

Under this approach, the firm finances a part of its permanent current assets with short- term sources of funds. Some extremely aggressive concerns may even finance a part of their fixed assets with short term sources of funds. Thus, when the firm uses more short term financing, it is assumed to follow aggressive approach.

The concept of aggressive can be made clear with the figure demonstrated below:



**Figure: 3 Aggressive Approach of Financing**

In the above figure, X-axis denotes time and Y-axis denotes amount. The figure clearly shows that under aggressive approach a major part of the total current assets and a part of long term investment is also financed short term sources.

Thus, from the above study, we can make the following generalization:

Approach	Cost	Working Capital	Degree of Risk	Profitability
Matching	Intermediate	-----	High	High
Conservative	High	High	Low	Low
Aggressive	Low	Intermediate	Intermediate	Intermediate

## **2.1.2 Cash Management**

The financial strength of companies is critical in an uncertain environment. Cash serves as insurance against a declining economy, and it also provides opportunities to firms. It is said that approximately 1.5 percent of the average industrial firm's assets are held in the form of cash, which is defined as the total of bank demand deposits plus currency. Many overleveraged companies are accumulating cash to pay off their debts. However, some firms may have too much cash, thus making them vulnerable to corporate raiding—a trend that we have seen a lot of lately.

Cash is regarded as both the beginning and the end of the working capital cycle—cash, inventories, receivables and cash. In fact, it is considered as the most important current assets for the operations of the business. Cash is the money which the firm can disburse immediately without any restriction. The term cash includes coins, currency and cheques held by the firm, and balances in its bank accounts. Cash is the basic input needed to keep the business running on a continuous basis; it is also the ultimate output expected to be realized by selling the service or product manufactured by the firm. Managing it efficiently and effectively is the key determinant of appropriate working capital management. Thus, a major function of the financial manager is to maintain a sound cash position.

"Cash, like the blood stream in the human body, gives vitality and strength to a business enterprise. The steady and healthy circulation of cash throughout the entire business operation is the basis of business solvency."<sup>15</sup>

"It is the cash which keeps a business going. Hence, every enterprise has to hold necessary cash for its existence."<sup>16</sup>

Cash management took on increased importance in the 1970s when the high level of interest rates on short-term investments raised the opportunity cost of holding cash balances. Though idle cash is sterile, its retention is not without cost. Even with the lower rates, managing cash will remain important given the active market for takeovers. Financial managers, therefore, have developed and refined techniques of cash collection and disbursement enabling them to optimize the availability of funds and to reduce the interest costs of outside financing.

"Holding of cash balance has an implicit cost in the form of its opportunity cost."<sup>17</sup>

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<sup>15</sup> B.B.Havard and M.Upton, *Introduction to Business Finance*, McGraw Hill Book Co., New York, 1953, p. 188.

<sup>16</sup> J.M.Keynes, *The General Theory of Employment, Interest and Money*, Harcourt Brac., New York, 1936, p.170.

<sup>17</sup> K. Brandt, Louis, *Analysis for Financial Management*, Prentice Hall Inc, Englewood Cliffs, New Jersey, 1971, p. 225.

Cash is termed as "non-earning" asset in the sense that, although it is needed to pay for labour and raw materials, to buy fixed assets, to pay taxes, to service debt, to pay dividends, and so on, cash itself earns no interest. Thus, the goal of cash management is to reduce the amount of cash the firm must hold for use in conducting its normal business activities. The higher the level of idle cash, the greater is the cost of holding it in the manner of loss of interest, which could have been earned either by investing it in the securities or by paying off the loans taken previously.

Supply of cash in an adequate manner is vital to meet the requirements of the business, its shortage may stop the business operations and may degenerate a firm into a state of technical insolvency and even of liquidation. If the level of cash balances is more than the desired level with the firm, it shows mismanagement of funds. Therefore, for its smooth running and maximum profitability proper and effective cash management in a business is of paramount importance.

Cash management is thus concerned with the managing of -

- Cash flows into and out of the firm.
- Cash flows within the firm.
- Cash balances held by the firm at a point of time by financing deficit or investing surplus cash.

### **2.1.2.1 Motives of Holding Cash**

It is known factor that the future is pregnant with all sorts of risks and opportunities. So cash may be required at any point of time and is very vital to hold cash. Businesses and individuals generally have three primary motives for holding cash which are discussed below-

- **The Transaction Motive**

Cash balances are very vital in operating any kind of business activities. The principal motive for holding cash is to enable the firm to conduct its ordinary business-making purchases and sales. The firm requires cash primarily to make payments for purchase, operating expenses, wages, dividends, taxes, etc. Thus, the transactions motive mainly refers to holding cash to meet anticipated payments whose timing is not perfectly matched with cash receipts.

### ▪ **The Precautionary Motive**

The precautionary motive for holding safety stocks of cash relates primarily to the predictability of cash inflows and outflows. It is the need to hold the cash to meet any contingency in future. The firm generally requires cash to withstand some unexpected emergencies which may be the result of strikes, floods, failure to pay to vital customers, sharp increase in cost of raw materials. The amount of precautionary cash is also influenced by the firm's ability to borrow at short notice when the need arises.

### ▪ **The Speculative Motive**

The speculative motive relates to the holding of cash for investing in profit-making opportunities as and when they arise. In other words, it refers to the expectation of the firm to gain advantage of opportunities that occurs at the unexpected moments and is generally outside the normal course of business. It helps to take advantage of an opportunity to purchase raw materials at a reduced price on payment of immediate cash, gain from quantity discounts, anticipated price increase, etc.

Thus, decisions with regard to holding cash require careful analysis in order to approach optimal holdings. However, companies mainly concentrate upon transaction and precautionary motives of the cash.

## **2.1.2.2 Objectives of Cash Management**

The primary objectives of cash management are highlighted below-

- To meet the cash disbursement needs.
- To minimize funds committed to cash balances. These are conflicting and mutually contradictory. The task of cash management is to reconcile them.

## **2.1.2.3 Functions of Cash Management**

The firm should evolve strategies regarding the highlighted four functions of cash management in order to resolve the uncertainty about prediction of cash flow-

### • **Cash Planning**

Cash plans are very vital in developing the overall operating plans of the firm. Cash planning is a technique to plan for and control the use of cash. It protects the financial condition of the firm by developing a projected cash statement from a forecast of expected cash inflows and outflows for a given period. The forecasts may be based on the present or the anticipated future operations. Cash planning may be done on daily, weekly or monthly basis depending upon the size of the firm and philosophy of management.

- **Managing the Cash Flows**

Once the cash budget has been prepared and appropriate net cash flow established, the financial manager should ensure that a significant deviation between projected cash flows and actual cash flows does not exist. In order to achieve this target, cash management efficiency will have to be improved through the proper control of cash collection and disbursement. The twin objectives in managing the cash flows should be to accelerate cash collections as much as possible and to decelerate or delay cash disbursements as much as possible.

- **Optimum Cash Balance**

One of the primary duties of the financial manager is to maintain a sound liquidity position of the firm so that dues may be settled in time. The test of liquidity is the availability of cash to meet the firm's obligations as and when they become due. The financial manager should be able to determine the appropriate amount of cash balance. Such a decision is influenced by a trade-off between risk and return. If the firm maintains a high level of cash balance, it will have a sound liquidity position but will have to forego the opportunities to earn interests and on the other hand if the firm maintains small cash balance, its liquidity position becomes weak and suffers from scarcity of cash to make payments. Thus, maintaining too large or too small cash balance may hamper the firm so the firm should be able to manage an optimum cash balance.

- **Investing Idle Cash**

Excess cash should be invested normally on those things which can be conveniently and promptly converted into cash. The excess amount of cash held by the firm can be temporarily invested in marketable securities or bank deposits, which can be regarded as near moneys. A firm generally holds extra cash balance because cash flows cannot be predicted with certainty. Cash balance held to cover future exigencies is called the precaution balance and is usually invested in marketable securities and bank deposits until needed. Instead of holding cash for the precautionary requirements, it can make short term borrowings to meet it. However, the choice between the short-term borrowings and liquid assets holding will depend upon the firm's policy regarding the mix of short-term and long-term financing.



### **2.1.3 Receivable Management**

Trade credit is the most prominent force of the modern business. It is considered as an essential marketing tool, acting as a bridge for the movement of goods through production and distribution stages to customers finally. A firm grants trade credit to protect its sales from the competitors and to attract the potential customers to buy its products at favourable terms. When the firm sells its products or services and does not receive cash for it immediately, the firm is said to have granted trade credit to customers. Trade credit, thus, creates receivables which the firm is expected to collect in the near future.

The term 'receivables' is defined as "debt owed to the firm by customers arising from sale of goods or services in the ordinary course of business."<sup>18</sup>

In simple words, amount due from customers is known as receivables. Receivables represent investments. Firms would, in general, rather sell for cash than on credit, but competitive pressures force most firms to offer credit. Thus, goods are shipped, inventories are reduced, and an account receivable is created. Eventually, the customer will pay the account, at which time (1) the firm will receive cash and (2) its receivables will decline. Carrying receivables has both direct and indirect costs, but it also has a crucial advantage-increased sales. As substantial amounts are tied up in receivables; they need a careful analysis and proper management. The receivables are also known as account receivable, customer receivables, sundry receivables, trade debtors, trade acceptance, book debts, bill receivables, etc.

Receivables constitute a substantial portion of current assets of several firms and occupy second important place after inventories. In any sizeable business organization, the bulk of sales would be on credit. This is borne out by the fact that credit allowed to customers always enables the concern to increase sales. No business can run without credit facilities in today's competitive era. Credit sales play a vital role in the development and expansion of market for each and every firm whether it is small or big. So the company should keep some provision for credit sales, which will definitely increase the level of receivables. In this sense, receivables play an important role in ensuring a higher turnover for the firm concerned.

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<sup>18</sup> D.M.Joy, *Introduction to Financial Management*, Irvin, Hnne Wood, 1977, p. 456

The receivables arising out of the credit includes three characteristics which are discussed below-

- It involves an element of risk which should be carefully analyzed because cash sales are totally risk less, but not the credit sales as cash payment has yet to be received.
- It is based on economic value. To the buyer, the economic value in goods or services passes immediately at the time of sale, while the seller expects an equivalent value to be received later on.
- It implies futurity. The cash payment for goods or services received by the buyer will be made by him in a future period.

### **2.1.3.1 Objectives of Maintaining Receivables**

The main objectives of maintaining receivables are discussed below-

#### **▪ Expansion of Sales**

In today's competitive age, no business can operate completely only on cash. It has to sell its product on credit too to expand its sales and grab maximum market share. Moreover, customers may not be willing to buy goods on cash basis and, thus, to encourage them to purchase goods the firm has to offer them the credit terms. In the absence of such an offer, a firm may not be able to sell goods at a desired level. Thus, receivables enable it to push its sales effectively in the market.

#### **▪ Increase in Profits**

It is a known fact that the profit level will increase with the increase in sales level. This is ordinarily so because the marginal contribution-affected by an increase in sales is higher than the additional costs associated with such an increase.

#### **▪ Maintaining Liquidity**

Receivables are termed as near money. Thus, it facilitates the task of maintaining liquidity in business because it can easily be converted into cash.

### **2.1.3.2 Objectives of Receivables Management**

The basic objective in the management of receivables should be that of maximization of overall returns on investment. It is obvious that the firm's objective with respect to receivables management is not merely to collect receivables quickly but to give attention to the benefit cost trade off involved in the various areas of accounts receivables management. Thus, the main objective of receivables management is to maximize the value of the firm by way of achieving a trade off between risk and profitability.

The objective of receivables management is, "to promote sales and profit until that point is reached where the return on investment in further funding of receivables is less than the cost of funds raised to finance that additional credit (i.e., cost of capital)."<sup>19</sup>

Some of the major objectives of receivables management are highlighted below-

- To control the cost of credit.
- To keep credit at the minimum level.
- To maintain the optimum level of investments in receivables.
- To obtain the optimum volume of sales.
- To keep down the average collection period.

#### **2.1.4 Inventory Management**

In simple sense, inventory refers to the movable articles of the business which are eventually expected to go into the flow of trade. It refers to the stock pile of the product a firm is offering for sale and the components that make up the product. In financial parlance, inventory is defined as the sum of the value of raw materials, fuels and lubricants, spare parts, maintenance, consumables, semi processed materials and finished goods stock at any given point of time. To expand the definition of inventory and make it applicable to manufacturing firms as well as merchandising firms, it can be stated that inventory means the aggregate of those items of tangible personal property which are held for sale in the ordinary course of business and are in the process of production for such sale and are to be currently consumed in the production of goods or services to be available for sale.

Thus, the stock of different type of consumable goods held by an organization is called inventory. The basic reason to for holding inventory is to keep up the production activities unhampered. Inventory is one of the most important liquid assets to many business concerns. It is also equally important to both governmental as well as non-governmental sector. Inventory, by nature is a circulating capital and exhausts frequently either consumption or sale or by fire or other natural calamities. It occupies a large percentage of the working capital employed by a firm. Firms generally maintain some inventory in stock to achieve a desired level of sale. The major goal of inventory management is to determine and maintain the optimum level of inventory management. Thus purchasing economically, using appropriately and preserving carefully is the main objective of inventory management. In other words, optimum investment in inventory is the essence of inventory management.

Inventory management is concerned with the acquisition, storage, handling and use of inventories so as to ensure the availability of inventory

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<sup>19</sup> S.E.Bolten, *Managerial Finance*, Houghton Mitten Co., Boston, 1976, p. 446.

whenever needed, provide adequate cushion for contingencies and derive maximum economy and minimum wastage and losses. In this modern era, thus, inventory management plays a significant role in each and every organization whether small or big. Managing inventories is one of the crucial roles of finance manager as it covers a huge part of current assets and the finance manager should have efficient and effective control over assets being produced to be sold in the normal course of the firm's operation. The return on investment depends a great deal on the manner the inventories are managed. So, it is quite clear that, management should involve adequate alteration to the inventory management to reduce the cost of production and working capital requirement.

Inventory management focuses on the following three basic questions-

- How many units of each inventory item should the firm hold in stock?
- How many units should be ordered (or produced) at a given time?
- At what point should inventory be ordered (or purchased)?

#### **2.1.4.1 Management of Inventory**

In the sphere of working capital, the efficient and effective management of inventory poses a challenging problem. Inventory constitutes the largest component of current assets in many business organizations. The turnover of working capital is much more dependent upon its turnover. Thus, inventory management is of considerable significance to all business enterprises.

"The proper management and control of inventory not only solves the acute problems of liquidity but also increases annual profits and causes substantial reduction in the working capital of a firm".<sup>20</sup>

Inventories form a link between production and sale of a product. Therefore, it is essential to have a sufficient level of investment in inventories. D.Scholl Lawrence and W.Haley Charles rightly remark, "Managing the level of investment in inventory is like maintaining the level of water in a bath-tub with an open drain. The water is flowing out continuously. If water is let in too slowly, the tub is soon empty. If water is let in too fast, the tub overflows. Like the water in the tub, the particular items of inventories keep changing, but the level may stay the same. The basic financial problems are to determine the proper level of investment in inventories and to decide how much inventory must be acquired during each period to maintain that level".<sup>21</sup>

Thus, proper management of inventories is very crucial for every organization and is exercised by introducing different measures of inventory control, such as, ABC analysis, by fixation of norms for inventory holdings, by

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<sup>20</sup> L.R.Howard, *Working Capital - Its Management and Control*, Mac Donald and Vent Ltd., London, 1971, p. 92.

<sup>21</sup> D. Scholl Lawrence and W. Haley Charles, *Introduction to Financial Management*, McGraw-Hill, Inc., New York, 1963, p. 500.

determining reorder points and through a close watch on the movements of inventories.

