

CHAPTER- I

INTRODUCTION

1.1 Background of the study

Financial institutions can be considered as the means for economic growth of the country. The development process of a country involves the mobilization and development of resources. Development of trade, commerce and industry are the prime requisite for the attainment of the economic, political, and social goals. To fulfill the purpose of planning, financial functions more often dominate the other functions. “There is always lack of finance in underdevelopment economic because natural resources are either under utilized or unutilized in productive sectors or even other purposes, i.e.; social welfare and so on, likewise, underdevelopment countries are not deficient in land, water, mineral, forest or power resources through they may be untapped; constituting only potential resources”. (Dewett; 1995:459). So in these countries for the rapid development of the economy, there should be proper mobilization of resources. Due to various difficulties or even ignorance of the people, such resources have not been properly utilized; hoarding could be one of the reasons for this. So, banks and other financial institutions play a vital role to encourage thrift and discourage hoarding by mobilizing the resources and removing the habit of hoarding. They pursue rapid economic growth by developing the banking habit among the people, collecting small-scattered fund for further productive purposes and rendering other valuable services to the country. Thus, this gives the individuals an opportunity to borrow fund against future income which may improve the economic wellbeing of the borrower.

Financial institutions in the economy play a crucial role in the process of economic growth of the country. Financial institutions refer to a business concern that is mainly confined to finance for the development of trade, commerce and industry, which are the prime factors of economic development. Bank is a financial institution, which primarily deals in borrowing and lending. Bank is a vital part of national economy and

a vehicle for the mobilization of economy's financial resources and extension of credit to the business and service enterprises.

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

Proper financial decision making is extremely important in banking transaction for its efficiency and profitability. Most of the financial decision of a bank are concerned with current assets and current liabilities which simply known as working capital management. Working capital plays vital role in the success or failure of business. Working capital is lifeblood and controlling nerve-center of any organization. The excess working capital as well as short capital is harmful for business. So the management of working capital is not simple one, with the minor mistakes on decision about the adequacy of working capital, in a concern may put company into liquidation.

The aspect of working capital concerned with short term financing decision has received much attention in the literature of finance. Because of the earlier emphasis of financial management was more on long term financial decision, which led to the growth and development of many useful theories concerning these decisions as compared to short term financing decision. However in recent years, it has been realized that the area of working capital intricately interwoven with the success or failure of the enterprises. Today one may come across with such situation where shortage of funds for working capital as well as the uncontrolled over expansion of

working capital has caused many businesses to fail and in less serve caused, has situated their growth. This aspect of financial management is equally applicable to the small as well as large scale enterprises. The only difference is that in small firm working capital management may be the factor that decides success or failure where as in longer firms, efficient working capital management can significantly affect the firm's risk, return and share price. But the working capital management of a bank is different from other type of business. A bank plays significant role to fulfill the requirement of working capital of other type of business enterprises. It also needs to efficiently manage its own working capital. Investment in working capital of other business enterprises is a part of current assets of banks working capital and we can consider deposits and short-term borrowing as a part of current liabilities.

1.2 Development of Banking in Nepal.

The development of banking is relatively recent in Nepal. In case of Nepal too there were merchants, goldsmiths and moneylenders working as ancestors of modern banking. In Nepal, the origination of banks started through Sahu (Goldsmith). Even though the specific date of the beginning of money and banking deal in Nepal is not obvious, it is speculated that during the Lichhavi period, King Gunkamdev had borrowed money from the rich people to build the city. The historical record shows that Gunkamdev, the king of Kathmandu, borrowed money to rebuild his kingdom in 723AD. Some fifty-seven years thereafter, a merchant 'Shankhadhar' introduced 'Nepal Sambat' by clearing all the indebtedness of the people in 880AD. This clearly proved that money-lending practices were prevalent at that time. Later, during the regime of Mallas, money-lending business became more penetrating and popular. Towards the end of the 14th century, Jayasthiti Mallas, the ruler of Kathmandu, divided the people in sixty-four classes on the basis of their occupation. Among them one was Tankadhari and the people belonging to this class were engaged in money lending business. It is believed that the money lending business became quite popular in the reign of Mallas, particularly in financing the trade with Tibet and India. Thus, the role of Tankadhari was akin to that of a banking agent. However, these moneylenders advanced loan against personal security of land, building etc. As they

were free to charge any amount as interest and other charges on the loan advances. Naturally, the interest rate was higher, discriminatory and unfair. Of course, this gave birth to malpractices, frauds and exploitation in the whole Nepalese society. Even today, such practices of usury are prevalent in Nepalese village, which are beyond the purview of modern banking system. Thus, it was the duty of government to control the malpractices of the moneylenders and to set up a financial institution to make easy credit facilities for the general people. As a result, with growing consciousness and awareness of this, 'Tejarath Adda' had been established as an institution, during the period of Rana , under the Prime Minister of Ranodip Singh in 1933 B.S.

