CHAPTER-ONE INTRODUCTION

1.1 Background of the Study

Working capital management involves managing the relationship between a firm's short term assets and its short term liabilities. Working capital management is concerned with the management of all the aspects of both the current assets and current liabilities, so as to minimize the risk of insolvency while maximizing return on assets. The goal of working capital management is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivable and payable, and cash. Working capital management calls for addressing two basic issues-how much of current assets should an organization hold and how to finance such investment in current assets. It is opined that organizations which could tackle these two issues reasonably are able to combat liquidity problems comparatively more efficiently.

Working capital management is the crucial aspect of the financial management. It is the life-blood and controlling nerve center for any types or business organization because without the proper control upon it no business can run smoothly. The management of current assets and current liabilities is necessary for daily operations of any organizations. Thus, it plays the vital role in the success and failure of the organizations as it deal with the part of

assets, which are transformed from one form to another form during the course of manufacturing cycle. Therefore, the role of working capital management is more significant for every business organization irrespective to their nature. Working Capital Management refers to the administration of all aspects of current assets, namely cash, marketable securities, stock and current liabilities. It is the functional area of finance that covers all the current accounts of the firm. It is concerned with the adequacy of current assets as well as the level of risk posed by current liabilities. It is a discipline that seeks proper policies for managing current assets liabilities and practical for maximizing the benefits from managing working capital.

Working capital management is concerned with the problems that arise in attempting to manage the current assets and, the current liabilities and the inter-relationship that exists between them. The term currents assets refer to those assets which in the ordinary course of business can be or will be converted into cash within one year without undergoing a diminution in value and without disrupting the operations of the firm. The major current assets are cash, marketable securities, accounts receivable and inventory. Current liabilities are those liabilities which are intended at their inception, to be paid in the ordinary course of business within the year, out of the current assets or earnings of concern. The basic current liabilities are account payable, bills payable, bank over draft and outstanding expenses. (Khan and Jain, 2009)

Working capital management of banks is more difficult than that of manufacturing and nonmanufacturing business organizations. Commercial banks are great monetary institutions, which are playing important role to general welfare of the economy. The responsibility of commercial banks is more than any other financial institutions. Banks collected funds from different types of deposits for providing loan and advance to different sector. To get higher return, banks must try to increase funds from deposits as well as their investment. Thus, working capital management is a crucial aspect of financial management including the administration of all aspects of the current assets and current liabilities, which plays vital role for success or failure of business organizations, banks and financial institutions.

This study focuses on the various aspects of the working capital management of Prime Commercial Bank Limited (PCBL) and Standard Chartered Bank Nepal (SCBNL) comparatively. This study covers the current assets management policy, current assets utilization and current assets structure during the fiscal year from 2008/09 to 2012/13.

1.2 Statement of the Problem

Commercial banks are great monetary institutions, which are playing important role for the economy. The responsibility of commercial banks is more than any other financial institutions. They must be ready to pay on demand without warning or notice, a good share of their liabilities. Banks collected funds from different types of deposits for providing loan and advance to different sector. To get higher return, banks must try to increase funds from deposits as well as their investment.

Working capital management has been regarded as one of the elements in the decision-making issues. It is difficult to point out as to how much working capital need by a particular business organization. Working capital management of banks is more difficult than that of business organizations.

This study will give focus on working capital analysis between PCBL and SCBNL. It is the question of the study that whether there is any relationship

of working capital management with regard to their performance and profitability among these banks. So, following are the major problems that have been identified for the purpose of this study.

- 1. What is the investment status in current assets of sample banks?
- 2. What is the liquidity position of selected commercial banks?
- 3. What are the working capital structures and utilization of selected commercial banks?
- 4. What is the relationship between Working Capital Management and Profitability of the Company?
- 5. What is the trend analysis of working capital of selected bank?

1.3 Objective of the Study

The main objective of this study is to analyze the working capital management in PCBL and SCBNL. The specific objectives of this study are as fallow:

- 1. To know the status of each current assets and liabilities of sample banks.
- 2. To find out the liquidity position of sample banks during the study periods.
- 3. To evaluate the structures and utilization of working capital in PCBL and SCBNL during the study periods.
- 4. To analyze the relationship between working capital and profitability of sample banks.
- 5. To present the trend analysis of working capital of sample banks up to projected FY 2013/14 to 2017/18.

1.4 Significance of the Study

The success or failure of any organization depends on its strategy, which is affected by working capital management. Nepalese commercial banks are operating in the competitive environment. In this situation, banks have to adopt suitable strategies for their existence. Working capital management is the crux of problem to prepare the proper strategy on its favors. So the study might be helpful for the management of the concerned banks as well as it might be valuable for commercial banks, managers, researcher, scholars, students and other stakeholders who want to study into the working capital management of the commercial bank.

1.5 Limitations of the Study

None of the study can go beyond the boundary of some limitations and this study is also not an exception. The scope of the present study has been limited in terms of period of study as well as sources and nature of data. The following are the major limitations of the study.

- 1. This study is mainly based on secondary data.
- 2. The study is focused on information data published in their annual report. Therefore any discrepancy & reliability of study depend upon data provided by the organization.
- 3. The period coverage by the study extends over five years from FY 2008/09 to 2012/13.
- 4. Out of various commercial banks, this study is concerned with the only two commercial banks viz. PCBL and SCBNL.
- 5. Although there are various aspects of financial management, this is mainly concerned with the working capital aspects of the sample banks.

1.6 Organization of the Study

The entire study has been organized into five main chapters to make the study more systematic. The followings are the divisions of chapters.

Chapter 1: Introduction

The first chapter deals with background of the study, statement of problem, objective of the study, significance of the study and limitations of the study.

Chapter 2: Review of Literature

The second chapter deals with conceptual framework including the fundamental concept of and tools of working capital management. It also includes the brief review of previous research work.

Chapter 3: Research Methodology

The third chapter deals with the research methodology which has been followed to achieve the purposes of the study. It consists of research design, the period covered, nature and sources of data, tools to be used, research variable etc.

Chapter 4: Presentation and Analysis of Data

The fourth chapter deals with presentation and analysis of data. It gives a clear picture of how the collected data has been presented on the study and how it has been analyzed.

Chapter 5: Summary, Conclusions and Recommendations

The fifth chapter shows the summary of whole study, conclusion drawn and recommendations given. This ends the study paper. Besides these chapters, Bibliography and Appendix are included in this research paper.

CHAPTER-TWO REVIEW OF LITERATURE

This thesis is concerned with the field of working capital management. This chapter, review of literature is the theoretical framework that provides the bases and inputs for this study purpose. So, related different books, articles, encyclopedia, internet search, as well as previous studies relating to same subject have been consulted to make it more reliable. Besides, books related to accounts and finance too has been analyzed. For the study purpose, literature has been reviewed in terms of two different levels.

- i) **Conceptual Review:** This portion includes relation to the subject matter of reviewing the book and internet publication.
- ii) **Review of Previous Studies:** In this part, previous thesis, research article and project article and project work are reviewed.

2.1 Conceptual Framework

2.1.1 Meaning of Working Capital

Every business needs capital basically for two purposes. The first requires for long term purpose which is called Fixed Capital. Such funds are required to create production facility. Investment in plants, machinery, land, building etc. comes under production activity. Investment in these assets represents that part of firm's capital which is block on a permanent or fixed basis. Such assets are not purchased with the objective of resale.

To operate business, a firm also needs another type of capital which is known as Short Term Capital or Working Capital. The funds required for purchased of raw material, payment of wages and another day to day expenses etc. is called as Working Capital. Similarly, the investment required for work-in-progress, raw material, finished goods, sundry debtors, bills receivable etc. also comes under working capital.

Working Capital refers to the resources of the firm that are used to conduct day-to-day operation that makes business successful. In simple words working capital is the excess of current Assets over current liabilities. Working capital management is the effective life blood of any business. Hence the management of working capital plays a vital role for existing of any public enterprises successfully while studies it. Therefore working capital management in public enterprise is very important mainly for four reasons.

Firstly, public enterprise must need to determine the adequacy of investment in current assets otherwise it could seriously erode their liquidity base. Secondly, they can select the type of current assets, suitable for investment so as to raise their operational efficiency. Thirdly they are required to ascertain the turnover of current assets, which determine profitability of the concerns. Lastly, they must find out of the appropriate sources of funds of finance current assets. (Agrawal, 2011)

It represents that part of fund that circulates from one form of current assets to another form in ordinary course of business. For example, cash is used to purchase raw material which creates stock of finished goods which, in turn, is sold for cash. Therefore, working capital management is concerned with problems that arise within attempting to manage the current assets, current liabilities and the interrelationship that exists between them.

(Kulkarni, 1990)

Every business needs capital for two purposes. The first requires for long term purpose which is called Fixed Capital. Such funds are required to create production facility. Investment in plants, machinery, land, building etc. comes under production activity. Investment in these assets represents that part of firm's capital which is block on a permanent or fixed basis. Such assets are not purchased with the objective of resale. Asset of an essentially short term nature is known as Current Assets. It is a short term investment. Current assets are expected to be converted into cash within a short period. Those assets which are either readily available cash or are convertible into cash within a short time relatively during the normal course of business are known as Current Assets. The examples of current assets are cash in hand, cash at bank, bills receivable, sundry debtors inventory, prepayments, loans and advances etc. Current liability is another part concerned with working capital. Those liabilities which are expected to have been paid within a short period are known as Current Liabilities. The examples of current liabilities are bank overdraft, sundry creditors, bills payables, outstanding expenses, received in advance cash credit etc. The word 'working' means work at present. So, working capital is capital working at present. Technically, working capital management is an integral part of overall financial (Khan and Jain, 2009) management.

2.1.2 Types of Working Capital

On the basis of the concept and the time, the working capital has been categorized in four main types;

- 1. Gross Working Capital
- 2. Net Working Capital
- 3. Permanent Working Capital
- 4. Temporary Working Capital

1. Gross Working Capital

This thought says that total investment in current assets is the working capital of the company. This concept does not consider current liabilities at all. Reasons given for the concept are:

- When we consider fixed capital as the amount invested in fixed assets.
 Then the amount invested in current assets should be considered as working capital.
- 2. Current asset whatever may be the sources of acquisition, are used in activities related to day to day operations and their forms keep on changing. Therefore they should be considered as working capital"

Gross Working Capital = Total Current Assets

(Kulkarni, 1990)

2. Net Working Capital

"It is narrow concept of working capital and according to this, current assets minus current liabilities forms working capital. The excess of current assets over current liabilities is called as working capital. This concept lays emphasis on qualitative aspect which indicates the liquidity position of the concern/enterprise.

Net Working Capital = Current Assets – Current Liabilities

(Pandey, 2010)

3. Fixed or Permanent Working Capital

The need for current assets arises because of the operating cycle. The operating cycle is a continuous process and, therefore, the need for current assets is felt constantly. But the magnitude of current assets needed is not

always the same, it increases and decreases over time. However, there is always a minimum level of current assets which is continuously required by the firm to carry on its business operations. This minimum level of current assets is referred to as permanent, or fixed, working capital. It is permanent in the same way as the firm's assets are. Depending upon the changes in production and sales, the need for working capital, over and above permanent working capital will fluctuate.