#### **2.1.4.2 Importance of Inventory Management**

The efficient management of inventories enables the organization to achieve better working results and reduction in working capital. The primary importance of inventory management are to minimize the possibility of disruption in the production schedule of a firm for want of raw materials, stores and spares, and to keep down capital investment inventories.

Inventory management should strike a balance between excess inventory and inadequate inventory, so its importance is of great deal. The aim of inventory management is to avoid too much inventory for the smooth running of the business operation. However, the importance of inventory management can be listed as below-

- To ensure a regular supply of materials to facilitate uninterrupted production.
- To maintain adequate stocks of raw materials in the period of scarce supply and anticipate price changes.
- To maintain adequate stock of finished goods for smooth sales operations and effective customer service.
- To minimize the carrying costs and time.
- To control investment in inventories and keep it at an optimum level.

### **2.1.4.3 Motive to Hold Inventories**

There are generally three motives of holding inventories which are discussed below-

- **The Transaction Motive**

A company should maintain adequate stock of materials for a continuous supply to the factory for an uninterrupted production. It is not possible for a company to procure raw materials whenever it is needed. A time lag occurs between demand and supply of materials. Thus, the transactions motive emphasizes the need to maintain inventories to facilitate smooth production and sales operations.

- **The Precautionary Motive**

There exists uncertainty in procuring raw materials in time at many occasions. The procurement of materials may be delayed because of such factors as strike, transport disruption or short supply. The firm should therefore maintain sufficient level of raw materials at a given time to streamline production. Thus, the precautionary motive necessitates holding of inventories to guard against the risk of unpredictable changes in demand and supply forces and other factors.

- **The Speculative Motive**

A firm may have to hold inventories to take advantage from quantity discounts and anticipated price increase. The firm may purchase bulk quantities of raw materials than needed for desired production and sales levels to obtain quantity discounts of bulk purchasing. At times, the firm would like to raw materials in anticipation of price rise. Thus, the speculative motive influence the decision to increased or decreased inventory levels to take advantage of price fluctuations.

## **2.2 Review of Literature**

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

### **2.2.1 Review of Books**

This section includes review of various books and working capital management which has been studied for the purpose of making the research easier.

Sarita and Bhuvan Dahal have written a book named "A Handbook to Banking" which gives general overview of banking sector. It has been designed for students, bankers, businessman and others as an introductory course. It includes introduction of banking, its gradual development in Nepal as a separate non-manufacturing sector, its current operation and position, financial and managerial strength and weakness of banking business in context to Nepal.

In context to working capital, the well known Professor Weston and Brigham have given some important explanation regarding the origin of working capital.

"The term working capital originated with the old Yankee peddles, who would load up his wagon with goods and then go off on his route to peddle his wares. The merchant was called working capital because it was what he actually sold, or "turned over," to produce his profits. The wagon and horse were his fixed assets. He generally owned the horse and wagon, so they were financed with "equity" capital, but he borrowed the funds to buy the merchandise. These borrowings were called working capital loans, and they had to be repaid after each trip to demonstrate to the bank that the credit was sound. If the peddler was able to repay the loan, then the bank would make another loan, and banks that followed this procedure were said to be employing Sound Banking Practices".<sup>22</sup>

As per the theoretical concepts on the components of working capital from James C. Van Horne, "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".<sup>23</sup>

A well known Indian Professor R.K.Mishra and S. Ravishanker have described the concept of working capital.

"Working capital has two concepts-the total of current assets (gross concept) and the excess of current assets over current liabilities (net concept).Both these concepts of working capital have their own significance. If the objective is to measure the size and extent to which current assets are being used, 'gross

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<sup>22</sup> J.Fred Weston and E.F.Brigham, *Essentials of Managerial Finance*, The Dryden Press, New York, 1975, p. 345.

<sup>23</sup> J.C.Van Horne, *Financial Management and Policy*, Prentice hall of India (P) Ltd., New Delhi, 1973, p. 384.

concept' is useful; whereas in evaluating the liquidity position of an undertaking, 'net concept' becomes pertinent and preferable".<sup>24</sup>

We can also get much informative knowledge from the book written by S.C. Bardia named "Working Capital Management" which was quite resourceful for this study and for others who would conduct the research study on working capital management. He has described various aspects of working capital management into seven chapters. The first chapter introduces the subject. The second chapter focuses on the working capital trends. The third, fourth and fifth chapters, respectively provides a detailed study of various components of the working capital, viz., inventory, receivables and cash. The sixth chapter examines in detail the sources of financing the third, fourth and fifth chapters respectively. It also analyses the funds flow statement. The last chapter summarizes the findings of the study and offers suitable suggestions for the improvement of efficiency and effectiveness of management of the working capital.

### **2.2.2 Review of Published Journals/Articles**

This section includes review of published journals/articles by various management experts and executives relating to working capital management.

Dr. Manohar K. Shrestha has conducted an empirical observation of twelve-selected PEs, in this article; he has described the conceptual ingredient concerning the W/C. Some of the major conclusion drawn from the research is highlighted below-

- a) "The liquidity position of the selected PEs showed wide deviation.
- b) Based in the sales value four out of seven PEs had normal inventory, the other three had not been satisfactorily maintained and in the rest inventory had exceeded sales.
- c) The collection period relating to the selected PEs exhibited marked difference ranging from 32 days to 75 days.
- d) The profitability position was analyzed through return on net W/C was in embellishment phase.
- e) It has showed the lack of farsighted liquidity adjustment strategy in most of the PEs.
- f) Large blocking of capital inventories and low capacity utilization. All these were due to inefficient management of W/C in those public enterprises."<sup>25</sup>

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<sup>24</sup> R.K.Mishra, and S.Ravishanker, *Current Perspectives in Public Enterprise Management*, Ajanta Publication, New Delhi, 1985, p. 316.

<sup>25</sup> M.K.Shrestha, *Working Capital Management in Selected Public Enterprises*, A Pad Management Journal, 1992.



Dr. A.k. Mukherjee in 1988 conducted an empirical observation of twenty-selected PEs. in India. The scope of those studies was limited to manufacturing of public enterprises and the period was limited to 5 years.

The main focus of this research study are highlighted below-

- a) "Working capital changes mainly due to changing pattern of investment in quick assets. Current assets are highly affected by the inventory policy of the unit.
- b) Production or output, the size of working capital was negatively corrected of all the units.
- c) The government is not in favor allowing depreciation funds to use for financing working capital requirements. Such funds at the very outset used to replace assets. The government has also laid down compressive guidelines regarding bank financing the SC needs of the firm in different industries.
- d) The current ratio is less than two. The contribution of cash credit management is more than the W/C requirements which indicates that portion of such financing has been diverted towards capital expedition.
- e) It was observed that the overall profitability and the size of working capital are negatively corrected. Poor and defect product pricing policy has also led to negative profitability."<sup>26</sup>

### **2.2.3 Review of Related Research Work**

This section includes review of related studies made by the students of an MBA, MBS and PHD. relating to working capital management in different PEs and Private Sector in Nepal.

Dr. Khagendra Acharya has studied the working capital management of manufacturing public enterprises in Nepal with reference to Nepal Tea Development Corporation (NTDC). He took five years data from 1975/76 to 1982/83. Some of the key findings of the study are highlighted below-

- a) "Inventory occupies a large portion in working capital in NTDC.
- b) The turnover of inventory, receivable and current assets of NTDC were lower than average of PEs selected.
- c) Insufficient working capital has led to sell its product at a rate far below than its BEP as revealed by BEP analysis.
- d) A close liaison should be maintained between the production units of different states and the central materials management department.
- e) The growth of working capital and inventory is correlated negatively as disclosed from the overall adequacy of inventory in NTDC.
- f) Receivable as compared to sales volume has a rapid growth."<sup>27</sup>

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<sup>26</sup> A.K.Mukherjee, *Management of Working Capital*, Vohra Pub. And Distributors, Allahabad, 1988, p. 9.

<sup>27</sup> Dr.K.Acharya, *The Management of Working Capital Management in PEs of Nepal with Special Reference to Tea Industry*, University of Allahabad, 1985.

Mr. Jiban Nath Sapkota on his study on working capital management of Himal Cement Company Limited (HCCL) considered the ratio analysis of HCCL for 5 years i.e. from 2044/45 to 2048/2049. From the study, he came in conclusion that the inventory, cash, receivable should be managed appropriately in an optimum level. He recommended that the company should determine certain rate of return on it investment, He further suggested that the sales target should be set to recouped and overcome loss occurred. He argued that HCCL lacks appropriate guidelines for funds, inventory control, cost control selling process, investment policies which are hindering the actual growth of HCCL."<sup>28</sup>

The above review of literature from various books/journals, articles and dissertations related to working capital management reveals that the leading factor which has been obstructing and preventing the growth of the Nepalese Corporation is mainly improper and inefficient management of working capital. If the working capital funds have been managed properly the corporation would have been put back upon a driving seat. Since working capital is the lifeblood of the banking sector and has assumed great significance in the recent past, efficiency of working capital management of the Nepalese banking sector should be analyzed. So, the present study tries to analyze the working capital management of the selected three JVBs covering the period 2003/2004 to 2009/2010.

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<sup>28</sup> J.N.Sapkota, *A Study on Management in Himal Cement Company Limited* , unpublished dissertation, T.U.

# **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

### **3.1 Introduction**

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

Research is a systematic method of finding out solution to a problem where as research methodology refers to "various sequential steps to adopt by a research in studying a problem with certain objective in view".<sup>29</sup> In other words, research methodology describes the methods, techniques and process applied in the entire aspect of the study.

"A systematic research study needs to follow proper methodology to active the pre-mentioned objective. Research methodology is a sequential procedure and method to be adopted in a systematic study".<sup>30</sup>

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

### **3.2 Research Design**

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

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<sup>29</sup> C.R. Kothari, *Research Methodology Methods and Techniques*, Villey Eastery Limited New Delhi, 1989, p. 38.

<sup>30</sup> C.R.Kothari, *Quantitative Techniques*, Vikash Publishing House Pvt. LTd., New Delhi, 1994, p. 19.

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".<sup>31</sup>

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

### **3.3 Population and Sample**

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

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

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<sup>31</sup> Claire Selltiz Others, *Research Methods in Social Science*, 1962, as quoted in C.R. Kothari, *Quantitative Techniques*, Vikash Publishing house Pvt. Ltd., New Delhi, p. 22.

### **3.4 Sources of Data**

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

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

### **3.5 Data Collection Techniques**

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

Firstly, the financial statements i.e. Profit and Loss Account and Balance Sheet of the three JVBs were downloaded from the Nepal Stock Exchange to the computer disk and printed later on. Lastly, financial statement published by the banks from time to time, Auditor General's Reports, some previous study made regarding in this field, newspaper, journals, booklets and articles related to this study, Publications of Ministry of Finance, Ministry of Industry, Central Bureau of Statistics, National Planning Commission and similar reports submitted to various meeting, seminar and official accounting were collected.

### **3.6 Data Analysis Tools**

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

#### **3.6.1 Ratio Analysis**

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

A ratio is the defined as" the indicated quotient of two mathematical expressions" and as "the relationship between two or more things."<sup>32</sup>

"A ratio is simply one number expressed in terms of another." <sup>33</sup>

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

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

#### **3.6.2 Average**

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

Arithmetic mean of a given set of observations is their sum divided by the number of observations. In general, if  $X_1, X_2, \dots, X_n$  are the given  $n$  observations, then their arithmetic mean, usually denoted by  $\bar{X}$  is given by:

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

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<sup>32</sup> Webster's New Collegiate Dictionary, 8th Edition, Springfield, Mass: G & C, Merrian, 1975, p. 958.

<sup>33</sup> Robert N. Anthony, *Management Accounting*, Third Edition, Homewood, Illinois, 1964, p. 297.

where,

$\Sigma x$  = the sum of the observations and

$n$  = no. of years

### 3.6.3 Standard Deviation (SD)

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

$$\dagger = \sqrt{\frac{\sum(X - \bar{X})^2}{N}}$$

### 3.6.4 Trend Percentage Method

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

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

### 3.6.5 Correlation Analysis

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

"The correlation is defined as the relationship between (among) the one dependent variable (or factor) and one (or more than one) independent variable(s) or factor(s). In other words, correlation is the relationship between (or among) two or more variables (i.e. only one variable dependent and one or more variable (s) independent)".<sup>34</sup>

“Correlation is the statistical tool that we can use to describe the degree to which one variable is linearly related to another”.<sup>35</sup>

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

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

### 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-

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

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

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<sup>34</sup> Sunity Shrestha and Dhruva Prasad, *Statistical Method in Management*, Taleju Prakashan, Kathmandu, 2<sup>nd</sup> Edition, 2057, p. 315.

<sup>35</sup> Levin Richard and David Rubin, *Statistics for Management*, Prentice Hall of India, Pvt. Ltd., New Delhi, 1991, p. 505.



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

$$\text{P.E.} = .6745 \times \frac{1 - r^2}{\sqrt{N}}$$

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 (F- statistic)**

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

Analysis of variance (ANOVA) is an extremely useful technique concerning researches in the fields of economics, biology, education, psychology, sociology, business/industry etc. An essence of ANOVA is that the total amount of variation in a set of data is broken down into two types, that amount which can be attributed to chance and that amount which can be attributed to specified causes. There may be variation between samples and also within sample items. Through this technique one can explain whether various varieties of seeds or fertilizers or soils differ significantly so that a policy decision could be taken accordingly, concerning a particular variety in the context of agriculture researchers.

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

# CHAPTER-FOUR

## PRESENTATION AND ANALYSIS OF DATA

### **4.1 Introduction**

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

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

### **4.2 Analysis of Ratios**

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

"The ratio analysis provides guides and clues especially in spotting trends towards better or poorer performance, and in finding out significant deviation from any average or relatively applicable standard."<sup>36</sup>

Ratio analysis is a technique commonly employed by analysts examining a company's financial statements. It is mainly used by three main groups: (1) managers, who employ ratios to help analyze, control and thus improve their firm's operations; (2) credit analysts, including bank loan officers and bond rating analysts, who analyze ratios to help ascertain a company's ability to pay its debts; and (3) stock analysts, who are interested in a company's efficiency, risk, and growth prospects. In particular, an analysis of selected accounting ratios allows a bank manager to evaluate the bank's current performance, the change in its performance over time (time series analysis of ratios over a period of time), and its performance relative to that of competitor banks (cross-sectional analysis of ratios across a group of firms).

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<sup>36</sup> Erich A. Helfert, *Techniques of Financial Analysis*, Homewood, Illinois, 1957, p.57.