As a result, with growing consciousness and awareness of this, during the time of the Prime Minister Ranodip Singh in 1933 B.S an institution called "Tejarath Adda" was established for simple banking against the security of gold, silver and ornaments. However, it accepted no deposit from public. For the development of commercial sector "Tejarath Adda" was converted into Nepal Bank Ltd. in 1994 B.S.

Modern banking started with the inception of NBL under the Nepal Bank Act 1936 in 1994 B.S. NBL had Herculean responsibilities of attracting people towards the banking system from pre-dominant moneylenders and to expand banking services. Being a first Commercial Bank it was natural that NBL paid more attention to profit generating business and opened branches at urban centers. So, the establishment of central bank had become immensely an urgent task. The Government however, has onus of stretching banking services to the nook of the country and also managing financial system in a proper way. Thus, Nepal Rastra Bank (NRB) was set up in 14th Baishk 2012 B.S. as a central bank with an authorized capital of Rs 10 million fully subscribed by the HMG under Nepal Rastra Bank Act 2012 B.S. It has been functioning as the government's bank and has contributed to the growth of financial sector. The major challenge before Nepal Rastra bank today is to ensure the robust health of financial institutions. Nepal Rastra Bank, the central bank of Nepal regulates, inspects, supervise and monitor the whole functions of bank and financial companies of Nepal. The second commercial bank Rastriya Banijaya Bank was

established in 2022 B.S. The two commercial banks extended their operation extensively throughout the country.

Nepal Industrial Development Corporation (NIDC) and Agriculture Development Bank were established to facilitate development activities by providing loans and equity capital. The former Industrial Development Center was established in 2013 B.S. and was converted into NIDC in 2016 B.S. to finance equity and loan capital to industries that are going to be established in the country. Agricultural Development Bank Nepal was established in 2004 to finance agricultural sector as well as agro-based industries within the country.

In modern times , commercial banks , which are facilitated, regulated and supervised by the Central bank, confined them and concentrated in their activities of fulfilling the financial needs of their customers. With the opening of NABIL bank in 1985 A.D. the door of opening commercial banks was opened to the private sector. Then whole lot of commercial banks was opened in Nepal. Today all the banks except Nepal Bank Ltd. and Rastriya Banijya Bank are making profit. The inefficiency of these two public sector banks has led to the success of other private banks. As the commercial banks grew they stopped entertaining small projects. Thus a scope for opening finance companies emerged. In 2042 B.S., finance company Act was passed; but private sector kept stony silence till 2049 B.S. The first break came in the month of Shrawan of that year, when the first company Nepal Housing and Finance Company came. The second came in the Poush of the same year, Nepal Finance and Saving Company. Now there are altogether 67 finance companies operating in Nepal.

After the financial liberation in the 1980's the reform measure were undertaken .Such measures include deregulation in interest rate determination, portfolio management, market-based tenders for government securities sales, non-subsidized credits etc. the market would determine the cost of funds and rate of lending .Better use funds, easy availability of funds to the entrepreneurs, better returns to the depositors, professional approach towards customer satisfaction.

For any sector to function smoothly a well-defined law governing the organization in that sector should be there. But there are many flaws in these laws giving opportunity for manipulation. All banks basically function the same functions without regards their names, like-Business banks, Retail banks, clearing banks, Joint Venture banks, merchant Banks etc. Obviously, like other business organizations the sole objective of the banking industries is the profit maximization as well as wealth maximization.

Altogether there are 31 Commercial Banks, 90 Development Banks, 67 Finance Companies and 16 cooperatives. They all have got their own rules and regulations and own vision but ultimately they are serving the nation to build a huge financial resource and mobilize in the best possible way. The banking Sector remained still for a long period of time but as the time passed on many developments occurred. In the present scenario, Nepalese banking system is evolving itself as a powerful instrument of planning and economic growth of all the developed and underdeveloped sectors. The scope and scale of banking too have undergone substantial change in response to the saving and credit needs of people.

1.3 Role of commercial Banks in the National Economy

Commercial banks are the major component in the financial system. They work as the intermediary between depositors and lenders and facilitate in overall development of the economy, with major thrust in industrial development. So, commercial banks are those that accept deposits and finance to the business and project. They provide short term and long- term finance. As per Commercial Bank Act 2031 B.S, “*A commercial Bank means the bank which deals in exchanging currency, accepting deposits, giving loans and doing commercial transactions.*”

Commercial Banks play the role of financial intermediary collecting the fund from surplus unit and supplying to the deficit units (investors). Commercial banks help in the process of saving and holding of saving in a socially describe form. Though their advances bank also help the creation of the incomes which further saving by the

community and further growth potentials emerge for the good of economy. In a planned economy, bank emerges for the good economy and makes the entire planned productive process possible by providing funds for all types of production incorporated in the plan, regardless of whether the production is in the public sector or whether the production is undertaken by one type of organization or another. All employment income distribution and other objectives of plan are as far as possible subsumed into production plan which banks finance. The importance of commercial banks is directing the economic activities in the system is indeed overwhelming with the establishment of commercial banks the flood gates of development promising great hopes for people in the life open.