"The volume of investment in current assets changes over a period of time. But always there is minimum level of current assets that must be kept in order to carry on the business. This is the irreducible minimum amount needed for maintaining the operating cycle. It is the investment in current assets which is permanently locked up in the business and therefore known as permanent working capital. (Weston, 1996)

4. Variable or Temporary Working Capital

The extra working capital, needed to support the changing production and sales activities is called fluctuating, or variable, or temporary working capital. Both kinds of working capital-permanent and temporary-are necessary to facilitate production and sale through the operating cycle, but temporary working capital are created by the firm to meet liquidity requirements that will last only temporarily. (Pandey, 2010)

"It is the volume of working capital which is needed over and above the fixed working capital in order to meet the unforced market changes and contingencies. In other words any amount over and about the permanent level of working capital is variable or fluctuating working capital. This type of working capital is generally financed from short term sources of finance

such as bank credit because this amount is not permanently required and is usually paid back during off season or after the contingency." (Smith, 1980)

2.1.3 Need and Importance of Working Capital

The connotation of energy in the term working capital is indeed accurate. It refers to the resources of the firm that are used to conduct operation to do the day-to-day "work" that makes the business successful. Without cash, bills cannot be paid. Without receivables, the firm cannot allow timing differences between delivering goods and services and colleting the money to pay for them. Without inventories, the firm cannot engage in production, nor can it stock goods to provide immediate deliveries. As a result of the critical nature of current assets, the management of working capital is one of the most important areas in determining whether a firm will be successful. Following are the main advantages of maintaining adequate amount of working capital in the business:

I. Solvency

There will be uninterrupted flow of production by an arrangement of adequate working capital. A business can run smoothly only in the presence of adequate working capital. In this situation, the short term liability can be paid within a short period. Thus it helps to strengthen the solvency position of a business.

II. Goodwill

A firm with sufficient working capital can provide the payment within time to employees, workers and creditors. In such a case, there is no complaint against the firm. As a result, it helps a firm in creating and maintaining goodwill.

III. Easy Loans

A reputed company having adequate working capital need not face any problem to get loan. It can arrange the loan easily from the bands and financial institutions for the funds which are necessary to operate a business.

IV. Cash Discount

A business firm having adequate capital can easily manage the cash for purchases of the goods. Immediate payment of cash enables a concern to receive huge discount on purchases and hence it reduces the cost.

V. Regular Supply of Raw Materials

In the case of sufficient working capital, it can easily supply raw materials necessary for production and there is no chance of disturbance in production. The uninterrupted flow of production enables the concern to supply its production in the market regularly.

VI. Morale of Management

With the help of adequate working capital, the overall efficiency of the business increases. It creates an environment of security, confidence and high morale of management.

VII. Smooth Operation of Business

A firm with sufficient working capital can smoothly operate the business. Due to adequate working capital, it can make regular payment of salaries, wages and other day-to-day commitments. By paying these expenses regularly at time, the morale of employee's increases on one hand and on the other, their efficiency also increases.

VIII. Ability to Face Crisis

A business concern has naturally to face various problems such as economic depression, strike, natural disaster etc. Availability of working capital in

sufficient volume gives the business concern ability to face these kinds of crisis easily.

IX. Regular Return

The management of ample working capital helps a firm to pay quick and regular dividends to its investors. Because of adequate working capital, the firm does not have to plough back of profit and hence it provides confidence to its investors and creates a favorable market to raise additional funds in the future.

2.1.4 Factors Affecting Working Capital

The working capital need of a firm depends upon various factors. These factors may vary from one type of business to another and also keep on changing from time to time. The working capital needed at one point of time may not be good enough for some other situations. Internal policies and environmental changes also affect the working capital. A firm should plan its operations in such a way that it should have neither too much nor too little working capital. In general, the following factors are involved in proper assessment of the quantum of working capital required:

a) Nature and Size of Business

The amount of working capital depends mainly upon the nature of business. It is the nature and conduct of the business that differentiates one firm from another as far as working capital requirement is concerned. If we compare public utility, for example, with manufacturing concern, the later will be found to be requiring much more working capital. Trading and financial enterprises may be required to invest even more on working capital for the reason that it has to maintain sufficient amount of cash, inventories and book debts whereas public utility concern have a very limited need for working capital because they have cash sales in most of the cases.

b) Manufacturing Process and Length of Production Cycle

Another factor which has the bearing on the quantum of working capital is the manufacturing process and production cycle. By 'production cycle', we mean the time involved from the procurement of raw material till it is finally transferred into finished product. In this process, huge fund are tied up on materials, labor and overhead. The longer the time span i.e. manufacturing cycle, the larger will be the tied up funds and therefore the larger is the working capital needed. Opposite is also true.

c) Growth and Expansion of Business

In general, expanding enterprises require more working capital than those which are static, other things being equal. Fixed capital is needed more for the developing enterprises, as the theories state, funds required for operation and maintenance of the fixed capital also increases proportionately whatsoever.

d) Rapidity of Turnover

Turnover represents the speed with which the working capital is recovered by the sale of goods. If the turnover rate is high, lower amount of working capital will be sufficient and vice-versa.

e) Terms and Conditions of Purchase and Sales

Credit terms and conditions of sales and purchases have a bearing on the magnitude of working capital required. If the suppliers or trade creditors avail liberal credit terms, the firm will require less working capital and viceversa. Similarly, the firm selling its product on cash basis will need less working capital than those which sell their products mostly on credit. The credit sales result in higher book debts (receivables). Higher book debts mean more working capital.

f) Seasonal Nature

If raw materials are expected to fall short of demand throughout the year for some reasons, the enterprise has to buy the materials in bulk involving huge fund i.e. working capital to make it sure that the production process will not be interrupted during the entire year.

g) Dividend Policy

The firm having satisfactory level of earning capacity may generate cash profit from operation. The need for working capital can be met with the retained earnings. A firm which declares dividend and distributes large proportion of cash irrespective of its profit need larger amount of working capital than that which retains larger part of its profits and distributes lower amount of cash dividend.

h) Operating Efficiency of the Firm

The operating efficiency of the concern also plays the key role in determining the level of working capital to be brought from external source. Operating efficiency of the firm results in optimum utilization of resources at minimum cost. Proper utilization of resources improves the profitability of the firm which will in turn release greater funds for working capital purposes.

i) Working Capital Cycle

The working capital cycle begins with the purchase of raw materials and ends with realization of cash from sale of finished product. Generally, the working capital cycle involves purchase of raw materials and stores, its conversion into stock of finished goods through work-in-progress with progressive increment of labor and services cost, conversion of finished goods into sales, debtors, receivable and ultimately realization of cash. This

cycle keeps on repeating again and again. If it takes long time to finish one cycle, large amount of working capital will have to be set aside and viceversa.

j) Price Level Changes

Changes in the price level also affect the requirements of working capital. Rising prices necessitates the use of more funds for maintaining an existing level of activity. For the same level of current assets, higher cash outlays are required. The effect of rising prices is that a higher amount of working capital is needed. However, in the case of companies which can raise their prices proportionately, there is no serious problem regarding working capital. The implications of changing price levels on working capital position vary from company to company depending on the nature of its operations, its standing in the market and other relevant considerations.

k) Business Cycle

Business fluctuations lead to cyclic and seasonal change which in turn, cause a shift in the working capital position particularly for temporary working capital requirement. During the upswing of business activity, the need for working capital is likely to grow to cover the lag between sales and receipt of cash as well as to finance purchases of additional material to cater to the expansion of the level of activity. The downswing phase of business cycle has exactly an opposite effect on the level of working capital requirement.

1) Production Policy

The quantum of working capital is also determined by production policy. In the case of certain lines of business, the demand for product is seasonal, that is, they are purchased during certain months of the year. During the slack season, the firms have to maintain their working force and physical facilities without adequate production and sale. When the peak period arrives, the firms have to operate at full capacity to meet the demand. In this situation, it can either confine its production only that period when goods are sold or follow a steady production policy. The former policy does not need more working capital than the latter does. A production policy in tune with the changing demands may be preferable.

m) Access to Money Market

The firm which has good relation with banks and financial institutions is apt to get loans easily as a result of which the need for working capital can be minimized.

n) Level of Taxes

The first appropriation out of profits is payment or provision for tax. Tax liability, in a sense, is a short-term liability payable in cash. An adequate provision for tax payments, therefore, is an important aspect of working capital planning. If tax liability increases, it leads to an increase in the requirement of working capital and vice-versa.

o) Transport and Communication Facilities

If transport and communication facilities are effective, they help to publicize and distribute finished goods quickly, speed up the collection of necessary materials and sale of finished goods leading to the requirement of less amount of working capital. On the contrary, if these facilities are not adequately available or not effective, reorder period will be longer. Similarly, longer will be the time to sell the finished products meaning thereby, a larger sum of funds will be blocked on procurement of raw materials and sale of finished products.

p) Attitude toward Profit

Most funds involve a cost to the firm. Thus, a relatively large amount of current assets tends to reduce the overall profit. Some firms are willing to

accept greater liquidity risks in order to achieve higher profits. Other firms are not highly focused on maximizing profits and do not manage liquid assets aggressively. These behaviors affect the level of working capital.

q) Attitude toward Risk

The reverse side of the attitude toward profits involves risk. The greater the level of working capital, the lower the risk and vice-versa. Cash provides safety for paying bills. Inventories provide less risk of running out of goods to sell. Firms that are averse to risk may maintain more current assets than firms willing to accept higher levels of risks.

2.1.5 Objectives of Working Capital in Banks

A bank undertakes many transactions daily. Sometimes, customers deposit large quantity and sometimes customers withdraw from their deposits in high quantity. Investment fund of bank is covered by deposit collections of different types of account holder. A bank should have to pay the money to depositors when they want to withdraw. For daily operation of office and to meet the administrative expenses, a bank should have certain level of working capital. Working capital is required to run the business smoothly and efficiently in the context of the set objectives. It is no doubt that no company can achieve its goals without proper use of working capital. Therefore, it can compare as lifeblood to the organization. The main objectives of arranging capital are as follows;

- 1. To pay to depositors,
- 2. To maintain Cash Reserve Ratio (CRR) & Statutory Liquidity Ratio (SLR),
- 3. To satisfy the customers by granting loans promptly and increase the attraction of business etc.

- 4. To meet the administrative expenses, perform the task as per objectives of business and run the business smoothly,
- 5. To fulfill the present need of business as well as get ready for risk & economic fluctuation in future.

2.1.6 Determinants of Working Capital of Banks

Working capital in banks is basically concerned with the liquidity management. Thus, the working capital of banks is synonymous to liquidity of banks. Many factors affect the liquidity or working capital of banks. They are:

a. External Factors

- 1. Prevailing interest rate of bank: If interest rate is high cash demand is low & liquidity need is low.
- 2. Savings & investment situation: If income & saving scale of people is high, low liquidity and if investment in commercial field is high, high liquidity.
- 3. Growth & scheming position of the financial market: If financial market of bank is in growth & prosperity, then low liquidity and if opposite, high liquidity.

b. Internal Factors

- 1. Lending policy of bank: Great quantity for long-term investment needs high liquidity and if short-term loan policy, low liquidity.
- 2. Management capacity: If management is efficient & ready to bear risk, low liquidity.
- 3. Strategic planning & funds flow situation: Liquidity depends upon planning, & strategy. Current A/C needs high liquidity & payment. On the other hand fixed deposit needs low liquidity.

2.1.7 Demand of Working Capital in Banks

Working capital is maintained at bank by current saving, & fixed deposit collection. Specially, to grant loan and to pay cheques, creditors & account holders demand the liquidity. Generally, banks need liquidity for maintaining following goals.

- 1. Transaction motive
- 2. Security motive
- 3. Speculative motive

2.1.8 Working Capital Policy

Working capital policy refers to the firm's basic policies regarding level of each category of current assets and how current assets will be financed. (Weston,et al., 1996). To have a clear insight on the working capital policy, we have to know about two basic policies: current assets investment policy and current assets financing policy.