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

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

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

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

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

The following table shows the ratio of cash & bank balance to current assets of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 1**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 Cash & Bank Balance	3 CA	2/3=4 Ratio (%)	5 Cash & Bank Balance	6 CA	5/6=7 Ratio (%)	8 Cash & Bank Balance	9 CA	8/9=10 Ratio (%)
2003/2004	630.94	11961.95	5.27	802.21	10988.05	7.30	826.15	12862.22	6.42
2004/2005	910.07	14788.91	6.15	901.91	15605.42	5.78	1020.46	16650.32	6.13
2005/2006	812.91	13161.68	6.18	1435.17	17359.84	8.27	961.05	19224.18	5.00
2006/2007	1051.82	13312.39	7.90	1264.67	14165.33	8.93	825.23	18330.82	4.50
2007/2008	1144.77	13868.31	8.25	1979.21	16881.45	11.72	1512.3	20797.6	7.27
2008/2009	970.49	14243.92	6.81	2001.18	18657.35	10.73	2023.16	23225.83	8.71
2009/2010	559.38	14969.38	3.74	2014.47	21326.26	9.45	1111.12	21447.16	5.18
Total	6080.38	96306.54	44.30	10398.82	114983.7	62.18	8279.47	132538.13	43.21
Avg.(mean)	868.63	13758.08	6.33	1485.55	16426.24	8.88	1182.78	18934.02	6.17
s.d.			1.43			1.86			1.36
c.v.			22.59			20.95			22.04

Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW.NepalStock.com](http://WWW.NepalStock.com)

The table highlights the proportion of cash and bank balance to current assets of three JVBs from 2003/2004 to F/Y 2009/2010. The proportion of cash and bank balance to current assets for 7 successive years of NABIL is 5.27%, 6.15%, 6.18%, 7.90%, 8.25%, 6.81% and 3.74% respectively whereas of HBL is 7.30%, 5.78%, 8.27%, 8.93%, 11.72%, 10.72% and 9.45% respectively and that of SCBNL is 6.42%, 6.13%, 5.00%, 4.50%, 7.27%, 8.71% and 5.18% respectively. The proportion of cash and bank balance to current assets is highest in the year 2007/2008 i.e. 8.25% and lowest in the year 2009/2010 i.e. 3.74% for NABIL, highest in the year 2007/2008 i.e. 11.72% and lowest in the year 2004/2005 i.e. 5.78% for HBL and highest in the year 2008/2009 i.e. 8.71% and lowest in the year 2006/2007 i.e. 4.50% for SCBNL. The average proportion of cash and bank balance to current assets of NABIL, HBL and SCBNL are 6.33%, 8.88% and 6.17% respectively. The average proportion of HBL i.e. 8.88% is greater in comparison to the three JVBs. Therefore liquidity position on the basis of cash and bank balance to current assets ratio maintained by HBL is better among the three JVBs. Higher proportion of cash and bank balance to current assets indicates higher amount of cash and bank balance maintained by the bank which shows that the bank has been able to maintained enough liquidity to fulfill its current obligations but the bank should keep in consideration that enough cash and bank balance results in idle money which incurs opportunity cost. Hence from the utilization perspective, this may not be desirable solution.

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

#### **4.2.2 Cash and Bank Balance to Total Assets**

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

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

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

The following table shows the ratio of cash & bank balance to total assets of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 2**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 Cash & Bank Balance	3 TA	2/3=4 Ratio (%)	5 Cash & Bank Balance	6 TA	5/6=7 Ratio (%)	8 Cash & Bank Balance	9 TA	8/9=10 Ratio (%)
2003/2004	630.94	12184.05	5.18	802.21	11244.10	7.13	826.15	13016.98	6.35
2004/2005	910.07	15024.20	6.06	901.91	15863.74	5.68	1020.46	16832.23	6.06
2005/2006	812.91	17770.65	4.57	1435.17	19500.57	7.36	961.05	19357.18	4.96
2006/2007	1051.82	17629.25	5.97	1264.67	21315.85	5.93	825.23	18443.10	4.47
2007/2008	1144.77	16562.62	6.91	1979.21	24197.97	8.18	1512.30	21000.50	7.20
2008/2009	970.49	16745.49	5.80	2001.18	25729.79	7.78	2023.16	23642.06	8.56
2009/2010	559.38	17186.33	3.25	2014.47	28871.34	6.98	1111.12	21893.58	5.08
Total	6080.38	113102.59	37.74	10398.82	146723.36	49.04	8279.47	134185.63	42.68
Avg.(mean)	868.63	16157.51	5.39	1485.55	20960.48	7.01	1182.78	19169.38	6.10
s.d.			1.11			.85			1.33
c.v.			20.59			12.12			21.80

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW. Nepal Stock.com](http://WWW.NepalStock.com)*

The above table highlights the proportion of cash and bank balance to total assets of three JVBs from 2003/2004 to F/Y 2009/2010. The proportion of cash and bank balance to total assets for 7 successive years of NABIL is 5.18%, 6.06%, 4.57%, 5.97%, 6.91%, 5.80% and 3.25% respectively whereas of HBL is 7.13%, 5.68%, 7.36%, 5.93%, 8.18%, 7.78% and 6.98% respectively and that of SCBNL is 6.35%, 6.06%, 4.96%, 4.47%, 7.20%, 8.56% and 5.08% respectively. The proportion of cash and bank balance to total assets is highest in the year 2007/2008 i.e. 6.91% and lowest in the year 2009/2010 i.e. 3.25% for NABIL, highest in the year 2007/2008 i.e. 8.18% and lowest in the year 2004/2005 i.e. 5.68% for HBL and highest in the year 2008/2009 i.e. 8.56% and lowest in the year 2006/2007 i.e. 4.47% for SCBNL. The average proportion of cash and bank balance to total assets of NABIL, HBL and SCBNL are 5.39%, 7.01% and 6.10% respectively. The average proportion of HBL i.e. 7.01% is greater in comparison to the three JVBs. Therefore liquidity position on the basis of cash and bank balance to total assets ratio maintained by HBL is better among the three JVBs. Higher ratio indicates higher amount of cash and bank balance maintained by the bank which shows that the bank has been able to maintained enough liquidity to fulfill its current obligations but the bank should keep in consideration that enough cash and bank balance results in idle money which incurs opportunity cost. Hence from the utilization perspective, this may not be desirable solution.

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

#### 4.2.3 Current Assets to Total Assets

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

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

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

The following table shows the ratio of current assets to total assets of NABIL, HBL and SCBNL from 2003/2004 to F/Y 2009/2010.

**Table No.: 3**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 CA	3 TA	2/3=4 Ratio (%)	5 CA	6 TA	5/6=7 Ratio (%)	8 CA	9 TA	8/9=10 Ratio (%)
2003/2004	11961.95	12184.05	98.18	10988.05	11244.10	97.72	12862.22	13016.98	98.81
2004/2005	14788.91	15024.20	98.43	15605.42	15863.74	98.37	16650.32	16832.23	98.92
2005/2006	13161.68	17770.65	74.06	17359.84	19500.57	89.02	19224.18	19357.18	99.31
2006/2007	13312.39	17629.25	75.51	14165.33	21315.85	66.45	18330.82	18443.10	99.39
2007/2008	13868.31	16562.62	83.73	16881.45	24197.97	69.76	20797.60	21000.50	99.03
2008/2009	14243.92	16745.49	85.06	18657.35	25729.79	72.51	23225.83	23642.06	98.24
2009/2010	14969.38	17186.33	87.10	21326.26	28871.34	73.87	21447.16	21893.58	97.96
Total	96306.54	113102.59	602.08	114983.7	146723.36	567.71	132538.13	134185.63	691.67
Avg.(mean )	13758.08	16157.51	86.01	16426.2429	20960.48	82.31	18934.02	19169.38	98.81
s.d.			8.97			12.57			0.49
c.v.			10.43			15.27			0.50

Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW.NepalStock.com](http://WWW.NepalStock.com)

The above table highlights the proportion of current assets to total assets of three JVBs from 2003/2004 to F/Y 2009/2010. The proportion of current assets to total assets for 7 successive years of NABIL is 98.18%, 98.43%, 74.06%, 75.51%, 83.73%, 85.06% and 87.10% respectively whereas of HBL is 97.72%, 98.37%, 89.02%, 66.45%, 69.76%, 72.51% and 73.87% respectively and that of SCBNL is 98.81%, 98.92%, 99.31%, 99.39%, 99.03%, 98.24% and 97.96% respectively. The proportion of current assets to total assets is highest in the year 2004/2005 i.e. 98.43% and lowest in the year 2005/2006 i.e. 74.06% for NABIL, highest in the year 2004/2005 i.e. 98.375 and lowest in the year 2006/2007 i.e. 66.45% for HBL and highest in the year 2006/2007 i.e. 99.39% and lowest in the year 2009/2010 i.e. 97.96% for SCBNL. The average proportion of current assets to total assets of NABIL, HBL and SCBNL are 86.01%, 82.31%, and 98.81% respectively. The average proportion of current assets to total assets of SCBNL is greater in comparison to the three JVBs. Therefore, on the basis of current assets to total assets ratio maintained by SCBNL, it can be concluded that SCBNL has been in both profitable and riskier position during the seven years study period among the three JVBs. However, SCBNL should concentrate on its current assets management because high level of current assets denotes good liquidity position but it adversely affects the profitability of the bank because idle money earns nothing.

The C.V. of current assets to total assets for 7 successive years of NABIL is 10.43% whereas of HBL is 15.27% and that of SCBNL is 0.50%. Thus, as regard to the consistency maintained by the three JVBs, SCBNL is more consistent or uniform among the three JVBs because the C.V. of SCBNL (i.e. 0.50%) is lower than that of the NABIL and HBL. In other words, there is more fluctuation in cash and bank balance to current assets of NABIL and HBL than the 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 one of the vital aspects of the firm and plays a key role for the success or failure of the firm. The ratio of current assets to fixed assets indicates the relationship between current assets and fixed assets. It is calculated as-

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

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

The following table shows the ratio of current assets to fixed assets of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 4**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 CA	3 FA	2/3=4 Ratio (in times)	5 CA	6 FA	5/6=7 Ratio (in times)	8 CA	9 FA	8/9=10 Ratio (in times)
2003/2004	11961.95	205.59	58.18	10988.05	171.31	64.14	12862.22	143.57	89.59
2004/2005	14788.91	219.17	67.48	15605.42	193.05	80.83	16650.32	170.72	97.53
2005/2006	13161.68	248.67	52.93	17359.84	201.68	86.07	19224.18	121.81	157.82
2006/2007	13312.39	237.64	56.01	14165.33	318.84	44.43	18330.82	101.07	181.37
2007/2008	13868.31	251.91	55.05	16881.45	229.87	73.44	20797.60	191.71	108.48
2008/2009	14243.92	338.13	42.13	18657.35	299.64	62.27	23225.83	136.23	170.49
2009/2010	14969.38	361.23	41.44	21326.26	295.82	72.09	21447.16	71.41	300.34
Total	96306.54	1862.34	373.22	114983.7	1710.21	483.27	132538.13	936.52	1105.62
Avg.(mean)	13758.08	266.05	53.31	16426.2429	244.32	69.03	18934.02	133.79	157.95
s.d.			8.46			12.72			67.35
c.v.			15.87			18.43			42.60

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW.NepalStock.com](http://WWW.NepalStock.com)*

The above table highlights the proportion of current assets to fixed assets of three JVBs from 2003/2004 to F/Y 2009/2010. The proportion of current assets to fixed assets for 7 successive years of NABIL is 58.18 times, 67.48 times, 52.93 times, 56.01 times, 55.05 times, 42.13 times and 41.44 times respectively whereas of HBL is 64.14 times, 80.83 times, 86.07 times, 44.43 times, 73.44 times, 62.27 times and 72.09 times respectively and that of SCBNL is 89.59 times, 97.53 times, 157.82 times, 181.37 times, 108.48 times, 170.49 times and 300.34 times respectively. The proportion of current assets to fixed assets is highest in the year 2004/2005 i.e. 67.48 times and lowest in the year 2009/2010 i.e. 41.44 times for NABIL, highest in the year 2005/2006 i.e. 86.07 times and lowest in the year 2006/2007 i.e. 44.43 times for HBL and highest in the year 2009/2010 i.e. 300.34 times and lowest in the year 2003/2004 i.e. 89.59 times for SCBNL. The average proportion of current assets to fixed assets of NABIL, HBL and SCBNL are 53.31 times, 69.03 times, 157.95 times respectively. The average proportion of SCBNL is greater in comparison to the three JVBs. 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 decrease in the ratio of NABIL and HBL as compared to SCBNL indicates that business is slack or more mechanism has been put through.



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

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

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

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

The following table shows the ratio of net working capital to current assets of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 5**

(Rs. In Million)

1 Year	Nabil Bank Limited				Himalayan Bank Limited			
	2 TCA	3 TCL	4 Net Working Capital (2-3)	4/2=5 Ratio (%)	6 TCA	7 TCL	8 Net Working Capital (6-7)	8/6=9 Ratio (%)
2003/2004	11961.95	11249.94	712.01	5.95	10988.05	10698.75	289.30	2.63
2004/2005	14788.91	13977.29	811.62	5.49	15605.42	15311.04	294.38	1.89
2005/2006	13161.68	17226.21	(4,064.53)	(30.88)	17359.84	18742.46	(1,382.62)	(7.96)
2006/2007	13312.39	16384.73	(3,072.34)	(23.08)	14165.33	19433.25	(5,267.92)	(37.19)
2007/2008	13868.31	15135.42	(1,267.11)	(9.14)	16881.45	21899.93	(5,018.48)	(29.73)
2008/2009	14243.92	15112.45	(868.53)	(6.10)	18657.35	22325.47	(3,668.12)	(19.66)
2009/2010	14969.38	15385.33	(415.95)	(2.78)	21326.26	25837.29	(4,511.03)	(21.15)
Total	96306.54	104471.37	(8,164.83)	(60.53)	114983.70	134,248.19	(19,264.49)	(111.17)
Avg.(mean)	13758.08	14924.48	(1,166.40)	(8.65)	16426.24	19,178.31	(2,752.07)	(15.88)
s.d.				12.85				14.19
c.v.				148.55				89.36

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

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW. Nepal Stock.com](http://WWW.NepalStock.com)*

The table highlights the proportion of net working capital to current assets of three JVBs from 2003/2004 to F/Y 2009/2010. The proportion of net working capital to current assets for 7 successive years of NABIL is 5.95%, 5.49%, -30.88%, -23.08%, -9.14%, -6.10% and -2.78% respectively whereas of HBL is 2.63%, 1.89%, -7.96%, -37.19%, -29.73%, -19.66% and -21.15% respectively and that of SCBNL is 7.2%, 5.00%, 5.09%, 6.13%, 5.61%, 4.65% and 5.30% respectively. The proportion of net working capital to current assets is highest in the year 2003/2004 i.e. 5.95% and lowest in the year 2005/2006 i.e. -30.88% for NABIL, highest in the year 2003/2004 i.e. 2.63% and lowest in the year 2006/2007 i.e. -37.19% for HBL and highest in the year 2003/2004 i.e. 7.20% and lowest in the year 2008/2009 i.e.4.65% for SCBNL. The average proportion of net working capital to current assets of NABIL, HBL and SCBNL are -8.65%, -15.88%, 5.57% respectively. The average proportion of SCBNL is greater in comparison to the three JVBs.

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

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

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

ability to cover its current liabilities with its available current assets. It indicates the rupees of current assets available for each rupee of current liabilities.