However, poor economy may be there will be needed for institution, which allows such saving as are currently forthcoming to be invested conveniently and safely and which ensure that they are channeled into the most useful purpose. Therefore, the tasks of commercial banks in underdeveloped countries are almost self-evident. Their purpose is to provide a collecting point for saving of a relatively small average amount from a large number of individual sources so long as the means to utilize saving safely and profitably are not available within an economy, funds will either to be directed abroad, sterilized in useless hoards of cash or precious metals or more likely still will not accumulated all.

1.4 Introduction of Siddhartha Bank Limited (SBL)

Siddhartha Bank Limited (SBL) commenced on operation in 2002 A.D. The bank is promoted by a group of highly reputed Nepalese dignitaries having wide commercial experience. SBL is providing a full range of commercial banking services through its 43 branches established in the Kathmandu valley and the famous and most potential cities of the nations. The bank already has some 18000 depositors and 3500 borrowing customers in the relatively short period of commencing business. And the Bank has its own motto or slogan i.e. **“Our business is to understand your business”** and the bank is heading to achieve its mission by strictly following the above stated slogan. The corporate office of the Bank is Hattisar, Kathmandu.

SBL's vision is to be financially sound, operationally efficient and keep abreast with technological developments. The bank firmly believes that customer focus is core value, shareholders prosperity is priority, employee's growth is commitment and overall economic welfare is of sincerely concern.

In addition to the core banking products in deposits and corporate financing the bank has the whole range of personal detail products for home, auto, education and mortgage loan for the miscellaneous requirements. The other services offered to the valued customers are trade finance, treasury, Siddhartha remit for remittance, cash management service for speedy collection of receivables, a network of ATMs and internet banking services.

Source: (<http://www.siddharthabank.com/>)

1.5 Statement of the problem

Due to unprofessional manpower, extra emphasis on only procurement aspects of working capital and want of ever investors to earn on their investment most of the Nepalese banks are still facing the problem of working capital management.

Working capital of the organization can not be managed in on easy way and it should not be neglected. Further, the banker's problem in this regard is more difficult than of manufacturing and non manufacturing business organization. Commercial banks are great monetary institutions, important to the general welfare of the economy. More than any other financial institutions, they have a vastly sobering and exacting responsibility; they must be ready to pay "one demand" without warning or notice, a good short of their liabilities. Different types of deposits are the main source of fund which they can use of giving loans and advances to different sectors. Hence in order to have a higher return from this transaction, bank must try to increase their deposits as well as their investment. To fix the level of deposits and the capacity of mobilizing these deposits is the main problem of working capital management of banks. Banks can get higher profit if they invest their increasing deposits in proper places, otherwise

profitability of the bank can not be expected. So, basically this study has tried to find out the issue of working capital management of Siddhartha Bank Ltd. Some specific problem felt in this study are as follow:

- a) How far the working capital is difficult or manages in Siddhartha Bank ?
- b) What is the bank's image in relation to working capital?
- c) Is the company maintaining an appropriate liquidity?
- d) How the company is financing its current assets?
- e) What is the profitability position of Siddhartha bank Ltd.?
- f) How far the firms been raising the required funds? Is the fund properly and productively utilized or not?

1.6 Objectives of the study

The main objectives of this study are to evaluate the performance of the working capital management of Siddhartha bank ltd. To achieve this basic objective, the following specific objectives have also been considered in the study.

- a) To see the current assets and current liabilities of a bank.
- b) To see the effects of working capital on profitability of the bank.
- c) To see the financing policy of the bank.
- d) To see the liquidity position of the bank.

1.7 Significance of the study.

The management of working capital should not be neglected by enterprises because decision regarding working capital affects not only the profitability of the firm in the short term but also it's survival in the long run.

Also the need of the study like this arises from the real value of the banking business because the business of bank is to accept deposits and advance loans and level of deposits and loans depends upon the working capital policy, which directly impact on the economy of the country. This type of study or analysis will be the most important and useful for the bankers, economists and also to public. It provides the literature to the researcher who wants to carry on further research in this field. Therefore

evaluating the position of working capital management and focusing on the importance of the working capital management of Siddhartha bank ltd has been felt very necessary.

1.8 Limitation of the study

Limitations exist everywhere and this study is also not an exception of it. Following are some limitations of the study.

- a) This study is basically based on secondary data.
- b) This study covers the period of five fiscal years.(2065/066 to 2069/070)
- c) This study will be considered only working capital management of the bank so the study cannot judge other financial aspects of the bank.
- d) This study will be focused on working capital management of Siddhartha bank ltd only. Thus the findings of the study may not be applicable for other banks, firms and companies as well.
- e) There are many factors that affect working capital management of the banks however only those related factors will be considered in this study.