2.1.8.1 Current Assets Investment Policy

Current assets investment policy refers to the policy regarding the total amount of current assets to be carried to support the given level of sales. There are three alternative current assets investment policies which are as follows:

a. Relaxed Current Assets Investment Policy

This is the policy "where relative large amount of cash, marketable securities, and inventories are carried and where sales are stimulated by the use of credit policy that provides liberal financing to customers and a corresponding high level of receivables" (Weston, et al., 1996). This policy is also known as fat cat policy. It creates longer inventory and cash conversion cycles and longer receivable collection period due to the liberal

credit policy. Thus, this policy provides the lowest expected return on investment with lower risk.

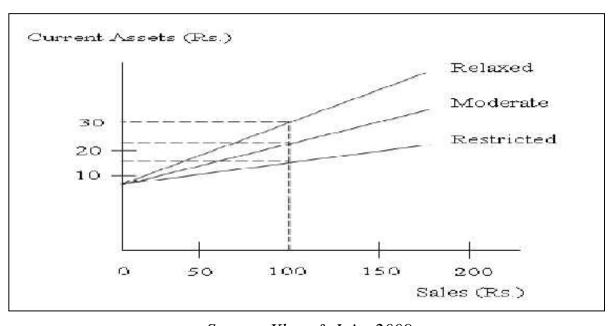
b. Restricted Current Assets Investment Policy

The policy under which a firm holds minimum amount of cash, marketable securities, inventory and receivable to support a given level of sales is known as restricted current assets investment policy or lean and mean policy. In this policy, the firm follows a tight credit policy and bears the risk of losing sales.

c. Moderate Policy

This is the policy that lies between relaxed and restricted policies. In this policy, a firm holds the amount of current assets in between the relaxed and restricted policies. Both risk and return are moderate in this policy.

Figure: 2.1
Alternative Current Assets Investment Policies



Source: Khan & Jain, 2009

2.1.8.2 Current Assets Financing Policy

There are different sources by which current assets are financed. However, each and every source entails certain level of cost and risk. Therefore, a careful study is required before making decision as to the financial sources of current assets. The manner in which the permanent and temporary current assets are financed is called the firm's current assets financing policy. A firm can adopt one of the following policies regarding raising funds for current assets.

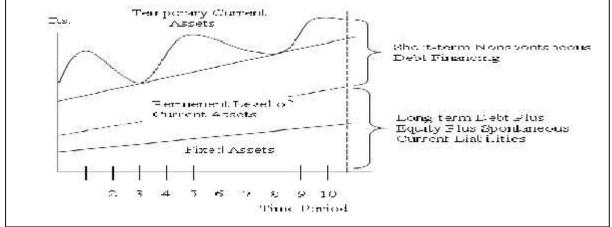
a. Aggressive Policy

Degree of aggressiveness in financing the current assets depends upon how the current assets have been financed. A firm is generally regarded aggressive if it finances all of its fixed assets and part of the permanent current assets with long term debt plus equity plus spontaneous current liabilities and all of the temporary current assets with short-term, non-spontaneous liabilities. If part of the fixed assets is also financed with current debt or short term credit, then the firm will be regarded more aggressive.

Figure: 2.2

Aggressive Financing Policy

Temporary Current



Source: Khan & Jain, 2009

b. Conservative Policy

This is the policy in which all of the fixed assets, all of the permanent current assets, and some of the temporary current assets of a firm are financed with long-term capital. This is a very safe financing policy and, therefore, not very appropriate from the standpoint of profit.

Marketable Securities

Ehout-term Financing requirements

Permenent Leve of Current Assets

Long term Debt. Plus Equity Plus Spontaneous Surrent Liabilities

1 2 3 4 5 6 7 8 9 10

Time Period

Figure: 2.3
Conservative Financing Policy

Source: Khan & Jain, 2009

c. Maturity Matching Policy

Maturity matching policy, also known as self-liquidating policy calls for matching assets and liability maturities. This strategy minimizes the risk that the firm will be unable to pay off its maturing obligations if the liquidations of the assets can be controlled to occur on or before the maturities of the obligations. At the limit, a firm could attempt to match exactly the maturity structures of its assets and liabilities. Inventory expected to be sold in 30

days could be financed with a 30-day bank loan; a machine expected to last for five years could be financed by a 5-year loan; a 20-year building could be financed by a 20-year mortgage bond; and so forth. In this policy, generally, the firm finances permanent current assets with long term financing and temporary with short- term financing. It means the firm matches the maturity of financing sources with an asset's useful life. It lies between the aggressive and conservative policies.

Temporary. Rs. Current Assets Short-term Nonspontaneous Debt Financing Long-term Debt plus Permanent Newel of Temporary Current Equity plus Current Assets Assets Spontaneous Current Liabilities Total Perrmanent Assets **Fixed Assets** 2 3 4 5 Time Period

Figure: 2.4

Maturity Matching Policy

Source: Khan & Jain, 2009

2.1.9 An Overview of Working Capital Management

Working Capital Management refers to the administration of all aspects of current assets, namely cash, marketable securities, stock and current liabilities. It is the functional area of finance that covers all the current accounts of the firm. It is concerned with the adequacy of current assets as

well as the level of risk posed by current liabilities. It is a discipline that seeks proper policies for managing current assets by current liabilities and practical technique for maximizing the benefits from managing working capital. The term working capital management closely relates with short-term financing; it is concerned with collection and allocation of resources. Working capital management relates to problems that arise in attempting to manage the current assets, the current liabilities and interrelationships that exist between them (Smith, 1980).

Working capital management is the crucial aspect of the financial management. It is the life-blood and controlling nerve center for any types or business organization because without the proper control upon it no business can run smoothly. The management of current assets and current liabilities is necessary for daily operations of any organizations. Thus, it plays the vital role in the success and failure of the organizations as it deals with the part of assets, which are transformed from one form to another form during the course of manufacturing cycle. Therefore, the role of working capital management is more significant for every business organization irrespective to their nature.

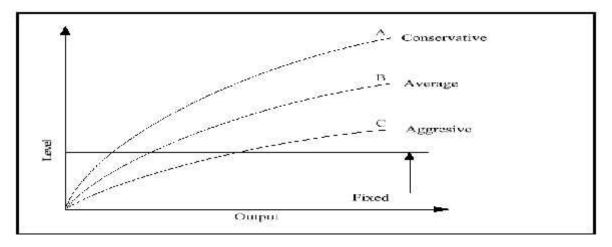
By the definition of various experts of working capital management, we conclude that, all institution, whether private or public, financial institution, manufacturing or non-manufacturing that need just adequate working capital to compete with competitive market. It is because over or under adequacy of working capital is dangerous from the firms objective points of view. Over investment on working capital affects the firm's profitability just as idle investment. On the other hand, under investment on working capital affects the liquidity position of the firm and causes to financial hindrance and

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

Need of working capital is directly related to firms growth. A firm can have different level of current assets to support the same level of output. The level of current assets can be measured by relating current assets to fixed assets. Its proportion upon the fixed assets of the firm indicates the working capital policy of the firm namely conservative and aggressive in two extreme ends. Dividing current assets by fixed assets gives Current Assets to Fixed Assets (CA/FA) ratio. Assuming a constant level of fixed assets, a higher CA/FA ratio indicates a conservative current assets policy and a lower CA/FA ratio means an aggressive current assets policy assuming other factors to be constant. A conservative policy implies greater liquidity or lower risk, while an aggressive policy indicates higher risk and poor liquidity (Panday, 2010).

Higher level of current assets implies greater liquidity and solvency of the firm. There is less risk of technical insolvency, but a considerable amount of funds will be tied up in current assets, which causes to lower the profitability. On the other side, to have a higher profitability, a firm can take an aggressive current assets policy maintaining lower level of current assets, which will lower the solvency of the firm and the level of risk in the same manner. Thus the reasonable approach is to balance the cost of maintaining current assets and risk associated in such a way that the tradeoff between risk and return is minimized.

Figure: 2.5
Alternative Current Assets Policies



Source: Khan & Jain, 2009

2.2 Review of Previous Studies

This section deals with views of different scholars in relation to working capital management which lay down conceptual foundation for this study.

2.2.1 Review of Books

Weston and Brigham (1986) in their book "Managerial Finance" have given theoretical insights into working capital management. The bond conceptual findings of their study provide sound knowledge and guidance for the further study in the field of management of working capital of any enterprise and naturally to this study as well. They explain, in the beginning, the importance of working capital, concept of working capital, financing of working capital, the use of short term versus long-term debt, relationship of current assets to fixed assets. In the next chapter they have dealt with the various components of working capitals and their effective management techniques. The components of working capital they have dealt with the cash, marketable securities, receivable and inventory for the efficient management of cash, they have explained the different cash management

models. They have also explained the major sources and forms of short term financing, such as trade credit, loans from commercial banks and commercial paper.

Shrestha (1995) has published "Portfolio Behavior of Commercial Banks in Nepal" based on the study of two local commercial banks, three joint-venture banks and one development bank as a sample for the study. Some major findings of her study are hereunder.

- 1. Total deposits have been the major sources of fund for all the banks.
- 2. Capital and reserve funds do not seem to have changed much over the year.
- 3. The user of fund analysis shows that the resources of commercial banks are allocated in the liquid funds, investment on securities, loans and advances. Bills purchased and discounted.
- 4. Among the portfolio, for Nepalese banks loan and advances share highest volume of the resources and the bills purchased and discounted the least over the year. The excess reserves of the commercial banks show unused resource. The cash reserve exceeds much more than the required cash reserve.

Van Horne (2010) another well known expert of financial management and writer in his book "Financial Management and Policy", has given the concept of capital management, it is usually described as involving the administration of these assets namely cash, marketable securities, receivables, inventories and the administration of current liabilities. It means the working capital management is concerned with the problem that arises in attempting to manage the current assets, the current liabilities and the interrelationship that exist between them. He has also described the different

methods for efficient management of cash and marketable securities and various models for balancing cash and marketable securities. For the management of receivable, different credit and collection policies have been described and various principles of inventory have been examined for inventory management and control.

2.2.2 Review of Journals/Articles

This part mainly focuses on the review of articles/journals published by different management experts in the field of working capital management.

M. K. Shrestha in his study "Working capital management in public enterprises" (1999) states that manager after lacks basic knowledge of working capital and its overall impact on the operative efficiency and financial viability of public enterprises which are Birgunj Sugar development corporation, National Trading Ltd., Royal Drugs Ltd., National construction company of Nepal, Harisidhhi Brick & Tile factory, Nepal Dairy Ghee Industry Ltd. and Chandeswori Textile factory Ltd. The study has pointed at certain policy such as deficient financial planning, negligence of working capital management, deviation between liquidity and turnover etc. He has suggested some measures for their effective operation. The problem can be sorted through identification of needed funds, development of management information system, determination of sound combination of short-term source to finance working capital requirements.

Pradhan (1994) had published fifth article is a part of the *Financial Management Practices in Nepal* published in 1994. This is based on the survey of executives of 78 enterprises located in Kathmandu, Bhaktapur, Chitawan, Kaski and Lalitpur districts in 1992. This paper provides the behavioral evidences from 63 executives of Nepalese industries on the

appropriateness of the choice of variables of prediction of financial distress. Pradhan has used 14 financial ratios: quick assets to current liabilities, current assets to current liabilities, cash to current liabilities, total debt to total assets, income to sales, working capital to total assets, sales to average inventories, net income to net worth, current assets to total assets, cash flows to sales, sales to total assets, cash flow to total debt, cash flow to total assets, and EBIT to fixed interest charges, as the indicators of financial distress. In this study he has concluded that executives of Nepalese enterprises perceive that short term liquidity ratios are the most important indicators of the financial distress. Moreover, he concluded that there is no significant difference between the choices of financial ratios by the private enterprises and public enterprises in Nepal.