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

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

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

The following table shows the ratio of current assets to current liabilities of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 6**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 CA	3 CL	2/3=4 Ratio (%)	5 CA	6 CL	5/6=7 Ratio (%)	8 CA	9 CL	8/9=10 Ratio (%)
2003/2004	11961.95	11249.94	106.33	10988.05	10698.75	102.70	12862.22	11903.72	108.05
2004/2005	14788.91	13977.29	105.81	15605.42	15311.04	101.92	16650.32	15781.19	105.51
2005/2006	13161.68	17226.21	76.40	17359.84	18742.46	92.62	19224.18	18196.01	105.65
2006/2007	13312.39	16384.73	81.25	14165.33	19433.25	72.89	18330.82	17150.05	106.88
2007/2008	13868.31	15135.42	91.63	16881.45	21899.93	77.08	20797.60	19559.38	106.33
2008/2009	14243.92	15112.45	94.25	18657.35	22325.47	83.57	23225.83	22090.48	105.14
2009/2010	14969.38	15385.33	97.30	21326.26	25837.29	82.54	21447.16	20235.75	105.99
Total	96306.54	104471.37	652.97	114983.70	134248.19	613.34	132538.13	124916.58	743.55
Avg.(mean)	13758.08	14924.48	93.28	16426.24	19178.313	87.62	18934.02	17845.23	106.22
s.d.			10.53			10.87			0.91
c.v.			11.29			12.41			0.86

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW. Nepal Stock.com](http://WWW.NepalStock.com)*

The above table highlights the proportion of current assets to current liabilities of three JVBs from 2003/2004 to F/Y 2009/2010. The proportion of current assets to current liabilities for 7 successive years of NABIL is 106.33%, 105.81%, 76.40%, 81.25%, 91.63%, 94.25% and 97.30% respectively whereas of HBL is 102.70 %, 101.92%, 92.62%, 72.89%, 77.08%, 83.57% and 82.54% respectively and that of SCBNL is 108.05%, 105.51%, 105.65%, 106.88%, 106.33%, 105.14% and 105.99 respectively. The proportion of current assets to

current liabilities is highest in the year 2003/2004 i.e. 106.33% and lowest in the year 2005/2006 i.e. 76.40% for NABIL, highest in the year 2003/2004 i.e. 102.70 % and lowest in the year 2006/2007 i.e. 72.89% for HBL and highest in the year 2003/2004 i.e. 108.05% and lowest in the year 2008/2009 i.e. 105.14% for SCBNL. The average proportion of current assets to current liabilities of NABIL, HBL and SCBNL are 93.28%, 87.62%, 106.22% respectively. The average proportion of SCBNL is greater in comparison to the three JVBs. Therefore current assets to current liabilities ratio maintained by SCBNL is better among the three JVBs. Higher ratio indicates better current assets 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 cushion the bank requires in adverse circumstances.

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

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

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

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

Higher ratio indicates higher utilization of current assets.

The following table shows the ratio of return on current assets of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 7**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 NPAT	3 CA	2/3=4 Ratio (%)	5 NPAT	6 CA	5/6=7 Ratio (%)	8 NPAT	9 CA	8/9=10 Ratio (%)
2003/2004	266.48	11961.95	2.23	165.25	10988.05	1.50	359.46	12862.22	2.79
2004/2005	329.12	14788.91	2.23	199.25	15605.42	1.28	392.69	16650.32	2.36
2005/2006	291.38	13161.68	2.21	277.04	17359.84	1.60	430.86	19224.18	2.24
2006/2007	271.64	13312.39	2.04	235.02	14165.33	1.66	479.21	18330.82	2.61
2007/2008	416.24	13868.31	3.00	212.13	16881.45	1.26	506.93	20797.60	2.44
2008/2009	455.31	14243.92	3.20	263.05	18657.35	1.41	537.80	23225.83	2.32
2009/2010	518.64	14969.38	3.46	308.28	21326.26	1.45	539.20	21447.16	2.51
Total	2548.81	96306.54	18.37	1660.15	114983.7	10.15	3246.15	132538.13	17.28
Avg.(mean)	364.12	13758.08	2.62	237.16	16426.2429	1.45	463.74	18934.02	2.47
s.d.			0.53			0.14			0.17
c.v.			20.23			9.65			6.88

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW. Nepal Stock.com](http://WWW.NepalStock.com)*

The above table highlights the proportion of net profit after tax to current assets of three JVBs from F/Y 2003/2004 to F/Y 2009/2010. The proportion of net profit after tax to current assets for 7 successive years of NABIL is 2.23%, 2.23%, 2.21%, 2.04%, 3.00%, 3.20%, 3.46% and respectively whereas of HBL is 1.50%, 1.28%, 1.60%, 1.66%, 1.26%, 1.41% and 1.45% respectively and that of SCBNL is 2.79%, 2.36%, 2.24%, 2.61%, 2.44%, 2.32% and 2.51% respectively. The proportion of net profit after tax to current assets is highest in the year 2009/2010 i.e. 3.46% and lowest in the year 2006/2007 i.e. 2.04% for NABIL, highest in the year 2006/2007 i.e. 1.66% and lowest in the year 2007/2008 1.26% for HBL and highest in the year 2003/2004 i.e. 2.79% and lowest in the year 2005/2006 i.e. 2.24% for SCBNL. The average proportion of net profit after tax to current assets of NABIL, HBL and SCBNL are 2.62%, 1.45%, 2.47% respectively. The average proportion of NABIL is greater in comparison to the three JVBs. It reveals that NABIL has been able to utilize its current assets more effectively than HBL and SCBNL.

The C.V. of net profit after tax to current assets for 7 successive years of NABIL is 20.23% whereas of HBL is 9.65% and that of SCBNL is 6.88%. Thus, as regard to the consistency maintained by the three JVBs, SCBNL is more consistent or uniform among the three JVBs because the C.V. of SCBNL (i.e. 6.88) is lower than that of the NABIL and HBL.

#### 4.2.8 Return on Total Assets

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

$$\text{Return on Total Assets} = \frac{\text{Net Profit After Tax}}{\text{Total Assets}}$$

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

The following table shows the return on total assets of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 8**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 NPAT	3 TA	2/3=4 Ratio (%)	5 NPAT	6 TA	5/6=7 Ratio (%)	8 NPAT	9 TA	8/9=10 Ratio (%)
2003/2004	266.48	12184.05	2.19	165.25	11244.10	1.47	359.46	13016.98	2.76
2004/2005	329.12	15024.20	2.19	199.25	15863.74	1.26	392.69	16832.23	2.33
2005/2006	291.38	17770.65	1.64	277.04	19500.57	1.42	430.86	19357.18	2.23
2006/2007	271.64	17629.25	1.54	235.02	21315.85	1.10	479.21	18443.10	2.60
2007/2008	416.24	16562.62	2.51	212.13	24197.97	0.88	506.93	21000.50	2.41
2008/2009	455.31	16745.49	2.72	263.05	25729.79	1.02	537.80	23642.06	2.27
2009/2010	518.64	17186.33	3.02	308.28	28871.34	1.07	539.20	21893.58	2.46
Total	2548.81	113102.59	15.81	1660.15	146723.36	8.22	3246.15	134185.63	17.07
Avg.(mean)	364.12	16157.51	2.26	237.16	20960.48	1.17	463.74	19169.38	2.44
s.d.			0.50			0.20			0.17
c.v.			22.12			17.09			6.97

Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW. Nepal Stock.com](http://WWW.NepalStock.com)

The table highlights the proportion of net profit after tax to total assets of three JVBs from F/Y 2003/2004 to F/Y 2009/2010. The proportion of net profit after tax to total assets for 7 successive years of NABIL is 2.19%, 2.19%, 1.64%, 1.54%, 2.51%, 2.72% and 3.02% respectively whereas of HBL is 1.47%, 1.26%, 1.42%, 1.10%, 0.88%, 1.02% and 1.07% respectively and that of SCBNL is 2.76%, 2.33%, 2.23%, 2.60%, 2.41%, 2.27% and 2.46% respectively. The proportion of net profit after tax to total assets is highest in the year 2009/2010 i.e. 3.02% and lowest in the year 2006/2007 i.e. 1.54% for NABIL, highest in the

year 2003/2004 i.e. 1.47% and lowest in the year 2007/2008 i.e. 0.88% for HBL and highest in the year 2003/2004 i.e. 2.76% and lowest in the year 2005/2006 i.e. 2.23% for SCBNL. The average proportion of net profit after tax to total assets of NABIL, HBL and SCBNL are 2.26%, 1.17%, and 2.44% respectively. The average proportion of SCBNL is greater in comparison to the three JVBs. It reveals that SCBNL provides greater rate of return to its total assets thereby indicating that the bank has been able to utilize its available resources more effectively and efficiently in comparison to other two JVBs.

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

#### **4.2.9 Receivable on Total Assets**

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

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

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

The following table shows the ratio of receivable on total assets of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 9**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 R	3 TA	2/3=4 Ratio (%)	5 R	6 TA	5/6=7 Ratio (%)	8 R	9 TA	8/9=10 Ratio (%)
2003/2004	231.65	12184.05	1.90	173.26	11244.10	1.54	97.69	13016.98	0.75
2004/2005	373.01	15024.20	2.48	386.56	15863.74	2.44	154.70	16832.23	0.92
2005/2006	372.35	17770.65	2.10	335.75	19500.57	1.72	139.03	19357.18	0.72
2006/2007	171.09	17629.25	0.97	385.38	21315.85	1.81	215.98	18443.10	1.17
2007/2008	230.07	16562.62	1.39	466.53	24197.97	1.93	174.48	21000.50	0.83
2008/2009	225.44	16745.49	1.35	564.36	25729.79	2.19	290.73	23642.06	1.23
2009/2010	208.67	17186.33	1.21	578.37	28871.34	2.00	266.63	21893.58	1.22
Total	1812.28	113102.59	11.40	2,890.21	146723.36	13.63	1339.24	134185.63	6.84
Avg.(mean)	258.90	16157.51	1.63	412.89	20960.48	1.95	191.32	19169.38	0.98
s.d.			0.50			0.28			0.21
c.v.			30.67			14.36			21.43

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW.NepalStock.com](http://WWW.NepalStock.com)*

The above table highlights the proportion of receivables on total assets of three JVBs from F/Y 2003/2004 to F/Y 2009/2010. The proportion of receivables on total assets for 7 successive years of NABIL is 1.90%, 2.48%, 2.10%, 0.97%, 1.39%, 1.35% and 1.21% respectively whereas of HBL is 1.54%, 2.44%, 1.72%, 1.81%, 1.93%, 2.19% and 2.00% respectively and that of SCBNL is 0.75%, 0.92%, 0.72%, 1.17%, 0.83%, 1.23% and 1.22% respectively. The proportion of receivables on total assets is highest in the year 2004/2005 i.e. 2.48% and lowest in the year 2006/2007 i.e. 0.97% for NABIL, highest in the year 2004/2005 i.e. 2.44% and lowest in the year 2003/2004 i.e. 1.54% for HBL and highest in the year 2008/2009 i.e. 1.23% and lowest in the year 2003/2004 i.e. 0.75% for SCBNL. The average proportion of receivables on total assets of NABIL, HBL and SCBNL are 1.63%, 1.95%, 0.98% respectively. The average proportion of HBL is greater in comparison to the three JVBs.

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



#### 4.2.10 Receivable to Current Assets

This ratio is calculated dividing receivable by current assets.

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

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

The following table shows the ratio of receivable on current assets of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 10**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 R	3 CA	2/3=4 Ratio (%)	5 R	6 CA	5/6=7 Ratio (%)	8 R	9 CA	8/9=10 Ratio (%)
2003/2004	231.65	11961.95	1.94	173.26	10988.05	1.58	97.69	12862.22	0.76
2004/2005	373.01	14788.91	2.52	386.56	15605.42	2.48	154.70	16650.32	0.93
2005/2006	372.35	13161.68	2.83	335.75	17359.84	1.93	139.03	19224.18	0.72
2006/2007	171.09	13312.39	1.29	385.38	14165.33	2.72	215.98	18330.82	1.18
2007/2008	230.07	13868.31	1.66	466.53	16881.45	2.76	174.48	20797.60	0.84
2008/2009	225.44	14243.92	1.58	564.36	18657.35	3.02	290.73	23225.83	1.25
2009/2010	208.67	14969.38	1.39	578.37	21326.26	2.71	266.63	21447.16	1.24
Total	1812.28	96306.54	13.21	2,890.21	114983.70	17.21	1339.24	132538.13	6.92
Avg.(mean)	258.90	13758.08	1.89	412.89	16426.24	2.46	191.32	18934.02	0.99
s.d.			0.54			0.48			0.21
c.v.			28.57			19.51			21.21

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW. Nepal Stock.com](http://WWW.NepalStock.com)*

The table highlights the proportion of receivable to current assets of three JVBs from F/Y 2003/2004 to F/Y 2009/2010. The proportion of receivable to current assets for 7 successive years of NABIL is 1.94%, 2.52%, 2.83%, 1.29%, 1.66%, 1.58% and 1.39% respectively whereas of HBL is 1.58%, 2.48%, 1.93%, 2.72%, 2.76%, 3.02% and 2.71% respectively and that of SCBNL is 0.76%, 0.93%, 0.72%, 1.18%, 0.84%, 1.25% and 1.24% respectively. The proportion of receivable to current assets is highest in the year 2005/2006 i.e. 2.83% and lowest in the year 2006/2007 i.e. 1.29% for NABIL, highest in the year 2008/2009 i.e. 3.02% and lowest in the year 2003/2004 i.e. 1.58% for HBL and highest in the year 2008/2009 i.e. 1.25% and lowest in the year 2005/2006 i.e. 0.72% for SCBNL. The average proportion of receivable to current assets of NABIL, HBL and SCBNL are 1.89%, 2.46%, 0.99% respectively. The average proportion of HBL is greater in comparison to the three JVBs. It reveals the unfavorable business condition for HBL in comparison to the other two JVBs. The most favourable business condition is for SCBNL as its average ratio is lower than the rest.

The C.V. of receivable to current assets for 7 successive years of NABIL is 28.57% whereas of HBL is 19.51% and that of SCBNL is 21.21%. Thus, as regard to the consistency maintained by the three JVBs, HBL is more consistent or uniform among the three JVBs because the C.V. of HBL (i.e. 19.51%) is lower than that of the NABIL and SCBNL. In other words, there is more fluctuation in receivable to current assets of NABIL and SCBNL than the HBL.

#### 4.2.11 Quick Assets to Current Liabilities

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

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

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

The following table shows the ratio of quick assets to current liabilities of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 11**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 QA	3 CL	2/3=4 Ratio (%)	5 QA	6 CL	5/6=7 Ratio (%)	8 QA	9 CL	8/9=10 Ratio (%)
2003/2004	11961.95	11249.94	106.33	10988.05	10698.75	102.70	12862.22	11903.72	108.05
2004/2005	14788.91	13977.29	105.81	15605.42	15311.04	101.92	16650.32	15781.19	105.51
2005/2006	13161.68	17226.21	76.40	17359.84	18742.46	92.62	19224.18	18196.01	105.65
2006/2007	13312.39	16384.73	81.25	14165.33	19433.25	72.89	18330.82	17150.05	106.88
2007/2008	13868.31	15135.42	91.63	16881.45	21899.93	77.08	20797.60	19559.38	106.33
2008/2009	14243.92	15112.45	94.25	18657.35	22325.47	83.57	23225.83	22090.48	105.14
2009/2010	14969.38	15385.33	97.30	21326.26	25837.29	82.54	21447.16	20235.75	105.99
Total	96306.54	104471.37	652.97	114983.7	134248.19	613.34	132538.13	124916.58	743.55
Avg.(mean)	13758.08	14924.48	93.28	16426.2429	19178.313	87.62	18934.02	17845.23	106.22
s.d.			10.53			10.87			0.91
c.v.			11.29			12.41			0.86

Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW.NepalStock.com](http://WWW.NepalStock.com)

The table highlights the proportion of quick assets to current liabilities of three JVBs from F/Y 2003/2004 to F/Y 2009/2010. The proportion of quick assets to current liabilities for 7 successive years of NABIL is 106.33%, 105.81%, 76.40%, 81.25%, 91.63%, 94.25%, 97.30% respectively whereas of HBL is 102.70%, 101.92%, 92.62%, 72.89%, 77.08%, 83.57%, 82.54% respectively and that of SCBNL is 108.05%, 105.51%, 105.65%, 106.88%, 106.33%, 105.14%, 105.99% respectively. The proportion of quick assets to current liabilities is highest in the year 2003/2004 i.e. 106.33% and lowest in the year 2005/2006 i.e. 76.40% for NABIL, highest in the year 2003/2004 i.e. 102.70% and lowest in the year 2006/2007 i.e. 72.89% for HBL and highest in the year 2003/2004 i.e. 108.05% and lowest in the year 2008/2009 i.e. 105.14% for SCBNL. The average proportion of quick assets to current liabilities of NABIL, HBL and SCBNL are 93.28%, 87.62%, 106.22% respectively. The average proportion of SCBNL is greater in comparison to the three JVBs. Therefore, the quick ratio maintained by the SCBNL is better as the bank can easily meet its all current claims. But it should be noticed that as the average ratio maintained by all the three JVBs are above or below the standard ratio so it is not favourable for them.