1.9 Organization of the study

The overall studies of each chapter are described below.

-) Chapter one contains the general background of the study, introduction of Siddhartha Bank Ltd, statement of problem, objectives of the study, significance of the study and limitations of the study.
-) Chapter two deals with the review of related literatures and available studies written and prepared by different experts and researchers in the field of capital.
-) Chapter three deals with research methodology to be adopted for this consisting introduction, research design, sources of data, population & sample, data processing procedure, tools and techniques of analysis and definition of key term.

-) Chapter four contains the presentation and analysis of data through the way of designed methodology and interpreted by the help of various tools and techniques. Major findings of data analysis are also presented in this chapter.
-) The fifth chapter summarized the whole study, moreover, it draws the conclusion and forwards, towards the recommendations for the improvement of working capital management of Siddhartha Bank Ltd.
-) Bibliography and appendixes are also includes according to the literature are reviewed.

CHAPTER II

REVIEW OF LITERATURE

The process of studying different materials, which are concerned with selected topics of the research, is known as review of literature. According to P.V Young, “Review of literature is useful in research because it provides the insight and general knowledge about the subject matter of research.” In other words, review of literature is finding the pertinent fact with the available literature in ones field of research. The study of material available on research topics is called review of literature. Review of literature not only provides solid information on the topic but also guides along the future stream of action. The textual constraints would help it to support areas of research in order to explore the relevant and true facts for the reporting purpose.

This chapter is divided into two parts. First part deals with the conceptual framework of working capital management and second part deals with relating of some available literature including review of books, journals, articles and review of previous master’s thesis.

2.1 Conceptual framework

Business firms need various types of assets in order to carry out its operation. Some assets are required to meet the needs of regular productions and some others are required especially to meet day to day expenses and short term obligations. The assets such as cash, marketable securities, accounts receivables and inventories which are known as current assets are required to be maintained at certain level depending upon the volume of production and sales.

Working capital is a furnish investment in short term assets (weston, 1981:137). Working capital is a firm’s investment in short term assets-cash, short term securities, account receivables and inventories. (Weston and Brigham, 1984:266). The cash and marketable securities are respectively considered as purely liquid and near liquid

assets whereas the accounts receivable and inventories are not. However they can be liquidated as and when necessary within a period of less than one year. In short, WC is the source of financing current assets and it includes short as well as long term financing (Pradhan, 2000:139).

Working capital management is concerned with the problem that arises in the management of current assets and current liabilities. It affects the overall functional areas of the firm. Thus, the success or failure of any firm virtually depends upon the efficiency of working capital management. It is the lifeblood and controlling nerve center for any type of business organization because without the proper control upon it no business organization can run smoothly. As, it is the management of current assets and current liabilities; it plays the crucial role in success and failure of an organization. All the firm whether public or private, manufacturing or non-manufacturing must have adequate working capital to serve in competitive market. Because excessive investment in working capital affects a firm's profitability just as idle investment, earn nothing, in other hand inadequate investment on working capital affects the liquidity position of the firm and leads to financial embracement, reputation risk and failure of the firm. So, immature decision made in management of working capital can lead to adverse effects in business and reduce the liquidity, turnover and profitability and increase the cost of financing of the enterprise.

Therefore, the role of working management is more significant for every business organization irrespective of their nature. There are two concepts of working capita i.e. Gross concept and net concept.

1. Gross working capital
2. Net working capital

1) Gross working capital

The term gross working capital is regarded as the firm's total assets. It focuses only the optimum investment in current assets and financing of current assets (Khan &

Jain; 1999:604). It consists of cash, marketable securities, receivables and inventories. From the management viewpoint, gross working capital deals with the problems of managing individual current assets in day-to-day operations (Kucchal; 1988:157). Current assets are the most powerful part of any organization. It can affect the profitability and can create the problem in daily operations. It also enables a firm to plan and control funds to maximize the return on investment (Kulkarni; 1990:376). This concept is also known as qualitative concept.

2) Net working capital

Net working capital commonly defined as the difference between current assets and current liabilities. It focuses on the liquidity position of the firm in long run. Net working capital can be positive or negative. Positive net working capital will arise when current assets exceed current liabilities and negative working capital arises when current liabilities exceed current assets. Positive working capital helps to increase the profit but in reverse negative working capital may harmful to the company. So, net working capital can be more useful for the analysis of trade-off between profitability and risk (khan and jain; 1999:15.4). The concept of net working capital is also the equally important in every organization. It enables a firm to determine how much amount is left for operational requirement (kulkarni; 1990:376). Net working capital is not very useful for comparing the performance of different firms as a measure of liquidity, but it is quite useful for internal control. It is also known as quantitative concept.

2.2 Classification of working capital management

There are two types of working capital management.