R. S. Pradhan has published another article relating to working capital management. He studied on "The demand for working capital by Nepalese corporation." (July, 2004) He analyzed the selected nine manufacturing public corporation with the 12 year data from 1990-2002. Regression education has been adopted for the analysis. He has summarized that the earlier studies concerning about the demand for cash and inventories respectively. The pooled regression results show the presence of economics of scale with respect to the demand for working capital and its various components. The regression results suggest strongly that the demand for working capital and its components is function of both sales and their cost. The estimated result show that the inclusion of capacity utilization variable in model seems to have contributed to the demand function cash and net working capital only. The effect of capacity utilization on the demand for inventories receivables and gross working capital is doubtful.

Mahat (2004), also has published article relating to spontaneous resources working capital management. He has defined the three major sources of working capital i.e. equity financing, debt financing and spontaneous sources of financing, regarding the working capital management. Debt financing include short-term bank financing such as bank overdraft, cash credit, bills purchase and discounting, letter of credit etc. whereas spontaneous sources of working capital include trade credit, provisions and accrued expenses. Mahat has defined that working capital management is one of the important pillars of corporate finance. However, Nepalese industries are facing difficulty in their survival by the cause of recession, which can bring best and worst in corporate finance such an environment should be efficient enough to cope with the possible worst happenings in future for working capital management. He has said that managing the working capital resources for a profit making industries are routine affairs of just making payment and arranging collection of debtors. In contrast, the company in debt trouble, it is rather difficult to meet its working capital gap by way of debt financing, the company should have to bear interest, which may cause to increase in the percentage of operating expenses to the turnover and depletion in the profits. Therefore, spontaneous sources of working capital will be a better source for working capital in order to improve its performance.

Consequently, in a changed economic scenario, every company should realize that inability to manage working capital might land them in a vicious circle that can be hard to get out from. It is indeed essential for industries to tighten their belts and checks their financial stability to face and stand in forthcoming competitive day.

Baral (2004), has published article in the Journal of a Nepalese Business Studies about Determinants of Capital Structure: A Case Study of Listed Companies of Nepal. In this paper, an attempt has been made to examine the determinants of capital structure -size, business risk, growth rate, earning rate, dividend payout, debt service capacity, and degree of operating leverage-of the companies listed to Nepal Stock Exchange Ltd. as of July 16, 2003. Eight variables multiple regression model has been used to assess the influence of defined explanatory variables on capital structure. In the preliminary analysis, manufacturing companies, commercial banks, insurance companies, and finance companies were included. However, due to the unusual sign problem in the constant term of the model, manufacturing companies were excluded in final analysis. This study shows that size, growth rate and earning rate are statistically significant determinants of capital structure of the listed companies.

2.2.3 Review of Previous Thesis

Acharya (2006) has carried out research "Working Capital Management of Manufacturing Companies Listed in NEPSE". The objectives of his research as follows:

- 1. To analyze the current assets and current liabilities policies to examine the factors affecting working capital on profitability.
- 2. To examine factors affecting working capital management.
- 3. To provide appropriate suggestions.

Major Findings:

1. It is found out that the companies are accompanied with various hindrances like lower turnover, lower return, lower net working capital or poor liquidity position.

2. There is lack of proper working capital policy, deteriorating financing situation, lack of appropriate credit and collection policy.

Pandey (2010) has done a research on working capital management of hotel industry of Nepal using the financial statements of three sample hotels for five years from 2057/58 to 2061/62 under the heading "Working Capital Management in Hotel Industry (With Reference To Hotel Radisson, Hotel Soaltee and Hotel Hyatt)".

Main Objectives:

- 1. To analyze the composition of working capital, liquidity position, and profitability position.
- 2. To evaluate the relationship between sales and different variables of working capital.
- 3. To examine the working capital cash flow cycle and cash conversion cycle of the said hotels

Major Findings:

- 1. It is found that all three companies have been following aggressive financing policy.
- 2. They have negative working capital during the study period; none of the hotels seem to have solid view of the management of working capital.
- 3. Hotel Hyatt has very poor liquidity position as compared to other hotel turnover of the entire hotels is decreasing due to unstable political situation for more than a decade.
- 4. Sales revenue is decreasing but operating expenses is in increasing trend accounting for the loss to the hotels.
- 5. Hotel Radisson and Hotel Hyatt have been paying high amount of interest expenses than Hotel Soaltee.

Dahal (2010) has done a research on "A Case Study of a Working Capital and its Impact" with reference to NIC and NABIL Bank.

Main Objectives:

- 1. To analyze the liquidity, assets utilization, long term solvency and profitability position of Banks.
- 2. To study the current assets and current liabilities and their impact on liquidity and profitability.
- To provide appropriate recommendation and suggestion for the improvement of the working capital management and enhancing the profitability scenario of Nepalese commercial banks.

Major findings:

- 1. The average cash and bank balance percentage and loans and advances percentage are higher in NIC than NABIL. But the average government securities percentage is higher in NABIL than NIC.
- 2. The liquidity position of NIC is better than NABIL. The trend of Liquidity ratio i.e. quick ratio and cash and bank balance ratio of both banks are decreasing. The both banks tried to reduce its idle money; however, it is shown that the liquidity position of NIC is always better than NABIL. It means NIC is bearing Lower risk, which mean lower profits in commercial banks; higher liquidity is not always the cause of Lower profitability.
- 3. NABIL has better turnover than NIC. Thus NABIL has better utilization of deposits in income generating activity than NIC. However, NIC is utilizing its saving deposit in loans and advances more effectively than NABIL.

- 4. Profitability measures the efficiency of the firm. The profitability position of NABIL is far better than NIC although the interest earned by NABIL and NIC is equal.
- 5. The average long term debt to net worth ratio of NABIL is higher than that of NIC. So NABIL has higher proportion of outsiders claim in total capitalization than NIC or NABIL has more risky and aggressive capital structure than NIC.
- 6. Correlation between cash and bank balance and current liabilities in NABIL bank is positive which shows the positive relationship between two variables. On the other hand, coefficient of correlation between cash and bank balance to current liabilities in case of NIC also shows positive relationship. After considering the probable error there is highly significant relationship between net working capital and net profit in both banks.
- 7. The mean value of current ratio and quick ratio of NABIL are statistically different than NIC. But the cash and bank balance to deposit ratio are not significantly different.
- 8. The mean value of interest earned to total assets ratio is not significantly different, but net profit to total assets and net profit to total deposit are significantly different of NABIL and NIC.

Pathak (2012) has done a research work on "Working Capital Management of Commercial banks in Nepal "a comparative study of EBL and NBBL.

Main Objectives:

- 1. To study the working capital Management of EBL and NBBL.
- 2. To study the position of current assets and current liabilities and their impact.
- 3. To examine the liquidity and profitability position of EBL and NBBL.

4. On the basis of the analysis to provide recommendation and suggestion for the improvement of the working capital management of EBL and NBBL.

Major Findings:

- 1. The net working capital of NBBL is negative in some year so the sufficient amount of working capital for operational requirement for NBBL in case of EBL, the net working capital is positive.
- 2. There is very high variability of net working capital maintained by NBBL and EBL.
- 3. In case of EBL fluctuation of the study period, this shows that EBL is more efficiency than NBBL.
- 4. The profitability position of NBBL is better than EBL. Correlation between investment on government security and total deposit of EBL is highly significant. It shows that there is close relationship between investment on government securities and total deposit of EBL. However, it is not significant in case of NBBL.
- 5. While testing the hypothesis of composition of working capital, it has been observed that the mean value of proportion of cash and bank balance, loan and advance and government securities of NBBL and EBL are not statistically different.
- 6. While testing the hypothesis of liquidity management it has been observed that the mean value of current ratio, quick ratio, and cash and bank balance to deposit ratio of NBBL and EBL are not significantly different. It shows that liquidity management policy of these banks is significantly difference.
- 7. While testing the hypothesis of profitability position, it is observed that the mean value of net profit to total assets, net profit to total deposit and

interest on to total assets of NBBL is not statistically different from that of EBL.

Dhungana (2013) has carried out research "A Study on Working Capital Management of selected Joint Venture Banks in Nepal"

Main Objectives:

- 1. To study the position of current Assets and current liabilities of NABIL, NIBL and SCBNL, and their impact on Liquidity.
- 2. To analyze the composition of working capital and liquidity utilization of NABIL, NIBL and SCBNL.
- 3. To analyze the composition of working capital and assets utilization of NABIL, NIBL and SCBNL.
- 4. To analyze the comparative study of working capital Management among NABIL, NIBL and SCBNL.

Major Findings:

- 1. The average major components of the current assets i.e. cash and bank balance, loan and advance are higher in NIBL, money at call or short notice, government securities and miscellaneous assts are higher at SCBNL.
- 2. The liquidity position of sample banks are analyzed with the current ratio and quick ratio has highest current ratio and SCBNL has highest quick ratio.
- 3. Correlation between government securities and total deposit of sample banks are not significant; it shows that there is not close relationship between two variables. But there is highly significant correlation between loan and advance and total deposit of NABIL, NIBL and SCBNL. The banks have better utilization of their loan and advance and total deposit. There is positive correlation between cash and bank and current liabilities

and highly significant in NABIL, NIBL and SCBNL. Therefore, the banks have been better utilization of their cash and bank balance and current liabilities.

- 4. The composition of working capital are cash and bank balance, money at call or short notice, loan and advance, government securities and miscellaneous current assets are significantly different. There is significant difference in composition of working capital among NABIL, NIBL and SCBNL. Since, the mean value of loan and advance on total current assets of sample banks are significantly high and invest their fund in income generating sector.
- 5. The liquidity position of the sample banks' current ratio is not significantly different. But quick ratio is significantly different in liquidity position of NABIL, NIBL and SCBNL. The mean value of current ratio of NIBL is higher than NABIL and SCBNL but quick ratio of SCBNL is higher, however, liquidity position of SCBNL is better.

2.3 Research Gap

Many researchers have selected various different banks and companies but this study focuses on the various aspects of the working capital management of PCBL and SCBNL comparatively. This study covers only working capital position of selected banks by taking recent data during the fiscal year from 2008/09 to 2012/13. In this study, it is tried to carry out the distinct from other previous thesis studies in the term of sample size, nature of sample banks, methodology & statistical tools used. Analysis of standard deviation, regression analysis, and trend line analysis are used as main model of study with the view to obtain the relevant & accurate result. So, it has been believed that the study is different than earlier one.

CHAPTER-THREE RESEARCH METHODOLOGY

This chapter refers to the overall research method from the theoretical aspects to the collection and analysis of data. This study tries to perform a well-designed research in a very clear and direct way using both financial and statistical tools.

3.1 Research Design

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. (Kothari, 2005) To obtain the objective of the study, descriptive and analytical research design has been used. A true research design has been basically concerned with various steps to collect the data for analysis and draw a relevant conclusion.

3.2 Population and Sample

There are many commercial banks (including government owned, public and joint ventures) are operations in Nepal. The population for the study comprises all commercial banks. In this study only two commercial banks are to be taken for research work. Among them PCBL and SCBNL have been taken as a sample for the study.

Profile of the selected Banks

A. Brief Introduction of Prime Commercial Bank Ltd. (PCBL)

Prime Commercial Bank Limited has been established by prominent business personnel and professionals from diversified areas with a prime objective of providing 'Banking Services to Everyone' in the country where still large number of population are deprived of Banking Services.