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

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

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

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

The following table shows the ratio of cash and bank balance to current liabilities of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 12**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 Cash & Bank Balance	3 CL	2/3=4 Ratio (%)	5 Cash & Bank Balance	6 CL	5/6=7 Ratio (%)	8 Cash & Bank Balance	9 CL	8/9=10 Ratio (%)
2003/2004	630.94	11249.94	5.61	802.21	10698.75	7.50	826.15	11903.72	6.94
2004/2005	910.07	13977.29	6.51	901.91	15311.04	5.89	1020.46	15781.19	6.47
2005/2006	812.91	17226.21	4.72	1435.17	18742.46	7.66	961.05	18196.01	5.28
2006/2007	1051.82	16384.73	6.42	1264.67	19433.25	6.51	825.23	17150.05	4.81
2007/2008	1144.77	15135.42	7.56	1979.21	21899.93	9.04	1512.30	19559.38	7.73
2008/2009	970.49	15112.45	6.42	2001.18	22325.47	8.96	2023.16	22090.48	9.16
2009/2010	559.38	15385.33	3.64	2014.47	25837.29	7.80	1111.12	20235.75	5.49
Total	6080.38	104471.37	37.24	10398.82	134248.19	53.35	8279.47	124916.58	45.88
Avg.(mean)	868.63	14924.48	5.84	1485.55	19178.313	7.62	1182.78	17845.23	6.55
s.d.			1.21			1.07			1.42
c.v.			20.72			14.04			21.68

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW. Nepal Stock.com](http://WWW.NepalStock.com)*

The table highlights the proportion of cash and bank balance to current liabilities of three JVBs from F/Y 2003/2004 to F/Y 2009/2010. The proportion of cash and bank balance to current liabilities for 7 successive years of NABIL is 5.61%, 6.51%, 4.72%, 6.42%, 7.56%, 6.42% and 3.64% respectively whereas of HBL is 7.50%, 5.89%, 7.66%, 6.51%, 9.04%, 8.96% and 7.80% respectively and that of SCBNL is 6.94%, 6.47%, 5.28%, 4.81%, 7.73%, 9.16% and 5.49% respectively. The proportion of cash and bank balance to current liabilities is highest in the year 2007/2008 i.e. 7.56% and lowest in the year 2009/2010 i.e. 3.64% for NABIL, highest in the year 2007/2008 i.e. 9.04% and lowest in the year 2004/2005 i.e. 5.89% for HBL and highest in the year 2008/2009 i.e. 9.16% and lowest in the year 2006/2007 i.e. 4.81% for SCBNL. The average proportion of cash and bank balance to current liabilities of NABIL, HBL and SCBNL are 5.84%, 7.62%, 6.55% respectively. The average proportion of HBL is greater in comparison to the three JVBs. Therefore liquidity position on the basis of cash and bank balance to current liabilities ratio maintained by HBL is better among the three JVBs. Higher ratio indicates higher amount of cash and bank balance maintained by the bank which shows that the bank has been able to maintained enough liquidity to fulfill its current obligations but the bank should keep in consideration that enough cash and bank balance results in idle money which incurs opportunity cost. Hence from the utilization perspective, this may not be desirable solution.

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

#### 4.2.13 Debt to Equity Ratio

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

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

The following table shows the ratio of quick assets to current liabilities of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 13**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 Total Debt	3 Shareholder Equity	2/3=4 Ratio (times)	5 Total Debt	6 Shareholder Equity	5/6=7 Ratio (times)	8 Total Debt	9 Shareholder Equity	8/9=10 Ratio (times)
2003/2004	11306.31	877.33	12.89	10792.91	451.18	23.92	11936.55	1080.41	11.05
2004/2005	14040.13	984.07	14.27	15337.69	526.05	29.16	15817.40	1014.85	15.59
2005/2006	16707.80	1062.85	15.72	18779.96	720.59	26.06	18245.18	1112.02	16.41
2006/2007	16482.82	1146.43	14.38	20457.73	858.11	23.84	17207.62	1235.48	13.93
2007/2008	15248.44	1314.19	11.60	23134.84	1063.13	21.76	19631.6	1368.91	14.34
2008/2009	15263.80	1481.68	10.30	24375.62	1324.17	18.41	22146.32	1495.74	14.81
2009/2010	15528.69	1657.64	9.37	27329.6	1541.75	17.73	20311.16	1582.41	12.84
Total	104577.99	8524.19	88.52	140,208.35	6,484.98	160.88	125295.83	8889.82	86.12
Avg.(mean)	14939.71	1217.74	12.65	20,029.76	926.43	22.98	17899.40	1269.97	14.14
s.d.			2.15			3.77			1.65
c.v.			16.70			16.40			11.67

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW. Nepal Stock.com](http://WWW.NepalStock.com)*

The table highlights the proportion of debt to equity of three JVBs from F/Y 2003/2004 to F/Y 2009/2010. The proportion of debt to equity for 7 successive years of NABIL is 12.89, 14.27, 15.72, 14.38, 11.60, 10.30 and 9.37 times respectively whereas of HBL is 23.92, 29.16, 26.06, 23.84, 21.76, 18.41

and 17.73 times respectively and that of SCBNL is 11.05, 15.59, 16.41, 13.93, 14.34, 14.81 and 12.84 times respectively. The proportion of debt to equity is highest in the year 2005/2006 i.e. 15.72 times and lowest in the year 2009/2010 i.e. 9.37 times for NABIL, highest in the year 2004/2005 i.e. 29.16 times and lowest in the year 2009/2010 i.e. 17.73 times for HBL and highest in the year 2005/2006 i.e. 16.41 and lowest in the year 2003/2004 i.e. 11.05 times for SCBNL. The average proportion of debt to equity of NABIL, HBL and SCBNL are 12.65 times, 22.98 times, 14.14 times respectively. The average proportion of HBL is greater in comparison to the three JVBs. Therefore from the shareholders point of view, investment in the share of HBL is considered to be satisfactory than NABIL and SCBNL because of low cost of outsider's fund were used to acquire assets to generate higher return. In contrary, from the creditor's point of view, a lower debt-equity is generally viewed as favourable so NABIL and SCBNL are favorable as they provide safe investment.

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

#### **4.2.14 Net Worth to Total Assets**

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

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

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

The following table shows the ratio of net worth to total assets of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 14**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 Net Worth	3 TA	2/3=4 Ratio (%)	5 Net Worth	6 TA	5/6=7 Ratio (%)	8 Net Worth	9 TA	8/9=10 Ratio (%)
2003/2004	877.33	12184.05	7.20	451.18	11244.10	4.01	1080.41	13016.98	8.30
2004/2005	984.07	15024.20	6.55	526.05	15863.74	3.32	1014.85	16832.23	6.03
2005/2006	1062.85	17770.65	5.98	720.59	19500.57	3.70	1112.02	19357.18	5.74
2006/2007	1146.43	17629.25	6.50	858.11	21315.85	4.03	1235.48	18443.10	6.70
2007/2008	1314.19	16562.62	7.93	1063.13	24197.97	4.39	1368.91	21000.50	6.52
2008/2009	1481.68	16745.49	8.85	1324.17	25729.79	5.15	1495.74	23642.06	6.33
2009/2010	1657.64	17186.33	9.65	1541.75	28871.34	5.34	1582.41	21893.58	7.23
Total	8524.19	113102.59	52.66	6,484.98	146723.36	29.93	8889.82	134185.63	46.85
Avg.(mean)	1217.74	16157.51	7.52	926.43	20960.48	4.28	1269.97	19169.38	6.69
s.d.			1.25			0.69			0.79
c.v.			16.62			16.12			11.81

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW. Nepal Stock.com](http://WWW.NepalStock.com)*

The table highlights the proportion of net worth to total assets of three JVBs from F/Y 2003/2004 to F/Y 2009/2010. The proportion of net worth to total assets for 7 successive years of NABIL is 7.20%, 6.55%, 5.98%, 6.50%, 7.93%, 8.85% and 9.65% respectively whereas of HBL is 4.01%, 3.32%, 3.70%, 4.03%, 4.39%, 5.15% and 5.34% respectively and that of SCBNL is 8.30%, 6.03%, 5.74%, 6.70%, 6.52%, 6.33% and 7.23% respectively. The proportion of net worth to total assets is highest in the year 2009/2010 i.e. 9.65% and lowest in the year 2005/2006 i.e. 5.98% for NABIL, highest in the year 2009/2010 i.e. 5.34% and lowest in the year 2004/2005 i.e. 3.32% for HBL and highest in the year 2003/2004 i.e. 8.30% and lowest in the year 2005/2006 i.e. 5.74% for SCBNL. The average proportion of net worth to total assets of NABIL, HBL and SCBNL are 7.52%, 4.28%, and 6.69% respectively. The average proportion of NABIL is greater in comparison to the three JVBs. It reveals that average proportion of net worth to total assets favors NABIL more than the rest of the JVBs.

The C.V. of net worth to total assets for 7 successive years of NABIL is 16.62% whereas of HBL is 16.12% and that of SCBNL is 11.81%. Thus, as regard to the consistency maintained by the three JVBs, SCBNL is more consistent or uniform among the three JVBs because the C.V. of SCBNL (i.e. 11.81%) is lower than that of the NABIL and HBL. In other words, there is more fluctuation in net worth to total assets of NABIL and HBL than the SCBNL.

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

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

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

The following table shows the ratio of return on owner's equity of NABIL, HBL and SCBNL from F/Y 2003/2004 to F/Y 2009/2010.

**Table No.: 15**

(Rs. In Million)

1 Year	Nabil Bank Limited			Himalayan Bank Ltd.			Standard Chartered Bank Nepal Ltd.		
	2 NPAT	3 Owner Equity	2/3=4 Ratio (%)	5 NPAT	6 Owner Equity	5/6=7 Ratio (%)	8 NPAT	9 Owner Equity	8/9=10 Ratio (%)
2003/2004	266.48	877.33	30.37	165.25	451.18	36.63	359.46	1080.41	33.27
2004/2005	329.12	984.07	33.44	199.25	526.05	37.88	392.69	1014.85	38.69
2005/2006	291.38	1062.85	27.41	277.04	720.59	38.45	430.86	1112.02	38.75
2006/2007	271.64	1146.43	23.69	235.02	858.11	27.39	479.21	1235.48	38.79
2007/2008	416.24	1314.19	31.67	212.13	1063.13	19.95	506.93	1368.91	37.03
2008/2009	455.31	1481.68	30.73	263.05	1324.17	19.87	537.80	1495.74	35.96
2009/2010	518.64	1657.64	31.29	308.28	1541.75	20.00	539.20	1582.41	34.07
Total	2548.81	8524.19	208.62	1660.15	6,484.98	200.15	3246.15	8889.82	256.56
Avg.(mean)	364.12	1217.74	29.80	237.16	1,621.25	28.59	463.74	1269.97	36.65
s.d.			3.00			8.23			2.13
c.v.			10.07			28.79			5.82

*Source: Comparative Balance Sheet and Profit And Loss Account of NABIL, HBL and SCBNL as given in [WWW. Nepal Stock.com](http://WWW.Nepal Stock.com)*



The table highlights the proportion of return on owner's equity of three JVBs from F/Y 2003/2004 to F/Y 2009/2010. The proportion of return on owner's equity for 7 successive years of NABIL is 30.37%, 33.44%, 27.41%, 23.69%, 31.67%, 30.73% and 31.29% respectively whereas of HBL is 36.63%, 37.88%, 38.45%, 27.39%, 19.95%, 19.87% and 20.00%, respectively and that of SCBNL is 33.27%, 38.69%, 38.75%, 38.79%, 37.03%, 35.96% and 34.07% respectively. The proportion of return on owner's equity is highest in the year 2004/2005 i.e. 33.44% and lowest in the year 2006/2007 i.e. 23.69% for NABIL, highest in the year 2005/2006 i.e. 38.45% and lowest in the year 2008/2009 i.e. 19.87% for HBL and highest in the year 2006/2007 i.e. 38.79% and lowest in the year 2003/2004 i.e. 33.27% for SCBNL. The average proportion of return on owner's equity of NABIL, HBL and SCBNL are 29.80%, 28.59%, 36.65% respectively. 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 remaining two JVBs.

The C.V. of return on owner's equity for 7 successive years of NABIL is 10.07% whereas of HBL is 28.79% and that of SCBNL is 5.82%. Thus, as regard to the consistency maintained by the three JVBs, SCBNL is more consistent or uniform among the three JVBs because the C.V. of SCBNL (i.e. 5.82%) is lower than that of the NABIL and HBL. In other words, there is more fluctuation in return on owner's equity of NABIL and HBL than the SCBNL.

### **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 statements of a single year. In order to succeed in this dynamic world, it is quite important for a business analysts to find out the direction and tendency of business and to determine it, the relative past data to the problem are studied and the trend is determined.