1) Permanent working capital

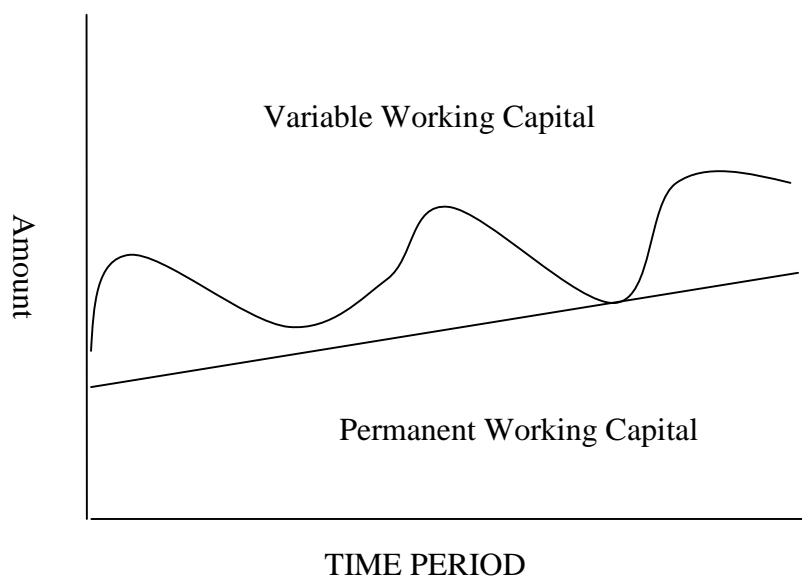
Permanent working capital is the minimum amount of current assets required throughout the year to conduct a business on a continuous and uninterrupted basis, even during the dullest season of the year. It will remain permanently in the business and will not be returned until the business is wound up (khan and jain; 1999: 172) but it could vary from year to year depending upon the growth of the company and the

stage of the business cycle in which it operates (kulkarni; 1990:376). Business firm could not be able to survive itself in the competitive market without permanent working capital. For instance, every business enterprises has to maintain a minimum stock of raw material, work in progress, finished products, spare parts etc. It always requires money for the payment of wages and salaries throughout the year (kucchal; 1988:161).

2) Temporary working capital

Temporary working capital is also known as variable, seasonal and fluctuate working capital. It represents the extra working capital, required at certain times during the operation year to meet some special emergency. It may required in seasonal changes of business and certain abnormal conditions like strikes, lockouts, dull market conditions, cut-throat competition etc. Therefore, the firm to meet liquidity requirements that will last only temporary creates temporary working capital (kucchal; 1988: 401)

Figure 2.1
Classification of Working Capital



Source: (Kucchal; 1988: 401)

2.3 Need for working capital

The need for working capital to run day to day business activities cannot be overemphasized (pandey; 1999:809). It helps to achieve entire goal of the business and maximize the wealth of shareholders. Business firm generally holds working capital for three purposes. They are as follows.

1. Transaction motive

The transaction motive refers to the holding cash to meet day to day routine cash requirement of the business. It helps business to run smoothly and uninterrupted basis.

2) Precautionary motive

The precautionary motive refers to the holding of cash to meet the random and unforeseen fluctuations in cash flow i.e. unpredictable changes in demand and supply, strikes, failure of important customer, unexpected slow down in collection of account receivable etc.

3) Speculative motive

The speculative motive refers to the desire of a firm to take advantages of opportunities, which present themselves at unexpected moment for example they can make purchase at favorable or reduce price on payment of immediate cash, speculate on interest rate etc.

2.4 Working capital policy

Working capital policy refers to the firm's basic policies regarding target levels for each category of current assets and how current assets will be financed. (Western, J.fred.:1996:343). So first of all, in working capital management, a firm has to determine how much funds should be invested in working capital in gross concept. Every firm can adopt different financing policy according to financial manger's attitude towards the risk return trade off. One of the most important decisions of

finance manager is how much current liabilities should be used to finance current assets. Every firm has to find out the different sources of funds for working capital.

i) 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-Fat Cat, Lean & Mean and Moderate.

a) Fat Cat Policy

This is also known as relaxed current assets investment policy. It is the policy under which relatively large amounts of cash and marketable securities and inventories are carried, and sales are stimulated by liberal credit policy which results in high level of receivables. This also creates the longer receivable collection period. Thus this policy provides the low expected return in investment with lower risk.