The bank is the only bank entrusted by the World Bank and Government of Nepal to be the Power Development Fund (PDF) Administrator for the development of small and middle level hydropower project in the country. It has international networking and relation with more then 190 prominent foreign Banks in the world enabling us to carry out remittance and foreign trade business.

Prime Commercial Bank Ltd. started a concept of "Bearer Certificate OF Deposit" (BCD), which is very new concept in commercial banking sector in Nepal and its product and service are Loan and Advance ,Deposit Scheme , Automated Teller Machine(ATM) facility, Educational Loan, Housing Loan ,Hire purchase loan for professional, Saving plus, Locker Facility etc.

B. Brief Introduction of Standard Chartered Bank Nepal Limited (SCBNL)

Standard Charted Bank Nepal (SCBNL) has been operation in Nepal since 1987 when it was initially registered as a joint venture operation. The bank enjoys the status of the largest international bank currently in Nepal. Authorized capital of SCBNL Rs. operating 2,000,000,000.00. It's issued and paid up capital is Rs.1,610,168,000.00. Earning per share and cash dividend per share of this bank are Rs. 72.60 and Rs. 60.00 respectively at the end of the financial year 2011/12. Standard Chartered Bank Nepal Limited offers a full range of banking products and services in Consumer, Wholesale and SME Banking by catering to a wide range of customers encompassing individuals, midmarket local corporate, multinationals, large public sector companies, government corporations, hotels as well as the DO segment comprising of embassies, aid agencies, NGOs and INGOs. The bank has 54 branches located all over the major parts of the country.

3.3 Sources of Data

The study will be based on secondary data. The secondary sources of data collections are those that have been used from published on used by someone previously. The secondary sources of data are Balance Sheet, Profit & Loss account and literature publication of the concerned banks. The NEPSE report of the concerned bank has furnished some important data to this research work. Some supplementary data and information have been collected from the authoritative sources like Nepal Rastra Bank, Campus Library, Nepal Stock Exchange Limited, Security Exchange Board, Economic Survey, different journals, magazines and other published and unpublished reports documented by the authorities.

3.4 Nature of Data

In case of entire study secondary data used will be basically of the following nature.

- i. Most of the data taken for the analysis is collected in the form of published by the concerned banks through their annual reports.
- ii. Since all the banks which are taken into account for the study are listed in NEPSE, the figures are all most reliable and suitable too.

3.5 Data Analysis Tools

Analysis and presentation of the data is the core of each and every research work. This study requires some financial and statistical tools to accomplish the objective of the study. The financial and statistical tools are most

reliable. In this study various financial, statistical and accounting tools has been used. These tools make the analysis more effective, convenience, reliable and authentic. The various results obtained with the help of financial, accounting and statistical tools will be tabulated under different headings and will be compared with each other to interpret the results.

3.5.1 Financial Tools

In this research study various financial tools are employed for the analysis. Various ratios are employed and grouped for the analysis of composition of working capital, liquidity position, activity or turnover position, profitability position and capital structure or leverage position. The analysis of this study is based on following financial tools.

A) Working Capital

Due to differences in organization and the fact that working capital is not a ration but an absolute amount, it is difficult to predict what the ideal amount of working capital would be for the business. The net working capital is the difference between the current assets and the current liabilities. Lower the net working capital implies higher amount of short term financing and thus having aggressive policy and so on.

Working Capital = Current Assets – Current Liabilities

B) Working Capital to Current Assets

The working capital to current assets measures the relationship between these two variables.

C) Working Capital to Total Assets

This ratio measures the relationship between the working capital and total assets of the bank. This ratio is germane to the management for making

policy in the types of finance to be adopted. This ratio also shows the representation of working capital in total assets of the bank.

D) Return on Working Capital

Return on net working capital measures the profitability and also indicates the efficiency of working capital of banks

E) Cash Reserve Ratio

To ensure the security of the deposit holders, each bank has to keep certain percentage of the total local deposit collection as cash balance in NRB, as per the provision of NRB. Currently such requirement is 5.5%. Thus, this ratio measures the liquidity to be maintained by the bank.

3.5.2 Statistical Tools

The major statistical tools used for analyzing the data are as follows;

A) Arithmetic Mean or Average (.X)

Arithmetic mean also is called 'the mean' or 'average' as most popular and widely used measure of central tendency. Arithmetic mean is statistical constants which enables us to comprehend in a single effort of the whole. Arithmetic mean represents the entire data by a single value. It provides the gist and gives the bird's eye view of the huge mass of a widely numerical data. It is calculated as:

$$\overline{X} = \frac{1}{n} \sum_{i=1}^{n} x_i$$

Where: \overline{X} = mean value or arithmetic mean

 $\sum_{i=1}^{n} x_{i} = \text{sum of the observation}$

N= number of observation

B) Standard Deviation (S.D.)

It is the most usual measure of dispersion and it represents the square root of the variance of a group of numbers, i.e., the square root of the sum of the squared differences between a group of numbers and their arithmetic mean. Generally, it is denoted by small Greek letter (read as sigma) and is obtained as follows.

Standard Deviation () =
$$\sqrt{\frac{\sum x^2}{n} - \left(\frac{\sum x}{n}\right)^2}$$

Where,

 $\overline{X} = Mean$

x = Variable

n= Number of items in the series

The standard deviation measures the absolute dispersion or variability of a distribution; the greater the amount of dispersion or variability the greater the standard derivation, for the greater will be the magnitude of the deviations of the values from their mean.

C) Coefficient of Variation

Karl Pearson developed this measurement to measure the relative dispersion. It is used in such problems where we want to compare the variability of two or more series. It is denoted by C.V. and is obtained by dividing the arithmetic mean to standard deviation. Thus,

C.V. =
$$\frac{\dagger}{X} \times 100$$

 \overline{X} = mean of the observation

D) Correlation Coefficient (r):

Coefficient may be defined as the degree of linear relationship existing between two or more variables. There variables are said to be correlated when the change in the value of one results change in another variable. Correlation is categorized three types. They are simple, partial and multiple correlations. Correlation may be positive, negative or zero. Correlation can be classified as linear or non-linear. Here, we study simple correlation only. In simple correlation, the effect of others is not included rather these are taken as constant considering them to have no serious effect of the dependent.

Formula is given below;

$$\mathbf{r} = \frac{n\sum XY - \sum X\sum Y}{\sqrt{\sum X^2 - (\sum X)^2} \sqrt{n\sum Y^2 - (\sum Y)^2}}$$

E. Probable Error

The probable error of the coefficient of correlation helps in interpreting its value. With the help of problem error, it is possible to determine the reliability of the value of the coefficient in so far as it depends on the conditions of random sampling. The probable error of the coefficient of correlation is obtained as follows.

P.E. = 0.6745
$$\frac{1-r^2}{\sqrt{N}}$$

Here, r = Correlation coefficient

N = Number of pairs of observations

If the value of 'r' is less than the probable error, there is no evidence of correlation, i.e., the value of 'r' is not at all significant. Then, if the value of 'r' is more than six times of the probable error the coefficient of correlation is practically certain, i.e., the value of 'r' is significant.

F) Trend Analysis

A widely and most commonly used method to describe the trend is the method of least square. Let the trend line between the dependent variable y and the independent variable x (i.e. time) be represented by;

$$Yc = a + bx$$
(i)

Where,

a = y intercept or value of y when x = 0

b = slope of the trend line or amount of change that comes in y of a unit change in x.

To find the value of x and y, the following equations should be solved;

$$y = na + b \quad x \quad \dots \quad (ii)$$

$$xy = a$$
 $x + b$ $x2$ (iii)

CHAPTER-FOUR

PRESENTATION AND ANALYSIS OF DATA

This chapter will present the analysis of component of working capital of both selected banks. The major objective of the chapter is to evaluate the working capital management of PCBL and SCBNL. Overall objective of the study is highlight by presenting and analyzing the data obtained from concerned organization. In this chapter relevant data and information of working capital as well as financial performance of selected banks are presented and analyzed accordingly.

4.1 Analysis of Secondary Data

In this section, the data from the annual report of PCBL and SCBNL have been extracted and tabulated to compute the relative ratios that are essential for evaluating the working capital management of the selected banks. This chapter presents composition of current assets and current liabilities, working capital position, relationship between working capital and total assets and financing of working capital. It also uses correlation analysis between different components of working capital.

4.1.1 Components of Current Assets

To operate the business, different kinds of assets are required for the day to day operation of the business different types of current assets are required. For smooth operation of business appropriate level of current assets should be maintained by the organization. The compositions of current assets are

cash balance, bank balance, money at call, government securities, loan & advances and others etc. The following table depicts different components of current Assets of selected banks from FY 2008/09 to 2012/13.

Table-4.1
Components of Current Assets in PCBL

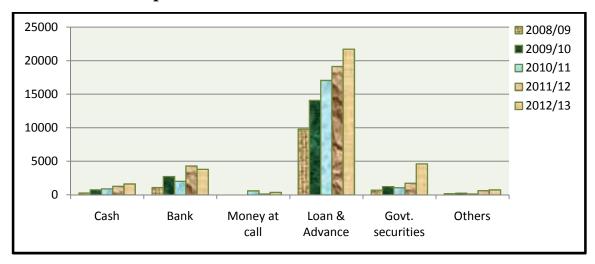
Rs. in Million

FY	Cash	Bank	Money at call	Loan & Advance	Govt. securities	Others	Total CA
2008/09	279.7	1099.7	0	9817.3	718.7	186.4	12101.8
2009/10	761	2747.5	0	14102.3	1229.7	256.1	19096.6
2010/11	905.1	2018.8	604.9	17070.3	1068.9	131.6	21799.6
2011/12	1277.7	4315.3	144.1	19159.9	1734.4	633.5	27264.9
2012/13	1627.6	3814.3	368.8	21735.9	4625.4	750.6	32922.6

Source: Annual Report of PCBL from FY 2008/09 to 2012/13

Above table represents the composition of current assets of PCBL. Total current assets are rapidly increased over the study period. Similarly, the overall, total current assets of PCBL are Rs. 12108.8, 19096.6, 21799.6, 27264.9 and 32922.6 millions from FY 2008/09 to 2012/13 respectively. The component of current assets of PCBL is also presented in figure.

Figure-4.1
Components of Current Assets in PCBL



From the above figure, it is found that loan and advance of PCBL is higher than other assets and money at call is lowest assets during the study periods.

Table-4.2
Components of Current Assets in SCBNL

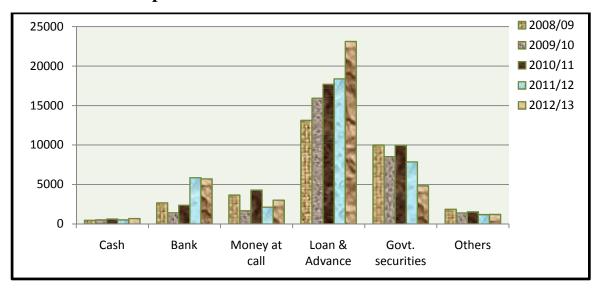
Rs. in Million

FY	Cash	Bank	Money at call	Loan & Advance	Govt. securities	Others	Total CA
2008/09	463.4	2673.9	3651.2	13118.6	9998.8	1861.2	31767.1
2009/10	509.1	1420.2	1669.5	15932.2	8531.5	1390.3	29452.8
2010/11	610.7	2365.1	4280.9	17698.2	9957.3	1528.6	36440.8
2011/12	509.7	5856.4	2126	18376.0	7862.7	1179.1	35909.9
2012/13	687.7	5717.3	3009.1	23125.7	4830.9	1203.8	38574.5

Source: Annual Report of SCBNL from FY 2008/09 to 2012/13

Above table represents the composition of current assets of SCBNL. Total current assets are rapidly increased over the study period. Similarly, the overall, total current assets of SCBNL are Rs. 31767.1, 29452.8, 36440.8, 35909.9 and 38574.5 millions from FY 2008/09 to 2012/13 respectively. The component of current assets of SCBNL is also presented in figure.