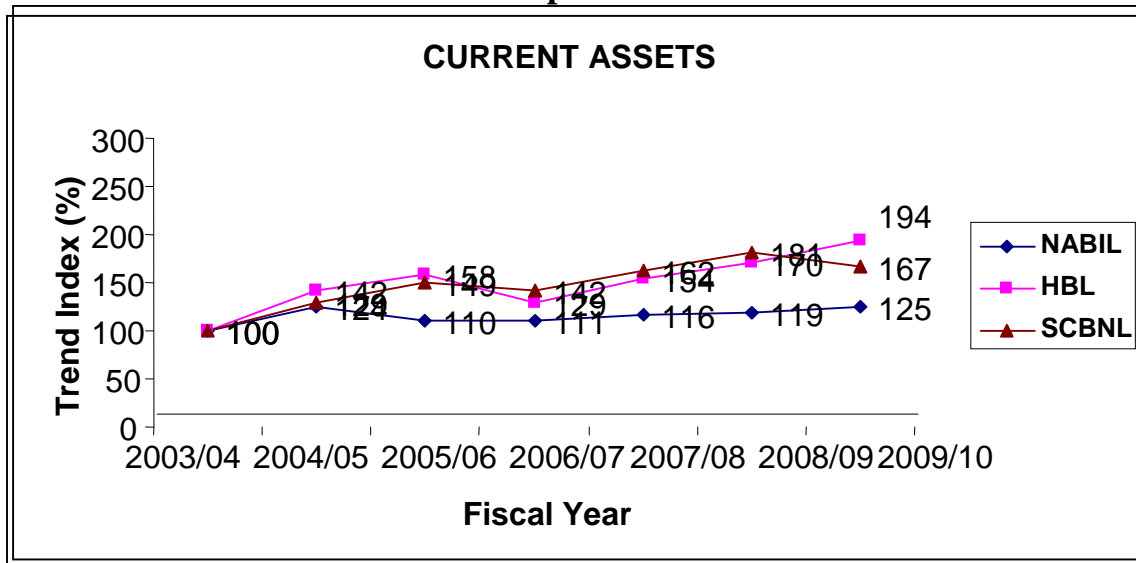
Trend analysis makes it easy to understand the changes occurred in an item or group of items over a period of time. Thus, trend analysis is one of the important tool for the bankers as it enable them to indicate the direction in which their business is going and on this basis to forecast its future.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

- Trend Ratios
- Graphs and Diagrams

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

### 4.3.1 Trend of Current Assets:

Graph no.: 1

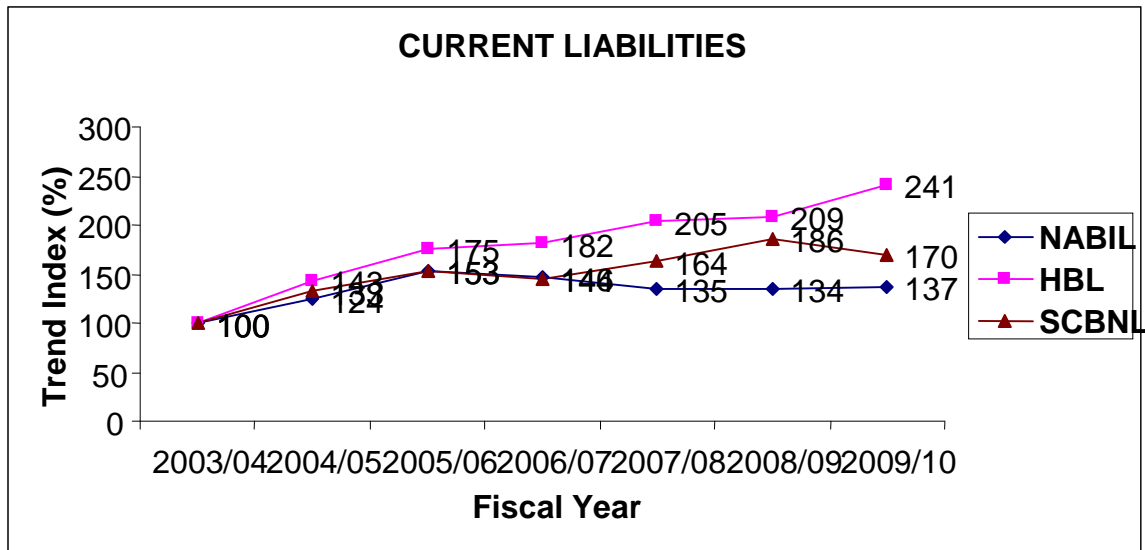


Source: Appendix-A

The graph highlights the current assets trends of three JVBs from F/Y 2003/04 to 2009/10. The growth of current assets in comparison to the base year (i.e. 100%) for 7 successive years of NABIL is 124%, 110%, 111%, 116%, 119%, 119%, 125% respectively whereas of HBL is 142%, 158%, 129%, 154%, 170%, 194% respectively and that of SCBNL is 129%, 149%, 142%, 162%, 181%, 167% respectively. The current assets of NABIL shows the fluctuating trend throughout the period understudy as there is rise and fall in successive years. The current assets of HBL marked an increasing trend throughout the period understudy except in 2006/07. The current assets of the SCBNL also marked an increasing trend throughout the period understudy except in 2006/2007 and 2009/10. This indicates that the current assets management of HBL and SCBNL is better in comparison to the NABIL.

### 4.3.2 Trend of Current Liabilities:

Graph no.: 2

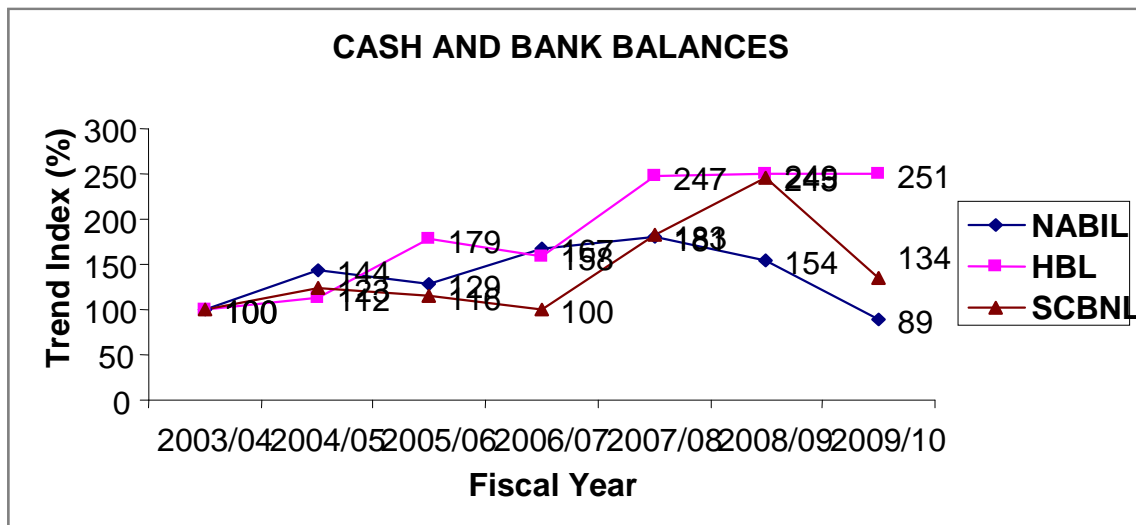


Source: Appendix-A

The above graph highlights the current liabilities trends of three JVBs from F/Y 2003/04 to 2009/10. The growth of current liabilities in comparison to the base year (i.e. 100%) for 7 successive years of NABIL is 124%, 153%, 146%, 135%, 134%, 137% respectively whereas of HBL is 143%, 175%, 182%, 205%, 209%, 241% respectively and that of SCBNL is 133%, 153%, 144%, 164%, 186%, 170% respectively. The current liabilities of NABIL shows the fluctuating trend throughout the period understudy as there is rise and fall in successive years. The current liabilities marked an increasing trend throughout the period understudy. The current assets of the SCBNL marked an increasing trend throughout the period understudy except in 2006/2007 and 2009/10. This indicates that the current liabilities of HBL and SCBNL are greater in comparison to the NABIL.

### 4.3.3 Trend of Cash and Bank Balances:

Graph no.: 3

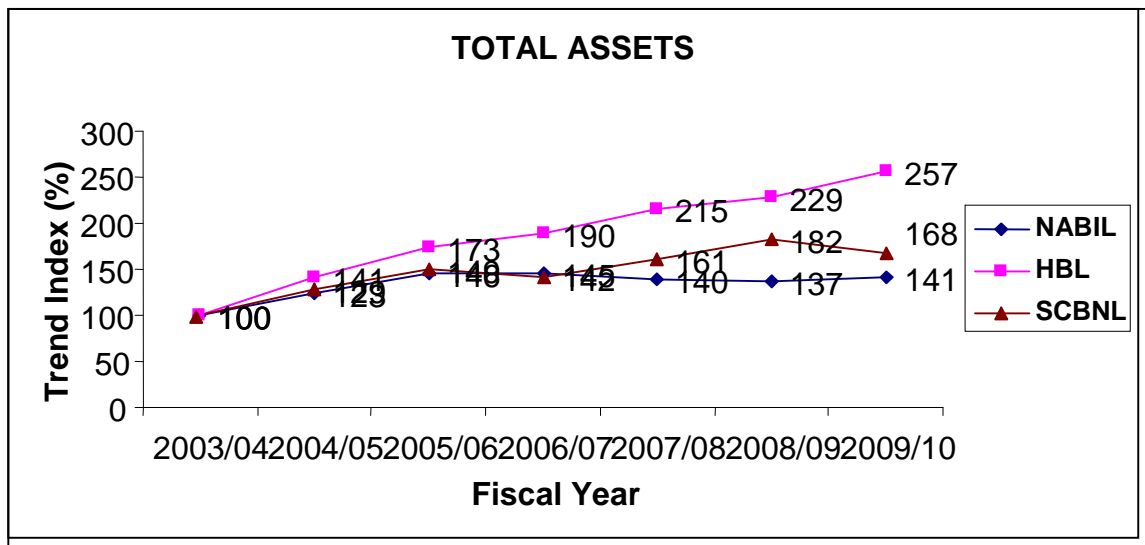


Source: Appendix-A

The above graph highlights the cash and bank balance trends of three JVBs from F/Y 2003/04 to 2009/10. The cash and bank balance in comparison to the base year (i.e. 100%) for 7 successive years of NABIL is 144%, 129%, 167%, 181%, 154%, 89% respectively whereas of HBL is 112%, 179%, 158%, 247%, 249%, 251%, respectively and that of SCBNL is 123%, 116%, 100%, 183%, 245%, 134% respectively. The cash and bank balance of NABIL indicates highly fluctuating trend throughout the period understudy. The cash and bank balance of HBL marked an increasing trend throughout the period understudy except in 2006/07 and 2009/10. The cash and bank balance of the SCBNL marked a fluctuating trend throughout the period understudy. This indicates that the cash and bank balance of NABIL and SCBNL is lower in comparison to the HBL which may be termed as both good and worst as greater cash and bank balances is good for the banks because it will increase their working capital and they can perform their operations smoothly whereas it is worst because greater cash balance may indicate idle cash which incurs cost.

#### 4.3.4 Trend of Total Assets:

Graph no.: 4

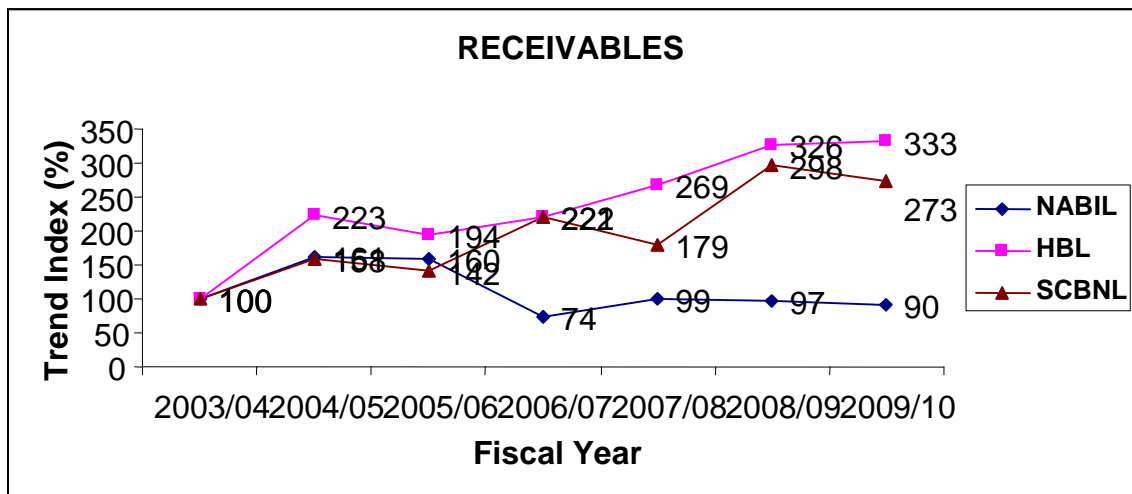


Source: Appendix-A

The above graph highlights the total assets trends of three JVBS from F/Y 2003/04 to 2009/10. The growth of total assets in comparison to the base year (i.e. 100%) for 7 successive years of NABIL is 123%, 146%, 145%, 140%, 137%, 141% respectively whereas of HBL is 141%, 173%, 190%, 215%, 229%, 257% respectively and that of SCBNL is 129%, 149%, 142%, 161%, 182%, 168% respectively. The total assets of NABIL show the increasing trend in the year 2004/05, 2005/06 and 2009/10 and decreasing trend in the remaining years. The total assets of HBL marked an increasing trend throughout the period understudy. The total assets of SCBNL marked an increasing trend throughout the period understudy except in 2006/2007 and 2009/10. This indicates that the total assets management of HBL and SCBNL is better in comparison to the NABIL.

#### 4.3.5 Trend of Receivables:

Graph no.: 5

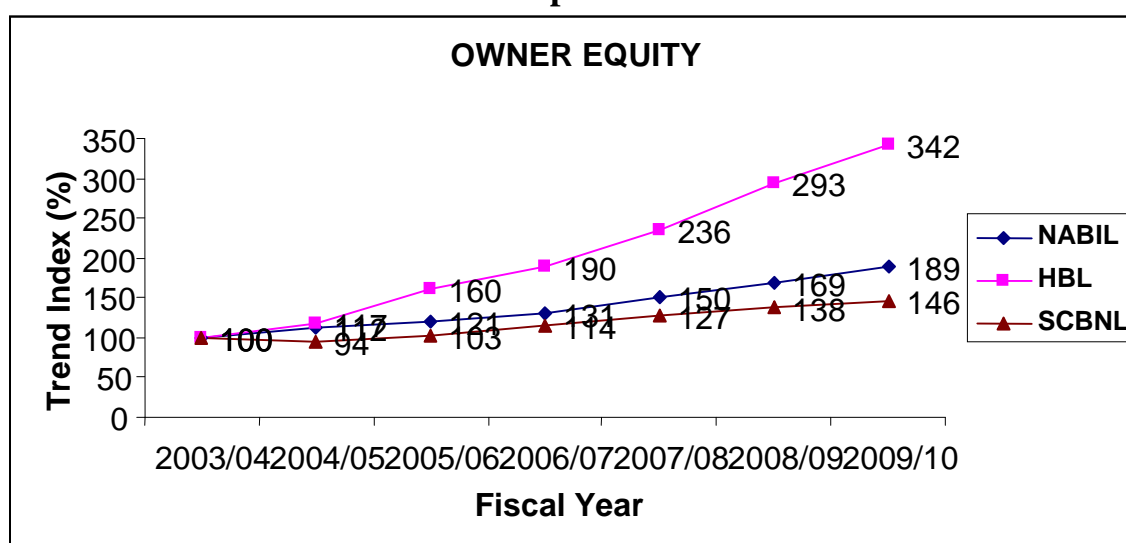


Source: Appendix-A

The above graph highlights the receivable trends of three JVBs from F/Y 2003/04 to 2009/10. The growth of receivable in comparison to the base year (i.e. 100%) for 7 successive years of NABIL is 161%, 160%, 74%, 99%, 97%, 90% respectively whereas of HBL is 223%, 194%, 222%, 269%, 326%, 333% respectively and that of SCBNL is 158%, 142%, 221%, 179%, 298%, 273% respectively. The receivable of NABIL shows the decreasing trend throughout the period understudy as there is constant fall in successive years except in the year 2004/05. The receivable of HBL marked a fluctuating trend throughout the period understudy. The receivable of the SCBNL also marked a fluctuating trend throughout the period. This indicates that the receivable of HBL and SCBNL is poor in comparison to the NABIL.