b) Lean and Mean Policy

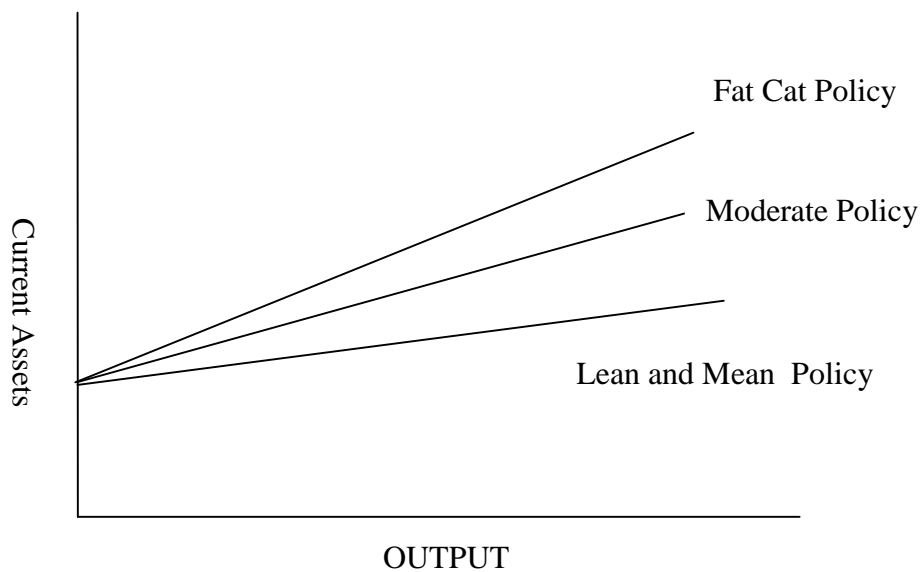
This is also known as restricted current assets investment policy. This is the policy under which holding of cash and marketable securities, inventories and receivables are minimized. This policy tends to reduce the policy conversion and receivable conversion cycle. Under this policy firm follows a tight credit policy and bears the risk of losing sales.

c) Moderate Policy

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

Figure 2.2

Alternative Current Assets Investment Policy



Source:

(Western, J.fred.:1996:343).

The relationship between output and current assets level for these alternatives is illustrated in above figure. We see from the figure that the greater the output, the greater the need for investment in current assets to support that output and sales. This relationship is based on the notion that it takes a greater proportional investment in current assets when only a few units of output are produced than it does later on, when the firm can use its current assets more efficiently.

ii) Current Assets financing policy

It is the manner in which the permanent and temporary current assets are financed. Current assets are financed with funds raised from different sources. But cost and risk affect the financing of any assets. Thus, current assets financing policy should clearly outline the source of financing of currents. There are three policies – aggressive, conservative and matching policies of current assets financing.

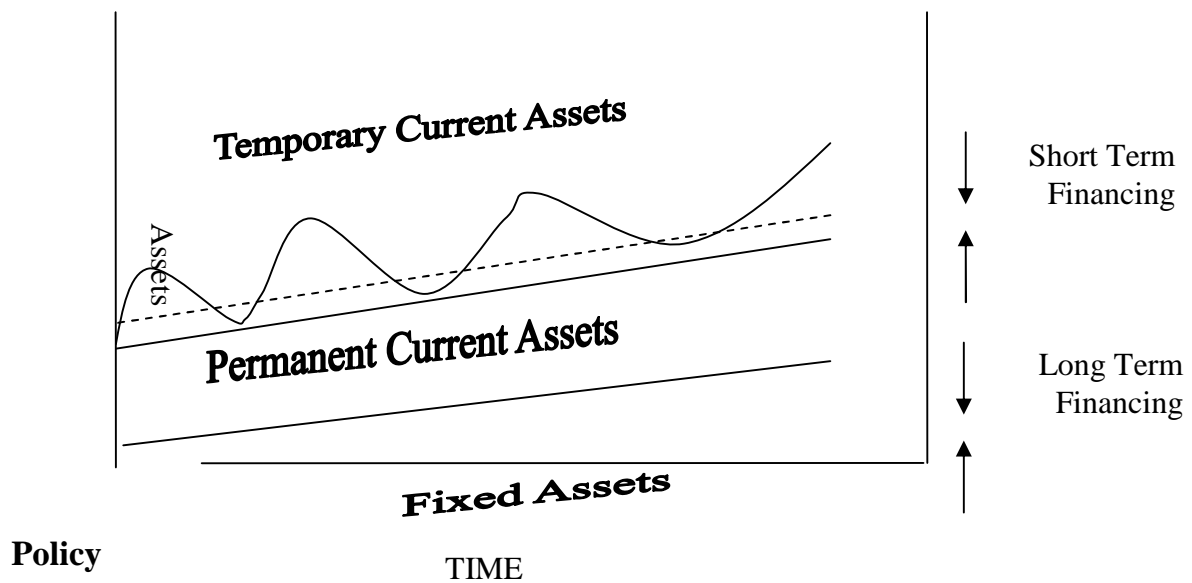
a) Aggressive Policy

In this policy, the firm finances a part of its permanent current assets with short-term financing and rest with long-term financing. In other words, the firm finances not only temporary current assets but also a part of permanent current assets with short-term

financing. In this policy, the liquidity position will be low and the risk will be high. A low liquidity position may expose the firm to opportunity costs. If a firm relies heavily on short-term borrowings, during the period of high money, credit may be rational and the firm may be unable to obtain all the financing its needs.