Figure-4.2
Components of Current Assets in SCBNL



From the above figure, it is found that loan and advance of SCBNL is higher than other assets and cash balance is lowest assets during the study periods.

4.1.2 Components of Current Liabilities

Current liabilities is a short term obligation which is payable within a year. It is the integral part of working capital policy. The compositions of current liabilities are current deposit, saving deposit, call deposit, other deposit, bills payable and others etc. The following table depicts the amount of different components of current liabilities of selected banks from FY 2008/09 to 2012/13.

Table-4.3
Composition of Current Liabilities in PCBL

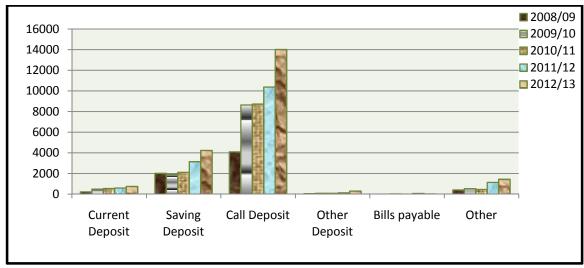
Rs. in Million

FY	Current	Saving	Call	Other	Bills	Other	Total CL
	Deposit	Deposit	Deposit	Deposit	payable		
2008/09	229.2	2018.3	4101.6	49.9	9.8	419.8	6828.6
2009/10	483.7	1912.2	8642.7	85.1	29.4	542	11695.1
2010/11	550.2	2119.8	8734.5	94.1	17.1	458.1	11973.8
2011/12	601.1	3154.5	10380.6	129.2	72.4	1148.5	15486.3
2012/13	754	4247.8	14030	308.1	22.9	1447.3	20810.1

Source: Annual Report of PCBL from FY 2008/09 to 2012/13

Above table represents the composition of current liabilities of PCBL. Total current liabilities are rapidly increased over the study period. Similarly, the overall, total current liabilities of PCBL are Rs. 6828.6, 11695.1, 11973.8, 15486.3 and 20810.1 millions from FY 2008/09 to 2012/13 respectively. The component of current liabilities of PCBL is also presented in figure.

Figure-4.3
Composition of Current Liabilities in PCBL



From the above figure, it is found that call deposit of PCBL is higher than other liabilities and bills payble is lowest liabilities during the study periods.

Table-4.4
Composition of Current Liabilities in SCBNL

Rs. in Million

FY	Current	Saving	Call	Other	Bills	Other	Total CL
	Deposit	Deposit	Deposit	Deposit	payable		
2008/09	6202.8	19187.7	3001.6	378	72.9	1912.4	30775.4
2009/10	9763.2	12430	3563.2	251.2	89.2	2113.5	28210.3
2010/11	11545.6	11619.8	4405.9	291.7	66	2319.9	30248.9
2011/12	11317.2	15502.3	3617.5	905.3	86.4	2067.9	33496.6
2012/13	13894.6	17885	3243.7	730	49.5	2148.9	36951.7

Source: Annual Report of SCBNL from FY 2008/09 to 2012/13

Above table represents the composition of current liabilities of SCBNL. Total current liabilities are increased over the study period except FY 2009/10. Similarly, the overall, total current liabilities of SCBNL are Rs. 30775.4, 28210.3, 30248.9, 33496.6 and 36951.7 millions from FY 2008/09 to 2012/13 respectively. The component of current liabilities of SCBNL is also presented in figure.

2008/09 25000 **2009/10 2010/11** 20000 **2011/12** 2012/13 15000 10000 5000 Call Deposit Other Bills payable Other Current Saving Deposit Deposit Deposit

Figure-4.4
Composition of Current Liabilities in SCBNL

From the above figure, it is found that saving deposit of PCBL is higher than other liablities and bills payble is lowest liabilities during the study periods.

4.1.3 Working Capital Policy

Working capital means current assets less current liabilities. Working capital measures how much amount in liquid assets of a company has available to build business. Working capital management refers to the administration of all current assets and current liabilities in a proper way. Working capital policy reflects the level of current assets and current liabilities maintained in the organization. To achieve the goal, the working capital financing decision is an integral decision of the organization. The amount invested in working capital should be neither more nor less.

The net working capital of the PCBL and SCBNL for the five fiscal year period has been shown in the table below.

Table-4.5
Net Working Capital PCBL and SCBNL

In Rs. Millions

	PCBL			SCBNL		
FY	CA	CL	NWC	CA	CL	NWC
2008/09	12101.8	6828.6	5273.2	31767.1	30775.4	991.7
2009/10	19096.6	11695.1	7401.5	29452.8	28210.3	1242.5
2010/11	21799.6	11973.8	9825.8	36440.8	30248.9	6191.9
2011/12	27264.9	15486.3	11778.6	35909.9	33496.6	2413.3
2012/13	32922.6	20810.1	12112.5	38574.5	36951.7	1622.8
Average	22637.1	13358.78	9278.32	34429.02	31936.58	2492.44
SD			2921.78			2136.77
CV			31.49			85.73

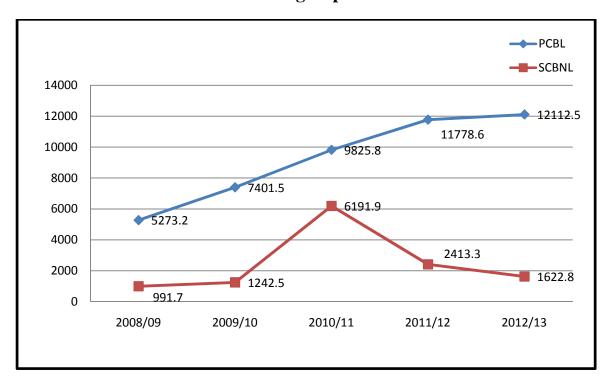
Source: Annual Report of PCBL and SCBNL

The above table shows the net working capital of the selected banks. It is clear that the net working capital of PCBL is in increasing trend during the study period. In average, the net working capital of the PCBL is Rs. 9278.32 millions.

However, net working capital of SCBNL is in increasing trend from FY 2010/11but it is decreasing trend up to 2012/13. In average, the net working capital of the SCBNL is Rs. 2492.44 millions.

The coefficient of variation in working capital of PCBL is only 31.49%, indicating consistency where as the coefficient of variation in the ratio is 85.73 % in SCBNL.

Figure-4.5
Net Working Capital



The above figure clearly indicates that the both banks have given more concentrations in increasing the current assets by greater amount than increasing the current liabilities.

Thus it can be concluded that the banks are following aggressive working capital policy, since the short term debt has been extensively used to finance current assets.

It is found that comparatively indicates the net working capital of PCBL is highest than SCBNL during the study periods.

4.1.4 Working Capital to Current Assets Ratio

The working capital to current assets measures the relationship between these two variables. The table below shows to what extent the working capital has been used to finance current assets of PCBL and SCBNL.

Table-4.6
Working Capital to Current Assets Ratio

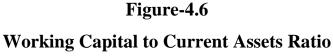
Rs. In Millions and Ratio in times

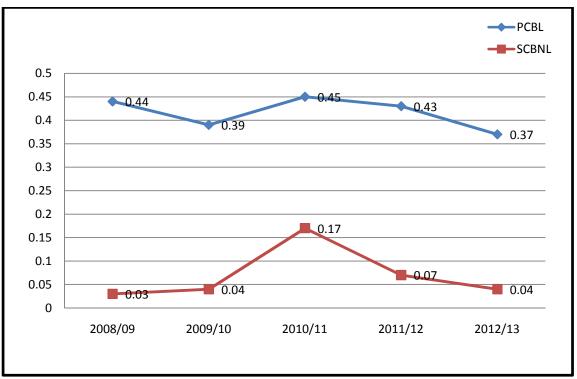
	PCBL				SCBNL	
FY	WC	CA	Ratio	WC	CA	Ratio
2008/09	5273.2	12101.8	0.44	991.7	31767.1	0.03
2009/10	7401.5	19096.6	0.39	1242.5	29452.8	0.04
2010/11	9825.8	21799.6	0.45	6191.9	36440.8	0.17
2011/12	11778.6	27264.9	0.43	2413.3	35909.9	0.07
2012/13	12112.5	32922.6	0.37	1622.8	38574.5	0.04
Average	9278.32	22637.10	0.41	2492.44	34429.02	0.07
SD			0.04			0.06
CV			0.085			0.810

Source: Annual Report of PCBL and SCBNL

The above table depicts the working capital to current ratio of both selected banks is in fluctuating trend. In average, the working capital has covered 41% of the current assets of PCBL and the coefficient of variation in such coverage is 0.085.

Similarly, in average, 0.07 of the current assets of SCBNL are covered by working capital and the coefficient of variation in such coverage is 0.810.





From the above figure on the basis of working capital to current assets, it can be concluded that PCBL has high liquidity and SCBNL has low liquidity during the study period. So, it is found that the working capital to current assets ratio of PCBL is higher than SCBNL.

4.1.5 Working Capital to Total Assets Ratio

The working capital to total assets measures the relationship between these two variables. Higher the ratio indicates higher amount of working capital which ultimately requires higher amount of short term debt, which is easier than long term debt to obtain, and bears low interest amount.

The table below shows to what extent the working capital has been used to finance total assets of PCBL and SCBNL.

Table-4.7
Working Capital to Total Assets Ratio

Rs. In Millions and Ratio in times

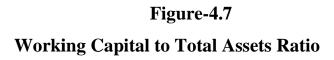
	PCBL				SCBNL			
FY	WC	TA	Ratio	WC	TA	Ratio		
2008/09	5273.2	13618.6	0.39	991.7	41678.8	0.02		
2009/10	7401.5	20558.5	0.36	1242.5	41525.2	0.03		
2010/11	9825.8	22407.7	0.44	6191.9	45227.2	0.14		
2011/12	11778.6	28063.2	0.42	2413.3	42970.8	0.06		
2012/13	12112.5	33575.4	0.36	1622.8	47024	0.03		
Average	9278.32	23644.68	0.39	2492.44	43685.20	0.06		
SD			0.04			0.05		
CV			0.089			0.830		

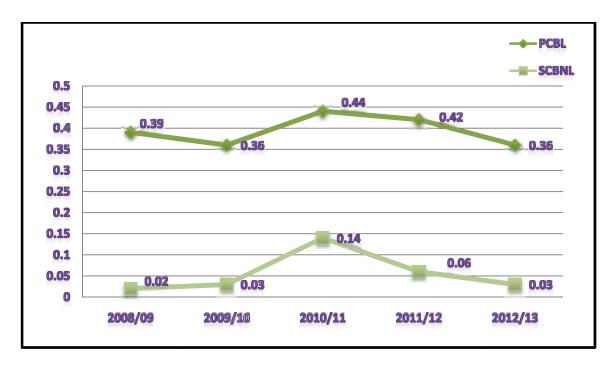
Source: Annual Report of PCBL and SCBNL

The above table presents the ratio of working capital to total assets of the bank. The working capital to total capital ratio of PCBL has been in fluctuating trend. The ratio is 36% in lowest in the FY 2012/13 and 44% in highest in the FY 2010/11.