### 4.3.6 Trend of Owner Equity:

Graph no.: 6

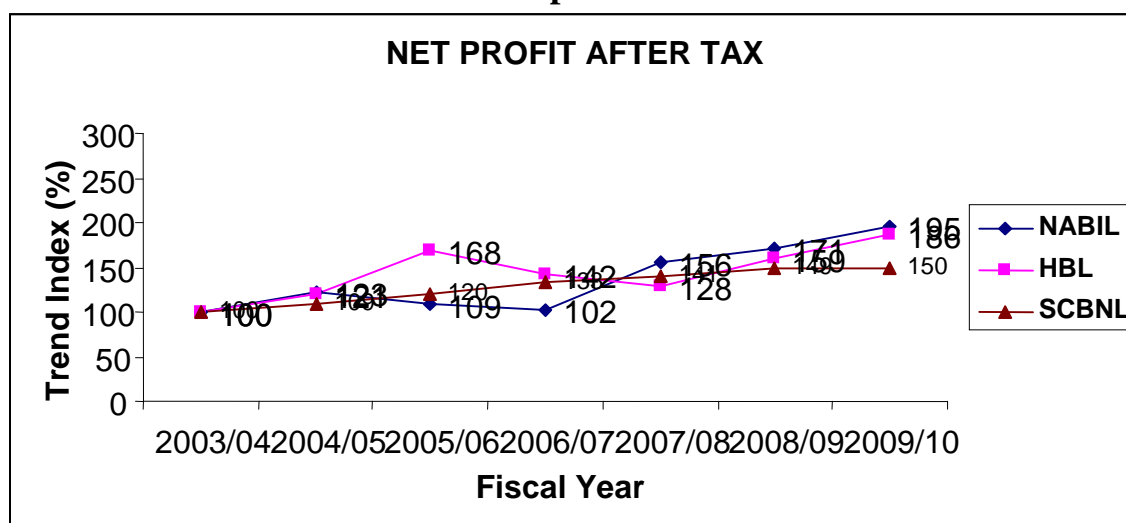


Source: Appendix-A

The above graph highlights the owner equity trends of three JVBs from F/Y 2003/04 to 2009/10. The growth of owner equity in comparison to the base year (i.e. 100%) for 7 successive years of NABIL is 112%, 121%, 131%, 150%, 169%, 189% respectively whereas of HBL is 117%, 160%, 190%, 236%, 293%, 342% respectively and that of SCBNL is 94%, 103%, 114%, 127%, 138%, 146% respectively. The owner equity of NABIL, HBL and SCBNL all the three marked an increasing trend throughout the period understudy but there is slow increase in NABIL and SCBNL as compared to the high increase in the HBL.

### 4.3.7 Trend of Net Profit after Tax:

Graph no.: 7



Source: Appendix-A

The above graph highlights the net profit after tax trends of three JVBs from F/Y 2003/04 to 2009/10. The growth of net profit after tax in comparison to the base year (i.e. 100%) for 7 successive years of NABIL is 123%, 109%, 102%, 156%, 171%, 195% respectively whereas of HBL is 121%, 168%, 142%, 128%, 159%, 186% respectively and that of SCBNL is 109%, 120%, 133%, 141%, 149%, 150% respectively. The net profit after tax of NABIL shows the increasing trend in the year 2004/05, 2007/08, 2008/09 and 2009/10 and decreasing trend in the remaining years. The net profit after tax of HBL marked an increasing trend throughout the period understudy except in the year 2006/07 and 2007/08. The net profit after tax of SCBNL marked an increasing trend throughout the period understudy as there is gradual increase in the successive years. This indicates that the net profit after tax of SCBNL is the best among the rest and is able to give higher return to the shareholders, creditors and is satisfying them.

### 4.4 Correlation Analysis and Probable Error

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

"When the relationship is of a quantitative nature, the appropriate statistical tool for discovering and measuring the relationship and expressing it in a brief formula, is known as correlation."<sup>37</sup>

<sup>37</sup> Croxton and Cowden, as quoted by S.P. Gupta, *An easy approach to Statistics*, 6th edition, S. Chand and Company Ltd., Ram Nagar, New Delhi-110055, p.155.



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

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

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

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

**Table no.: 16**

Banks	Correlation (r)	P.E.	6×P.E.	Correlation
NABIL	0.0939	0.2527	1.5161	$r < 6 \text{ P.E. ; not significant}$
HBL	0.8295	0.0795	0.4771	$r > 6 \text{ P.E. ; significant}$
SCBNL	0.7458	0.1131	0.6788	$r > 6 \text{ P.E. ; significant}$

The above table highlights the seven years Karl Pearson's correlation coefficient ( $r$ ) and probable error (P.E.) in between cash and bank balance and current assets of NABIL, HBL and SCBNL which are 0.0939 and 0.2527, 0.8295 and 0.0795, 0.7458 and 0.1131 respectively. We can conclude that the highest degree of correlation in between cash and bank balance and current assets is 0.8295 of HBL and the lowest is 0.0939 of NABIL among the three JVBs. In the above figure, there is moderate degree positive correlation coefficient in between cash and bank balance and current assets of NABIL but since it is not 6 times more than P.E., it is not considered as significant and the change in cash and bank balance does not affect the volume of current assets to the great extent. On the other hand, there is high degree positive correlation coefficient in between cash and bank balance and current assets of HBL and SCBNL and as it is 6 times greater than P.E., it is considered as significant and thereby changes in cash and bank balance affects volume of current assets.

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

**Table no.: 17**

Banks	Correlation (r)	P.E.	6×P.E.	Correlation
NABIL	0.3654	0.2209	1.3254	r < 6 P.E. ; not significant
HBL	0.9407	0.0293	0.1760	r > 6 P.E. ; significant
SCBNL	0.7508	0.1112	0.6674	r > 6 P.E. ; significant

The above table highlights the seven years Karl Pearson's correlation coefficient (r) and probable error (P.E.) in between cash and bank balance and total assets of NABIL, HBL and SCBNL which are 0.3654 and 0.2209, 0.9407 and 0.0293, 0.7508 and 0.1112 respectively. We can conclude that the highest degree of correlation in between cash and bank balance and total assets is 0.9407 of HBL and the lowest is 0.3654 of NABIL among the three JVBs. In the above figure, there is moderate degree positive correlation coefficient in between cash and bank balance and total assets of NABIL but since it is not 6 times more than P.E., it is not considered as significant and the change in cash and bank balance does not affect the volume of total assets to the great extent. On the other hand, there is high degree positive correlation coefficient in between cash and bank balance and total assets of HBL and SCBNL and as it is 6 times greater than P.E., it is considered as significant and thereby changes in cash and bank balance affects volume of total assets.

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

**Table no.: 18**

Banks	Correlation (r)	P.E.	6×P.E.	Correlation
NABIL	0.4783	0.1966	1.1796	r < 6 P.E.; not significant
HBL	0.8844	0.0555	0.3332	r > 6 P.E. ; significant
SCBNL	0.9996	0.0002	0.0012	r > 6 P.E. ; significant

The table highlights the seven years Karl Pearson's correlation coefficient (r) and probable error (P.E.) in between current assets and total assets of NABIL, HBL and SCBNL which are 0.4783 and 0.1966, 0.8844 and 0.0555, 0.9996 and 0.0002 respectively. We can conclude that the highest degree of correlation in between current assets and total assets is 0.9996 of SCBNL and the lowest is 0.4783 of NABIL among the three JVBs. In the above figure, there is moderate degree positive correlation coefficient in between current assets and total assets

of NABIL but since it is not 6 times more than P.E., it is not considered as significant and the change in current assets does not affect the volume of total assets to the great extent. On the other hand, there is high degree positive correlation coefficient in between current assets and total assets of HBL and SCBNL and as it is 6 times greater than P.E., it is considered as significant and thereby changes in current assets affects volume of total assets.

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

**Table no.: 19**

Banks	Correlation (r)	P.E.	6×P.E.	Correlation
NABIL	0.3547	0.2229	1.3374	$r < 6 \text{ P.E.}$ ; not significant
HBL	0.9041	0.0465	0.2793	$r > 6 \text{ P.E.}$ ; significant
SCBNL	0.9996	0.0002	0.0012	$r > 6 \text{ P.E.}$ ; significant

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

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

**Table no.: 20**

Banks	Correlation (r)	P.E.	6×P.E.	Correlation
NABIL	0.7381	0.1160	0.6963	r > 6 P.E. ; significant
HBL	0.8803	0.0574	0.3443	r > 6 P.E.; significant
SCBNL	0.9322	0.0334	0.2004	r > 6 P.E. ; significant

The above table highlights the seven years Karl Pearson's correlation coefficient (r) and probable error (P.E.) in between return and current assets of NABIL, HBL and SCBNL which are 0.7381 and 0.1160, 0.8803 and 0.0574, 0.9322 and 0.0334 respectively. We can conclude that the highest degree of correlation in between return and current assets is 0.9322 of SCBNL and the lowest is 0.7381 of NABIL among the three JVBs. In the above figure, there is high degree of positive correlation coefficient in between return and current assets of NABIL, HBL and SCBNL. Since the correlation coefficient in between return and current assets of NABIL, HBL and SCBNL is 6 times greater than P.E., so it is considered as significant and thereby changes in return affects the volume of current assets.

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

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

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

Null Hypothesis (H<sub>0</sub>):  $\mu_1 = \mu_2 = \mu_3$  i.e. there is no significant difference in average current assets of the three JVBs.

Alternative Hypothesis (H<sub>1</sub>):  $\mu_1 \neq \mu_2 \neq \mu_3$  i.e. there is a significant difference in average current assets of the three JVBs.

Computation of test statistic:

**Table no.: 21**

**Current Assets of NABIL, HBL and SCBNL**

<b>Banks</b> <b>Year</b>	<b>NABIL</b> <b>(X<sub>1</sub>)</b>	<b>HBL</b> <b>(X<sub>2</sub>)</b>	<b>SCBNL</b> <b>(X<sub>3</sub>)</b>
2003/2004	11961.95	10988.05	12862.22
2004/2005	14788.91	15605.42	16650.32
2005/2006	13161.68	17359.84	19224.18
2006/2007	13312.39	14165.33	18330.82
2007/2008	13868.31	16881.45	20797.6
2008/2009	14243.92	18657.35	23225.83
2009/2010	14969.38	21326.26	21447.16
<b>Total</b>	<b>96306.54</b>	<b>114983.70</b>	<b>132538.13</b>

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

Sum of Squares of Current Assets:

$$X_1^2 = 1331551272$$

$$X_2^2 = 1954176424$$

$$X_3^2 = 2580217935$$

$$\begin{aligned} T &= X_1 + X_2 + X_3 \\ &= 96306.54 + 114983.70 + 132538.13 \\ &= 343828.37 \end{aligned}$$

$$\begin{aligned} \text{Correction Factor (C.F.)} &= T^2 / N \\ &= (343828.37)^2 / 21 \\ &= 5629426096 \end{aligned}$$

Sum of Squares Between Sample Banks (SSB)

$$\begin{aligned} &= (X_1^2 / n_1) + (X_2^2 / n_2) + (X_3^2 / n_3) - T^2 / N \\ &= (96306.54)^2 / 7 + (114983.70)^2 / 7 + (132538.13)^2 / 7 - 5629426096 \\ &= 5723222402.30 - 5629426096 \\ &= 93796306.3 \end{aligned}$$

Total Sum of Squares Between Banks (TSS)

$$\begin{aligned} &= X_1^2 + X_2^2 + X_3^2 - T^2 / N \\ &= 1331551272 + 1954176424 + 2580217935 - 5629426096 \\ &= 5865945631 - 5629426096 \\ &= 236519535 \end{aligned}$$

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

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

**From above:**

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

**Decision:**

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

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

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

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

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

Computation of test statistic:

**Table no. 22**

**Current Liabilities of NABIL, HBL and SCBNL**

<b>Banks</b> <b>Year</b>	<b>NABIL</b> <b>(X<sub>1</sub>)</b>	<b>HBL</b> <b>(X<sub>2</sub>)</b>	<b>SCBNL</b> <b>(X<sub>3</sub>)</b>
2003/2004	11249.94	10698.75	11903.72
2004/2005	13977.29	15311.04	15781.19
2005/2006	17226.21	18742.46	18196.01
2006/2007	16384.73	19433.25	17150.05
2007/2008	15135.42	21899.93	19559.38
2008/2009	15112.45	22325.47	22090.48
2009/2010	15385.33	25837.29	20235.75
<b>Total</b>	<b>104471.37</b>	<b>134248.19</b>	<b>124916.58</b>

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

Sum of Squares of Current Liabilities:

$$X_1^2 = 1581302936.67$$

$$X_2^2 = 2723421309.13$$

$$X_3^2 = 2296007733.25$$

$$\begin{aligned} T &= X_1 + X_2 + X_3 \\ &= 104471.37 + 134248.19 + 124916.58 \\ &= 363636.14 \end{aligned}$$

$$\begin{aligned} \text{Correction Factor (C.F.)} &= T^2 / N \\ &= (363636.14)^2 / 21 \\ &= 6296725824.47 \end{aligned}$$

Sum of Squares Between Sample Banks (SSB)

$$\begin{aligned} &= (X_1)^2 / n_1 + (X_2)^2 / n_2 + (X_3)^2 / n_3 - T^2 / N \\ &= (104471.37)^2 / 7 + (134248.19)^2 / 7 + (124916.58)^2 / 7 - 6296725824.47 \\ &= 6362999375.22 - 6296725824.47 \\ &= 66273550.75 \end{aligned}$$

Total Sum of Squares Between Banks (TSS)

$$\begin{aligned} &= X_1^2 + X_2^2 + X_3^2 - T^2 / N \\ &= 1581302936.67 + 2723421309.13 + 2296007733.25 - 6296725824.47 \\ &= 6600731979.06 - 6296725824.47 \\ &= 304006154.59 \end{aligned}$$

Sum of Squares Within Sample Banks (SSW)  
 = TSS - SSB  
 = 304006154.59 - 66273550.75  
 = 237732603.84

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

**From above:**

Computed value of  $F = 2.51$

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

**Decision:**

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

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

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

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

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



Computation of test statistic:

**Table no.: 23**

**Cash and Bank Balance of NABIL, HBL and SCBNL**

<b>Year \ Banks</b>	<b>NABIL (X<sub>1</sub>)</b>	<b>HBL (X<sub>2</sub>)</b>	<b>SCBNL (X<sub>3</sub>)</b>
2003/2004	630.94	802.21	826.15
2004/2005	910.07	901.91	1020.46
2005/2006	812.91	1435.17	961.05
2006/2007	1051.82	1264.67	825.23
2007/2008	1144.77	1979.21	1512.3
2008/2009	970.49	2001.18	2023.16
2009/2010	559.38	2014.47	1111.12
<b>Total</b>	<b>6080.38</b>	<b>10398.82</b>	<b>8279.47</b>

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

Sum of Squares of Cash and Bank Balance:

$$X_1^2 = 5558715.85$$

$$X_2^2 = 17096168.67$$

$$X_3^2 = 10943299.42$$

$$\begin{aligned} T &= X_1 + X_2 + X_3 \\ &= 6080.38 + 10398.82 + 8279.47 \\ &= 24758.67 \end{aligned}$$

$$\begin{aligned} \text{Correction Factor (C.F.)} &= T^2 / N \\ &= (24758.67)^2 / 21 \\ &= 612991740.17 / 21 \\ &= 29190082.86 \end{aligned}$$

Sum of Squares Between Sample Banks (SSB)

$$\begin{aligned} &= (X_1^2 / n_1) + (X_2^2 / n_2) + (X_3^2 / n_3) - T^2 / N \\ &= (6080.38)^2 / 7 + (10398.82)^2 / 7 + (8279.47)^2 / 7 - 29190082.86 \\ &= 30522300.26 - 29190082.86 \\ &= 1332217.40 \end{aligned}$$

Total Sum of Squares Between Banks (TSS)

$$\begin{aligned} &= X_1^2 + X_2^2 + X_3^2 - T^2 / N \\ &= 5558715.85 + 17096168.67 + 10943299.42 - 29190082.86 \\ &= 4408101.08 \end{aligned}$$

Sum of Squares Within Sample Banks (SSW)

$$\begin{aligned} &= TSS - SSB \\ &= 4408101.08 - 1332217.40 \\ &= 3075883.68 \end{aligned}$$

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

**From above:**

Computed value of  $F = 3.90$

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

**Decision:**

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

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

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

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

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

Computation of test statistic:

**Table no.: 24**

**Net Profit of NABIL, HBL and SCBNL**

<b>Year \ Banks</b>	<b>NABIL (X<sub>1</sub>)</b>	<b>HBL (X<sub>2</sub>)</b>	<b>SCBNL (X<sub>3</sub>)</b>
2003/2004	266.48	165.25	359.46
2004/2005	329.12	199.25	392.69
2005/2006	291.38	277.04	430.86
2006/2007	271.64	235.02	479.21
2007/2008	416.24	212.13	506.93
2008/2009	455.31	263.05	537.80
2009/2010	518.64	308.28	539.20
<b>Total</b>	<b>2548.81</b>	<b>1660.15</b>	<b>3246.15</b>