Figure 2.3

Aggressive Financing



Source: (Manandhar, K.D :2011:226)

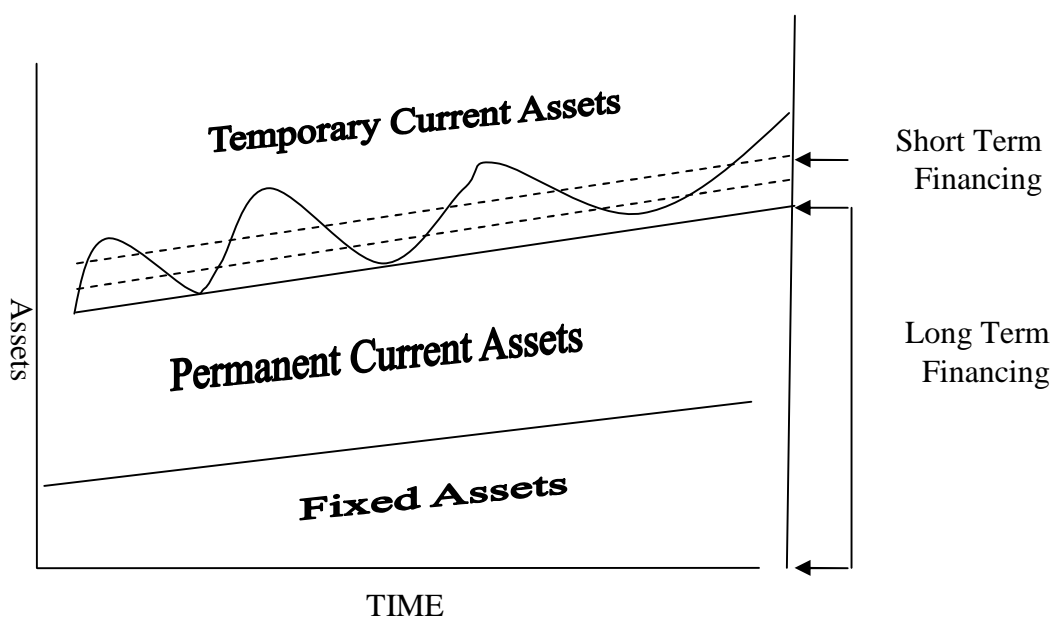
Above figure shows that short-term financing occupies 50 percent of the permanent current assets. In general interest rate increases with time i.e. shorter time, lower the interest rate. It is because lenders are risk adverse and risk generally increases with the length of lending period. Thus, under normal situation the firm borrows on a short-term financing rather than long-term financing, then it runs the risk of renewing the borrowing again and again. The continued financing exposes the firm to certain risk. It is because, in future the retest expenses will fluctuate widely and also, it may be difficult for the firm to raise the funds during the stringent credit periods. In conclusion, there is higher risk, higher risk, higher return and low liquidity position under this policy.

b) Conservative Policy

In this policy, the use of short-term fund is restricted to the emergency situation when there is necessity to invest current assets. Otherwise, the long-term fund should be used as far as possible in financing of investment in current assets. However, the cost of financing in this policy will be more, the liquidity will be relatively greater and risk will be minimized.

A firm may adopt a conservative policy in financing its current and fixed assets. The financing policy of the firm is said to be conservative when it depends more on long-term fund for financing need. Under a conservative plan, the firm finances its permanent assets and a part of temporary current assets with long-term financing. When the firm has no temporary current assets, it stores liquidity by investing surplus funds into marketable securities. The conservative financing relies heavily on long-term financing and, therefore is less risky. The conservative financing policy is shown in figure below. (Pandey 1995:684)