In average, the working capital has covered 39% of the total assets of the bank and the coefficient of variation in such coverage is 0.089. Similarly, the working capital to total assets ratio in SCBNL has also varied throughout the periods, and thus is maximum, 14%, in the fiscal year 2010/11 and minimum, 0.02, in the FY 2008/09.

In average, 0.05 of the total assets of SCBNL are covered by working capital and the coefficient of variation in such coverage is 0.83.





From the above figure on the basis of working capital to total assets, it can be concluded that PCBL has high liquidity and SCBNL has low liquidity during the study period.

4.1.6 Return on Working Capital

Return on net working capital measures the profitability and also indicates the efficiency of working capital of banks. It indicates how bank has used its available resources. The ratio measures the profitability position of the company with respect to current assets. Higher ratio indicates higher utilization of current assets to earn profit and vice-versa.

The ratio is computed by dividing net profit after tax by current assets or working capital.

Table-4.8
Return on Working Capital

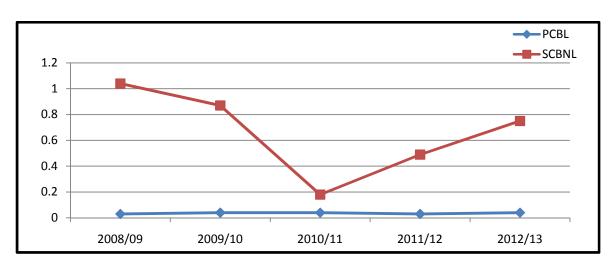
Rs. In Millions and Ratio in times

		PCBL			SCBNL		
FY	NP	WC	Ratio	NP	WC	Ratio	
2008/09	141.8	5273.2	0.03	1028.3	991.7	1.04	
2009/10	325.5	7401.5	0.04	1086.8	1242.5	0.87	
2010/11	370.0	9825.8	0.04	1120.5	6191.9	0.18	
2011/12	338.6	11778.6	0.03	1173.2	2413.3	0.49	
2012/13	479.8	12112.5	0.04	1217.9	1622.8	0.75	
Average	331.14	9278.32	0.04	1125.34	2492.44	0.67	
SD			0.01			0.34	
CV			0.206			0.507	

Source: Annual Report of PCBL and SCBNL

Above table shows that return on working capital of both banks is fluctuating trend during the study period. In average, return on working capital has covered 4% of PCBL and the coefficient of variation in such coverage is 0.206. Similarly, in average, return on working capital has covered 67% of SCBNL and the coefficient of variation in such coverage is 0.507.

Figure-4.8
Return on Working Capital



From the above figure on the basis of return on working capital, it can be concluded that SCBNL has high liquidity and PCBL has low liquidity during the study period.

4.1.7 Cash Reserve Ratio

Sound working capital management means sound liquidity, which ensures the security of deposit holders. Cash reserve ratio is considered as the major tool for measuring the bank's liquidity. As per the NRB's directives commercial banks have to keep 5.5 % of the local deposit as balance in NRB from fiscal year 2008/09.

To identify whether bank has sound liquidity or not, the cash reserve ratio of both sampled bank has been determined in the table below.

Table-4.9
Cash Reserve Ratio

Ratio in percent

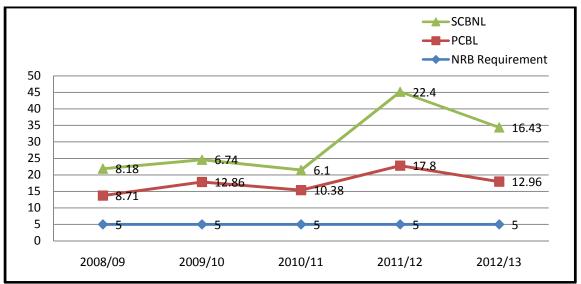
FY	NRB Requirement	PCBL	SCBNL
2008/09	5.00	8.71	8.18
2009/10	5.00	12.86	6.74
2010/11	5.00	10.38	6.10
2011/12	5.00	17.80	22.4
2012/13	5.00	12.96	16.43

Source: Annual Report of PCBL and SCBNL

The above table measures the liquidity of the bank to ensure the security of the deposit holders. The CRR of PCBL has followed maximum 17.8% in the fiscal year 2011/12 and minimum 8.71% in the fiscal year 2008/09 during

the five year periods. Similarly, The CRR of SCBNL has followed maximum 22.4% in the fiscal year 2011/12 and minimum 6.10% in the fiscal year 2010/11.

Figure-4.9 Cash Reserve Ratio



From the above figure, it is found that both banks have implemented the direction of NRB regarding the minimum cash reserve ratio. Comparing two banks, it can be concluded that the SCBNL is advanced than PCBL in managing liquidity and has managed the liquidity better.

4.1.8 Statistical Analysis

Under this the relationship between the variables that are germane to the working capital management has been determined. Mainly, the Karl Pearson correlation coefficient and trend analysis have been used.

i. Coefficient correlation between net profit and net working capital

To find out the correlation between net profit and net working capital, coefficient of correlation (r) is determined. To measure the relationship of net profit with net working capital, the net profit (Y) has been assumed to be the dependent variable on net working capital (X), independent variable.

Table-4.10
Correlation between Net Profit and Working Capital

In Rs. Millions

	F	PCBL	SC	CBNL
FY	WC	Net Profit	WC	Net Profit
2008/09	5273.2	141.8	991.7	1028.3
2009/10	7401.5	325.5	1242.5	1086.8
2010/11	9825.8	370.0	6191.9	1120.5
2011/12	11778.6	338.6	2413.3	1173.2
2012/13	12112.5	479.8	1622.8	1217.9
r		0.863		0.145
r^2		0.744		0.021
PE		0.077		0.295
6PE		0.463		1.772

(By computing Microsoft Office Excel-97)

The above table shows the relationship between the net working capital and the net profit after tax. Both banks have positive relationship with net working capital. The correlation between net profit and net working capital of PCBL and SCBNL are 0.863 and 0.145 respectively.

Also, the coefficient of determination (r²) indicates that 74.4% and 2.1%, variation in net profit of PCBL and SCBNL respectively has been explained by change in net working capital. The probable error in the relationship between these two variables is 0.077 and 0.295 and the six times probable error is 0.463 and 1.772 in PCBL and SCBNL respectively.

On the other hand, the value of 'r' is more than the calculated 6 P.E. of PCBL, it can be considered that the statistically relationship between net profit and net working capital is significant in case of PCBL, and thus net profit is increases with the increase in net working capital and vice-versa.

The value of 'r' is smaller than the calculated 6 P.E. of SCBNL, it can be considered that the statistically relationship between net profit and working capital is not significant in case of SCBNL, and thus net profit is not increases with the increase in net working capital and vice-versa.

ii. Coefficient correlation between current assets and net working capital

To find out the correlation between current assets and net working capital, coefficient of correlation (r) is determined. To measure the relationship of net profit with net working capital, the current assets (Y) has been assumed to be the dependent variable on net working capital (X), independent variable.

Table-4.11
Correlation between Current Assets and Working Capital

In Millions

	PC	PCBL		CBNL
FY	WC	CA	WC	CA
2008/09	5273.2	12101.8	991.7	31767.1
2009/10	7401.5	19096.6	1242.5	29452.8
2010/11	9825.8	21799.6	6191.9	36440.8
2011/12	11778.6	27264.9	2413.3	35909.9
2012/13	12112.5	32922.6	1622.8	38574.5
r		0.962		0.439
r^2		0.925		0.192
PE		0.023		0.244
6PE		0.136		1.462

(By computing Microsoft Office Excel-97)

The above table shows the relationship between the net working capital and the current assets. Both banks have positive relationship with net working capital. The correlation between current assets and net working capital of PCBL and SCBNL are 0.962 and 0.439 respectively.

Also, the coefficient of determination (r²) indicates that 92.5% and 19.2%, variation in current assets of PCBL and SCBNL respectively has been explained by change in net working capital. The probable error in the relationship between these two variables is 0.023 and 0.244 and the six times probable error is 0.136 and 1.462 in PCBL and SCBNL respectively. The value of 'r' is more than the calculated 6 P.E. of PCBL, it can be considered that the statistically relationship between current assets and net working capital is significant in case of PCBL, and thus current assets is increases with the increase in net working capital and vice-versa. On the other hand the value of 'r' is smaller than the calculated 6 P.E. of SCBNL, it can be considered that the statistically relationship between current assets and net working capital is not significant in case of SCBNL, and thus current assets is not increases with the increase in net working capital and vice-versa.

4.1.9 Trend Analysis

Trend analysis plays an important role in the analysis and interpretation of financial statement. Trend is general terms, signifies a tendency. It helps in forecasting and planning future operation. Trend analysis is a statistical tool, which shows the previous trend of the financial performance and forecasts the future financial results of the firms. The trend analysis aids to predict the future value on the basis of the past years.

Trend Analysis of Net Working Capital

To know the efficiency in working capital management of bank in future, the variables that are related to working capital have been estimated. Then

regression line of net working capital (Y) has been presented below along with the trend value.

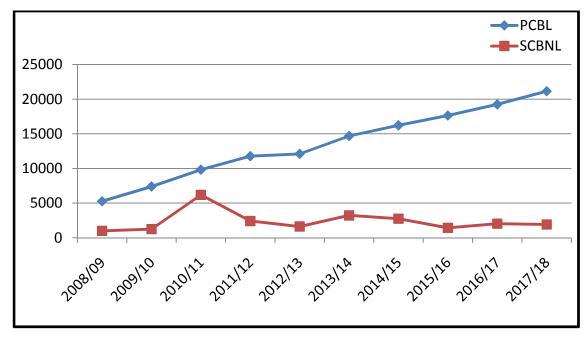
Table: 4.11
Trend Analysis of Net Working Capital

In Millions

FY	PCBL	SCBNL
2008/09	5273.2	991.7
2009/10	7401.5	1242.5
2010/11	9825.8	6191.9
2011/12	11778.6	2413.3
2012/13	12112.5	1622.8
2013/14	14695.0	3222.3
2014/15	16224.8	2755.7
2015/16	17641.7	1422.2
2016/17	19242.1	2032.5
2017/18	21145.0	1916.9

(By computing Microsoft Office Excel-97)

Figure: 4.11
Trend Analysis of Net Working Capital



The above table and figure shows that the projected value of net working capital of PCBL Rs. 14695.0, 16224.8, 17641.7, 19242.1 and 21145.0 million from 2013/14 to 2017/18 respectively where as the projected value of net working capital of SCBNL Rs. 3222.3, 2755.7, 1422.2, 2032.5 and 1916.9 million from 2013/14 to 2017/18 respectively.

Also, the regression line of net working capital on the time period indicates if the other variable remains constant that the net working capital of PCBL will be increasing trend where as the net working capital of SCBNL will be fluctuating trend. Thus, it can be concluded that the value of working capital will be highest in PCBL in future as well.

4.2 Major Findings of the Study

The major findings of the study are derived on the basis of analysis of selected banks, which are as follows.

- 1. The compositions of current assets are cash balance, bank balance, money at call, government securities, loan & advances and others etc. whereas the compositions of current liabilities are current deposit, saving deposit, call deposit, other deposit, bills payable and others etc.
- Total current assets of PCBL are Rs. 12108.8, 19096.6, 21799.6, 27264.9 and 32922.6 millions from FY 2008/09 to 2012/13 respectively.
- 3. Total current assets of SCBNL are Rs. 31767.1, 29452.8, 36440.8, 35909.9 and 38574.5 millions from FY 2008/09 to 2012/13 respectively.