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

Sum of Squares of Net Profit:

$$X_1^2 = 987572.54$$

$$X_2^2 = 408224.68$$

$$X_3^2 = 1535643.00$$

$$\begin{aligned} T &= X_1 + X_2 + X_3 \\ &= 2548.81 + 1660.15 + 3246.15 \\ &= 7455.11 \end{aligned}$$

$$\begin{aligned} \text{Correction Factor (C.F.)} &= T^2 / N \\ &= (7455.11)^2 / 21 \\ &= 55578665.11 / 21 \\ &= 2646603.10 \end{aligned}$$

$$\begin{aligned} \text{Sum of Squares Between Sample Banks (SSB)} \\ &= (X_1^2 / n_1) + (X_2^2 / n_2) + (X_3^2 / n_3) - T^2 / N \\ &= (2548.81)^2 / 7 + (1660.15)^2 / 7 + (3246.15)^2 / 7 - 2646603.10 \\ &= 2827145.75 - 2646603.10 \\ &= 180542.65 \end{aligned}$$

$$\begin{aligned} \text{Total Sum of Squares Between Banks (TSS)} \\ &= X_1^2 + X_2^2 + X_3^2 - T^2 / N \\ &= 987572.54 + 408224.68 + 1535643.00 - 2646603.10 \\ &= 284837.12 \end{aligned}$$

Sum of Squares Within Sample Banks (SSW)

$$\begin{aligned}
&= \text{TSS} - \text{SSB} \\
&= 284837.12 - 180542.65 \\
&= 104294.47
\end{aligned}$$

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

**From above:**

Computed value of F = 15.58

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

**Decision:**

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

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

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

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

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

Computation of test statistic:

**Table no. 25**

**Receivables of NABIL, HBL and SCBNL**

<b>Year \ Banks</b>	<b>NABIL (X<sub>1</sub>)</b>	<b>HBL (X<sub>2</sub>)</b>	<b>SCBNL (X<sub>3</sub>)</b>
2003/2004	231.65	173.26	97.69
2004/2005	373.01	386.56	154.70
2005/2006	372.35	335.75	139.03
2006/2007	171.09	385.38	215.98
2007/2008	230.07	466.53	174.48
2008/2009	225.44	564.36	290.73
2009/2010	208.67	578.37	266.63
<b>Total</b>	<b>1812.28</b>	<b>2890.21</b>	<b>1339.24</b>

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

Sum of Squares of Receivables:

$$X_1^2 = 508013.06$$

$$X_2^2 = 1311357.78$$

$$X_3^2 = 285510.89$$

$$\begin{aligned} T &= X_1 + X_2 + X_3 \\ &= 1812.28 + 2890.21 + 1339.24 \\ &= 6041.73 \end{aligned}$$

$$\begin{aligned} \text{Correction Factor (C.F.)} &= T^2 / N \\ &= (6041.73)^2 / 21 \\ &= 1738214.35 \end{aligned}$$

Sum of Squares Between Sample Banks (SSB)

$$\begin{aligned} &= (X_1^2 / n_1) + (X_2^2 / n_2) + (X_3^2 / n_3) - T^2 / N \\ &= (1812.28)^2 / 7 + (2890.21)^2 / 7 + (1339.24)^2 / 7 - 1738214.35 \\ &= 1918748.06 - 1738214.35 \\ &= 180533.71 \end{aligned}$$

Total Sum of Squares Between Banks (TSS)

$$\begin{aligned} &= X_1^2 + X_2^2 + X_3^2 - T^2 / N \\ &= 508013.06 + 1311357.78 + 285510.89 - 1738214.35 \\ &= 2104881.73 - 1738214.35 \\ &= 366667.38 \end{aligned}$$

Sum of Squares Within Sample Banks (SSW)  
 = TSS - SSB  
 = 366667.38 - 180533.71  
 = 186133.67

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

**From above:**

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

**Decision:**

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

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

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

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

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

Computation of test statistic:

**Table no.: 26**

**Net Working Capital of NABIL, HBL and SCBNL**

<b>Year</b> \ <b>Banks</b>	<b>NABIL (X<sub>1</sub>)</b>	<b>HBL (X<sub>2</sub>)</b>	<b>SCBNL (X<sub>3</sub>)</b>
2003/2004	712.01	289.30	925.67
2004/2005	811.62	294.38	832.92
2005/2006	(4,064.53)	(1,382.62)	979.00
2006/2007	(3,072.34)	(5,267.92)	1123.20
2007/2008	(1,267.11)	(5,018.48)	1166.00
2008/2009	(868.53)	(3,668.12)	1079.51
2009/2010	(415.95)	(4,511.03)	1136.00
<b>Total</b>	<b>(8,164.83)</b>	<b>(19,264.49)</b>	<b>7,242.30</b>

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

Sum of Squares of Net Working Capital:

$$X_1^2 = 29658288.98$$

$$X_2^2 = 88822610.77$$

$$X_3^2 = 7586033.76$$

$$\begin{aligned} T &= X_1 + X_2 + X_3 \\ &= (-8,164.83) + (-19,264.49) + 7,242.30 \\ &= -13887.02 \end{aligned}$$

$$\begin{aligned} \text{Correction Factor (C.F.)} &= T^2 / N \\ &= (-13887.02)^2 / 21 \\ &= 9183301.17 \end{aligned}$$

Sum of Squares Between Sample Banks (SSB)

$$\begin{aligned} &= (X_1^2 / n_1) + (X_2^2 / n_2) + (X_3^2 / n_3) - T^2 / N \\ &= (-8,164.83)^2 / 7 + (-19,264.49)^2 / 7 + (7,242.30)^2 / 7 - 9183301.17 \\ &= 70033704.74 - 9183301.17 \\ &= 60850403.57 \end{aligned}$$

Total Sum of Squares Between Banks (TSS)

$$\begin{aligned} &= X_1^2 + X_2^2 + X_3^2 - T^2 / N \\ &= 29658288.98 + 88822610.77 + 7586033.76 - 9183301.17 \\ &= 126066933.50 - 9183301.17 \\ &= 125148603.33 \end{aligned}$$

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

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

**From above:**

Computed value of  $F = 8.52$

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

**Decision:**

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



## **CHAPTER-FIVE**

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

#### **5.1 Summary**

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

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

In Nepal, the competitiveness among the commercial banks has grown considerably as the number has reached 17 in due course of time with the market remaining the same for all to cater. Thus, the banks have to develop various strategies to gain competitive edge over the rest of the banks. Among various strategies, the bank has to develop; one of the most important strategies to develop is efficient and effective working capital management. As working capital management is regarded as the life-blood and nerve knot of a business firm, the present study aims to analyze the working capital management of the three JVBs operating in Nepal with the help of secondary data for the period 2003/04 to 2009/10.

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

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

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

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

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

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

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

## **5.2 Conclusion**

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

### **5.2.1 Analysis of Ratios**

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

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

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

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

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

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

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

After the study of net profit after tax to current assets ratio of the three JVBs, it has been found that NABIL have been able to maintain higher mean net profit after tax to current assets ratio in comparison to the three JVBs. Again on

the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of NABIL and HBL than the SCBNL.

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

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

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

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

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

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

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

After the study of return on owner's equity ratio of the three JVBs, it has been found that SCBNL have been able to maintain higher mean return on

owner's equity ratio in comparison to the three JVBs. Again on the basis of C.V. of the ratio during the study period, there is higher fluctuation in the ratio of NABIL and HBL than the SCBNL.

### **5.2.2 Trend Analysis**

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

After the study of current assets trends of three JVBs from 2003/04 to 2009/10, it has been revealed that the current assets of NABIL shows the fluctuating trend throughout the period understudy as there is rise and fall in successive years. The current assets of HBL marked an increasing trend throughout the period understudy except in 2006/07. The current assets of the SCBNL also marked an increasing trend throughout the period understudy except in 2006/2007 and 2009/10. This indicates that the current assets management of HBL and SCBNL is better in comparison to the NABIL.

After the study of current liabilities trends of three JVBs from 2003/04 to 2009/10, the current liabilities of NABIL shows the fluctuating trend throughout the period understudy as there is rise and fall in successive years. The current liabilities marked an increasing trend throughout the period understudy. The current assets of the SCBNL marked an increasing trend throughout the period understudy except in 2006/2007 and 2009/10. This indicates that the current liabilities of HBL and SCBNL are greater in comparison to the NABIL.

After the study of cash and bank balance trends of three JVBs from 2003/04 to 2009/10, the cash and bank balance of NABIL indicates highly fluctuating trend throughout the period understudy. The cash and bank balance of HBL marked an increasing trend throughout the period understudy except in 2006/07 and 2009/10. The cash and bank balance of the SCBNL marked a fluctuating trend throughout the period understudy. This indicates that the cash and bank balance of NABIL and SCBNL is lower in comparison to the HBL which may be termed as both good and worst as greater cash and bank balances is good for the banks because it will increase there working capital and they can perform their operations smoothly whereas it is worst because greater cash balance may indicate idle cash which incurs cost.

After the study of total assets trends of three JVBs from 2003/04 to 2009/10, the total assets of NABIL show the increasing trend in the year 2004/05, 2005/06 and 2009/10 and decreasing trend in the remaining years. The total assets of HBL marked an increasing trend throughout the period understudy. The total assets of SCBNL marked an increasing trend throughout the period understudy except in 2006/2007 and 2009/10. This indicates that the total assets management of HBL and SCBNL is better in comparison to the NABIL.

After the study of receivable trends of three JVBs from 2003/04 to 2009/10, the receivable of NABIL shows the decreasing trend throughout the period under study as there is constant fall in successive years except in the year 2003/04. The receivable of HBL marked a fluctuating trend throughout the period under study. The receivable of the SCBNL also marked a fluctuating trend throughout the period. This indicates that the receivable of HBL and SCBNL is poor in comparison to the NABIL.

After the study of the owner equity trends of three JVBs from 2003/04 to 2009/10, the owner equity of NABIL, HBL and SCBNL all the three marked an increasing trend throughout the period under study but there is slow increase in NABIL and SCBNL as compared to the high increase in the HBL.

After the study of the net profit after tax trends of three JVBs from 2003/04 to 2009/10, the net profit after tax of NABIL shows the increasing trend in the year 2004/05, 2007/08, 2008/09 and 2009/10 and decreasing trend in the remaining years. The net profit after tax of HBL marked an increasing trend throughout the period under study except in the year 2006/07 and 2007/08. The net profit after tax of SCBNL marked an increasing trend throughout the period under study as there is gradual increase in the successive years. This indicates that the net profit after tax of SCBNL is the best among the rest and is able to give higher return to the shareholders, creditors and is satisfying them.

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

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

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

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

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

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

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

After the study of correlation coefficient and probable error between return and current assets of NABIL, HBL and SCBNL, the highest degree of correlation in between return and current assets is 0.9322 of SCBNL and the lowest is 0.7381 of NABIL among the three JVBs. There is high degree of positive correlation coefficient in between return and current assets of NABIL, HBL and SCBNL. Since the correlation coefficient in between return and current assets of NABIL, HBL and SCBNL is 6 times greater than P.E., so it is considered as significant and thereby changes in return affects the volume of current assets.

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

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

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

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

After the testing of Hypothesis on the basis of cash and bank balance, it was found that the computed value of F i.e. 3.90 was greater than its tabulated value i.e. 3.55. Therefore, null hypothesis ( $H_0$ ) is rejected and alternative hypothesis ( $H_1$ ) is accepted i.e. there is a significant difference in cash and bank balance of the three JVBs.

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

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



### **5.3 Recommendation**

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

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

1. The study is based on secondary data and includes only three JVBs and seven years data due to time constraint. So research based on primary data including more number of JVBs and maximum number of years may be a good option to choose for.
2. All these three JVBs should have a regular check on current assets to identify the adequate and inadequate amount of current assets as both hampers the smooth operation of the banks as well as avoids risk in management of working capital.
3. The average net working capital of NABIL and HBL are negative so these banks should try to increase these values.
4. The three JVBs should concentrate on the investment in receivables as it tends to be quite high. To accomplish this objective, the bank should concentrate on tight credit policy, providing reward to the good customers or punishing the defaulters.
5. To generate more profit all these three JVBs should concentrate more on safer loans and advances.
6. The fixed assets of all these three JVBs should be valued properly as per the current market value and depreciate them accordingly.
7. The three JVBs should retain more of its profit, as they are doing during the study, to reinvest and to increase net worth.

8. Since the average net profit of HBL is comparatively lower than the NABIL and SCBNL, so HBL is suggested to improve its average net profit in order to remain competent in the market. This objective can be accomplished by increasing income sources as well as decreasing cost or expenditures.
9. Since all these three JVBs are maintaining higher liquidity than the directives of NRB, it is suggested that idle fund should not be maintained as it incurs opportunity cost. They should provide short term loan that matures within short span of time and can easily be rediscounted instead of maintaining higher cash balances to remain liquidity.
10. Since the average net worth of HBL is comparatively lower than the NABIL and SCBNL, so HBL is suggested to improve its average net worth. This objective can be accomplished by retaining earnings or maintaining lower dividend pay out ratio.
11. It is well known that new players are entering the banking sector every now and then with very modern technologies and innovative products and services, creating immense competition within this sector. These may allow them to attract more customers resulting in shifting from one bank to another. So, all these three JVBs should keep on upgrading its system in order to be competitive.
12. As Nepal has already become a member of the World Trade Organization which provides tremendous opportunities to the banking sector, the selected three JVBs should form different strategies and maintain a competitive edge over others to catch such opportunities.
13. Finally, since all these three JVBs are profit-oriented, they should also not forget their social responsibilities. Today, thinking about how to make the banking system friendlier to the small and medium businesses and the poor Nepalese more generally is what social responsibility demands.

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## APPENDIXES

### Appendix-A

#### Working Capital Index

Statement of trend percentage of working capital items of three JVBs from fiscal year 2003/2004 to 2009/2010 in percentage.

#### NABIL BANK LIMITED

Banks Items	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Current Assets	100	124	110	111	116	119	125
Current Liabilities	100	124	153	146	135	134	137
Cash & Bank Balance	100	144	129	167	181	154	89
Fixed Assets	100	107	121	116	122	164	176
Total Assets	100	123	146	145	140	137	141
Receivable	100	161	160	74	99	97	90
Owner Equity	100	112	121	131	150	169	189
Net Profit After Tax	100	123	109	102	156	171	195

#### HIMALAYAN BANK LIMITED

Banks Items	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Current Assets	100	142	158	129	154	170	194
Current Liabilities	100	143	175	182	205	209	241
Cash & Bank Balance	100	112	179	158	247	249	251
Fixed Assets	100	113	118	186	134	175	173
Total Assets	100	141	173	190	215	229	257
Receivable	100	223	194	222	269	326	333
Owner Equity	100	117	160	190	236	293	342
Net Profit After Tax	100	121	168	142	128	159	186

#### STANDARD CHARTERED BANK NEPAL LIMITED

Banks Items	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Current Assets	100	129	149	142	162	181	167
Current Liabilities	100	133	153	144	164	186	170
Cash & Bank Balance	100	123	116	100	183	245	134
Fixed Assets	100	119	85	70	133	95	50
Total Assets	100	129	149	142	161	182	168
Receivable	100	158	142	221	179	298	273
Owner Equity	100	94	103	114	127	138	146
Net Profit After Tax	100	109	120	133	141	149	150