- Total current liabilities of PCBL are Rs. 6828.6, 11695.1, 11973.8, 15486.3 and 20810.1 millions from FY 2008/09 to 2012/13 respectively.
- Total current liabilities of SCBNL are Rs. 30775.4, 28210.3, 30248.9,
 33496.6 and 36951.7 millions from FY 2008/09 to 2012/13 respectively.
- 6. Net working capital of PCBL is in increasing trend during the study period. In average, the net working capital of the PCBL is Rs. 9278.32 millions.
- 7. Net working capital of SCBNL is in increasing trend from FY 2010/11but it is decreasing trend up to 2012/13. In average, the net working capital of the SCBNL is Rs. 2492.44 millions.
- 8. The coefficient of variation in working capital of PCBL is only 31.49%, indicating consistency where as the coefficient of variation in the ratio is 85.73 % in SCBNL.
- 9. The working capital to current ratio of both selected banks is in fluctuating trend. In average, the working capital has covered 41% of the current assets of PCBL and the coefficient of variation in such coverage is 0.085. Similarly, in average, 0.07 of the current assets of SCBNL are covered by working capital and the coefficient of variation in such coverage is 0.810.
- 10. The working capital to total capital ratio of PCBL has been in fluctuating trend. In average, the working capital has covered 39% of the total assets of the bank and the coefficient of variation in such coverage is 0.089.

- 11. The working capital to total assets ratio in SCBNL has also varied throughout the periods, and thus is maximum, 14%, in the fiscal year 2010/11 and minimum, 0.02, in the FY 2008/09. In average, 0.05 of the total assets of SCBNL are covered by working capital and the coefficient of variation in such coverage is 0.83.
- 12. The return on working capital of both banks is fluctuating trend during the study period. In average, return on working capital has covered 4% of PCBL and the coefficient of variation in such coverage is 0.206. Similarly, in average, return on working capital has covered 67% of SCBNL and the coefficient of variation in such coverage is 0.507.
- 13. The CRR of PCBL has followed maximum 17.8% in the fiscal year 2011/12 and minimum 8.71% in the fiscal year 2008/09 during the five year periods. Similarly, The CRR of SCBNL has followed maximum 22.4% in the fiscal year 2011/12 and minimum 6.10% in the fiscal year 2010/11.
- 14. Both banks have positive relationship with net working capital. The correlation between net profit and net working capital of PCBL and SCBNL are 0.863 and 0.145 respectively.
- 15. The coefficient of determination (r²) indicates that 74.4% and 2.1%, variation in net profit of PCBL and SCBNL respectively has been explained by change in net working capital.
- 16. The value of 'r' is more than the calculated 6 P.E. of PCBL, it can be considered that the statistically relationship between net profit and net working capital is significant in case of PCBL, and thus net profit is increases with the increase in net working capital and vice-versa.

Whereas, the value of 'r' is smaller than the calculated 6 P.E. of SCBNL, it can be considered that the statistically relationship between net profit and working capital is not significant in case of SCBNL, and thus net profit is not increases with the increase in net working capital and vice-versa.

- 17. The correlation between current assets and net working capital of PCBL and SCBNL are 0.962 and 0.439 respectively. Also, the coefficient of determination (r²) indicates that 92.5% and 19.2%, variation in current assets of PCBL and SCBNL respectively has been explained by change in net working capital.
- 18. The value of 'r' is more than the calculated 6 P.E. of PCBL, it can be considered that the statistically relationship between current assets and net working capital is significant in case of PCBL, and thus current assets is increases with the increase in net working capital and viceversa. On the other hand the value of 'r' is smaller than the calculated 6 P.E. of SCBNL, it can be considered that the statistically relationship between current assets and net working capital is not significant in case of SCBNL, and thus current assets is not increases with the increase in net working capital and vice-versa.
- 19. The projected value of net working capital of PCBL Rs. 14695.0, 16224.8, 17641.7, 19242.1 and 21145.0 million from 2013/14 to 2017/18 respectively where as the projected value of net working capital of SCBNL Rs. 3222.3, 2755.7, 1422.2, 2032.5 and 1916.9 million from 2013/14 to 2017/18 respectively.

CHAPTER-FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Banks are the suppliers of finance for trade and industry and play a vital role in the economic and financial life of the country. Commercial bank is income oriented, thus proper financial decision-making is more important in banking transaction for its efficiency and profitability. Most of the financial decisions of a bank are concerned with current assets and current liabilities. Commercial banks are the major financial institutions that occupy quite an important place in the framework in the economy development sectors as well as in saving and investment sectors. Working capital management is concerned with current assets and current liabilities. Generally, working capital refers to the difference between current assets and current liabilities. Thus, working capital management has been regarded as one of the conditioning factor in the decision-making issues of commercial banks. The term working capital management closely relates with short-term financing; it is concerned with collection and allocation of resources. Working capital management relates to problems that arise in attempting to manage the current assets, the current liabilities and interrelationships that exist between them. The main objective of the study is to study the working capital management of banks, especially in Prime Commercial Bank Limited and Standard Chartered Bank Nepal Limited. To fulfill this objective of this study and other specific objective as described in chapter one, an appropriate research methodology has been developed which includes the ratio analysis as financial tools and trend analysis, correlation coefficient as statistical tools. The major analysis consists of the composition of current assets, current liabilities, working capital position, current reserve ratio and working capital to total assets ratio. Under these, main ratios and their trend position are studied in the chapter four. In order to test the relationship between the various components of working capital, Karl Pearson's correlation coefficient r is calculated and analyzed.

To achieve the objectives of the study, secondary data have been analyzed and data have been extracted from the annual reports of the respective banks. Further, both financial tools and statistical tools have been effectively utilized to get the result.

Finally, the major findings have been extracted from the analysis of secondary data, and the conclusion has been made on the basis of major findings. For the enhancement of the working capital management of the sampled banks, the recommendations have been given, considering the major findings and conclusion, at the end of the study.

5.2 Conclusions

From the analysis of data, it is concluded that both banks have higher loan and advance than other assets. Both banks have given more concentrations in increasing the current assets by greater amount than increasing the current liabilities. Thus it can be concluded that the banks are following aggressive working capital policy, since the short term debt has been extensively used to finance current assets.

It is also concluded that both banks have implemented the direction of NRB regarding the minimum cash reserve ratio. Comparing two banks, it can be

concluded that the SCBNL is advanced than PCBL in managing liquidity and has managed the liquidity better. On the other hand, it can be considered that the statistically relationship between net profit and net working capital is significant in case of PCBL, and thus net profit is increases with the increase in net working capital and vice-versa. Similarly, it can be considered that the statistically relationship between net profit and working capital is not significant in case of SCBNL and thus net profit is not increases with the increase in net working capital and vice-versa.

The regression line of net working capital on the time period indicates if the other variable remains constant that the net working capital of PCBL will be increasing trend where as the net working capital of SCBNL will be fluctuating trend. Thus, it can be concluded that the value of working capital will be highest in PCBL in future as well.

5.3 Recommendations

On the basis of major findings and the conclusion drawn, the following Recommendations, which will undoubtedly enhance the bank's performance, are made;

- 1. The status of current assets in PCBL has increasing trend but SCBNL has fluctuating order. PCBL has high liquidity and SCBNL has low liquidity during the study period. So, it is recommended that the working capital to current assets ratio of SCBL should be maintained.
- 2. On the basis of return on working capital, SCBNL has high liquidity and PCBL has low liquidity during the study period. Thus PCBL should be increased such liquidity in future.

- 3. In this study, positive working capital is found in both sampled banks during the study period. So, bank should be maintained optimum size of current assets and liabilities in future also.
- 4. Positive working capital represents the sound financial management of the banks. Similarly, the negative working capital represents the poor financial management. The banks should follow moderate policy, to minimize the risk. They should use equity capital as well in the same level of debt capital.
- 5. The banks should follow the cash reserve ratio directed by NRB to minimize the liquidity risk.
- 6. Working capital of PCBL will be increasing trend where as the net working capital of SCBNL will be fluctuating trend in projected years. Thus, it can be recommended that the value of working capital should be maintained by SCBNL in future as well.
- 7. As the service of these banks have been limited to urban and semi urban regions of the nation, they should imitate some measures to widen their reach to the people of rural areas,
- 8. These banks should also focus on research and development activities in order to retain and keep their position up, as more and more players are entering into the limited market of banking industry of Nepal.

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Appendix-1

Current Assets of PCBL

FY	Cash	Bank	Money	Loan &	Govt.	Others	Total CA
			at call	Advance	securities		
2008/09	279.7	1099.7	0	9817.3	718.7	186.4	12101.8
2009/10	761.0	2747.5	0	14102.3	1229.7	256.1	19096.6
2010/11	905.1	2018.8	604.9	17070.3	1068.9	131.6	21799.6
2011/12	1277.7	4315.3	144.1	19159.9	1734.4	633.5	27264.9
2012/13	1627.6	3814.3	368.8	21735.9	4625.4	750.6	32922.6

Current Assets of SCBNL

FY	Cash	Bank	Money	Loan &	Govt.	Others	Total CA
			at call	Advance	securities		
2008/09	463.4	2673.9	3651.2	13118.6	9998.8	1861.2	31767.1
2009/10	509.1	1420.2	1669.5	15932.2	8531.5	1390.3	29452.8
2010/11	610.7	2365.1	4280.9	17698.2	9957.3	1528.6	36440.8
2011/12	509.7	5856.4	2126	18376	7862.7	1179.1	35909.9
2012/13	687.7	5717.3	3009.1	23125.7	4830.9	1203.8	38574.5

Current Liabilities of PCBL

FY	Current	Saving	Call	Other	Bills payable	Other	Total CL
	Deposit	Deposit	Deposit	Deposit			
2008/09	229.2	2018.3	4101.6	49.9	9.8	419.8	6828.6
2009/10	483.7	1912.2	8642.7	85.1	29.4	542.0	11695.1
2010/11	550.2	2119.8	8734.5	94.1	17.1	458.1	11973.8
2011/12	601.1	3154.5	10380.6	129.2	72.4	1148.5	15486.3
2012/13	754.0	4247.8	14030.0	308.1	22.9	1447.3	20810.1

Current Liabilities of SCBNL

FY	Current	Saving	Call	Other	Bills	Other	Total CL
	Deposit	Deposit	Deposit	Deposit	payable		
2008/09	6202.8	19187.7	3001.6	378.0	72.9	1912.4	30775.4
2009/10	9763.2	12430.0	3563.2	251.2	89.2	2113.5	28210.3
2010/11	11545.6	11619.8	4405.9	291.7	66.0	2319.9	30248.9
2011/12	11317.2	15502.3	3617.5	905.3	86.4	2067.9	33496.6
2012/13	13894.6	17885.0	3243.7	730.0	49.5	2148.9	36951.7

Working Capital of selected banks

	PCBL			SCBNL		
FY	CA	CL	NWC	CA	CL	NWC
2008/09	12101.8	6828.6	5273.2	31767.1	30775.4	991.7
2009/10	19096.6	11695.1	7401.5	29452.8	28210.3	1242.5
2010/11	21799.6	11973.8	9825.8	36440.8	30248.9	6191.9
2011/12	27264.9	15486.3	11778.6	35909.9	33496.6	2413.3
2012/13	32922.6	20810.1	12112.5	38574.5	36951.7	1622.8
Average	22637.1	13358.78	9278.32	34429.02	31936.58	2492.44

FY	Net Profit of PCBL	Net Profit of SCBNL
2008/09	141.8	1028.3
2009/10	325.5	1086.8
010/11	370.0	1120.5
2011/12	338.6	1173.2
2012/13	479.8	1217.9