Figure 2.4
Conservative Financing Policy

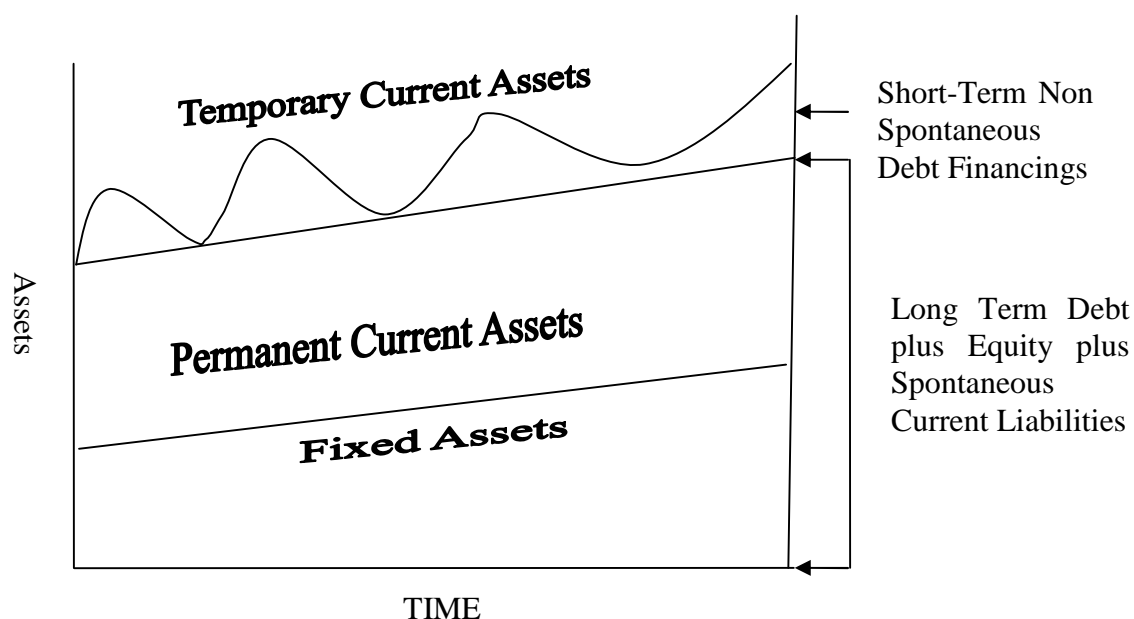


Source: (Pandey 1995:684)

c) Maturity Matching Policy

It is self-liquidity approach. In this policy, the firm finances the permanent current assets with long term financing and temporary with short-term financing. It means that the firm matches the maturity of financing sources with an assets useful life. It lies in between the aggressive and conservative policies. It leads to both neither high nor low level of current assets and current liabilities. It lies in between low profitability Figure 2.5 (J. Fred Weston & Brigham, Eugene F; 1996:348) shows the temporary working capital is financed by short-term financing and long term financing. Thus, no working capital is financed by long-term funds. Hence, net working capital is zero under this policy.

Figure 2.5
Maturity Matching Financing Policy



Source:(J. Fred Weston & Brigham, Eugene F; 1996:348)

2.5 Determinants of Working Capital Requirement.

In all the firms there should have neither too excess nor too inadequate working capital. But there are no sets of rules or formulate to determine the working capital requirement of the firm. It is because of a large number of factors that influence the working capital requirement of the firm. A number of factors affect different firm in

different ways. Internal policies and changes in environment also affect the working capital requirement of the firm. Generally, the following factors affect the working capital requirement of the firm.

a) Nature and Size of Business

It depends upon the nature and size of the business. If the size of the firm is bigger, then it requires more working capital. While a small firm needs less working capital. Trading and financial firms require larger amounts of working capital relative to public utilities, while manufacturing concerns lie between two extremes.

b) Growth and Expansion

This also affects the working capital requirement of a firm. A growing firm needs more working capital than those static ones. However, it is difficult to precisely determine the relationship between the growth and expansion of the firm and working capital needs.

c) Credit Policy

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

d) Production Policy

If a firm produces seasonal goods, and then it sells its products in a certain month of the year. In this situation, it can either confine its production only to that period when goods are sold or follow a steady production policy through the year and produce goods at a level to meet the peak demand. The former policy does not need more working capital than the latter does.

e) Availability of Credit

Availability of credit facility is another factor that affects the working capital requirement. If the creditors avail a liberal credit term then the firm will need less working capital and vice-versa. In other words, if the firm can get credit facility easily

on favorable conditions, it requires less working capital to run the firm smoothly otherwise more working capital is required to operate the firm smoothly.

f) Manufacturing Cycle

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

g) Profit Margin

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

h) Price level change

Generally, a firm is required to maintain the higher amount of working capital if the price level rises, because the same level of current assets needs more funds due to the increasing price. In conclusion, the implications of changing price level of working capital position will vary from firm to firm depending on the nature and other relevant consideration of the operation of the concerned firms.

i) Operating Efficiency

It is also the important factor, which influence the working capital requirement of the firm. It refers to the efficient utilization of available resources at minimum cost. Thus, financing manager can contribute to strong working capital position through operation efficiency then it needs less amount of working capital otherwise if requires if a firm has strong operating efficiency large amount of working capital.

j) Level of Taxes

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

2.6 Financing of working capital

The most important function of financing is to determine the level of working capital and to decide how it is to be financed to meet the organizational goal. Financing of working capital is concerned with two major factors-cost and risk. Therefore, only appropriate financing of working capital may lead the business firm. Firm can adopt different financing policies among them mainly three are given below:

1. Long term financing

The sources of long term financing refer to the ordinary share capital, preference share capital, debentures and long term debt from financial institutions and retained earnings. Long term financing will reduce the cost of business. In short, we can say that this long term financing has high liquidity and low profitability.

2. Short term financing

The sources of short term financing refer to the working capital Funds from bank, public deposits, commercial papers etc. the short term financing is obtained for period less than one year.

3. Spontaneous financing

Spontaneous financing refers to the automatic sources of short-term funds arising in the normal course of a business (pandey; 1999:827). The two major sources of spontaneous financing are trade credit and outstanding expenses. There is no explicit cost of spontaneous financing. Therefore, the financing manager always would like to finance its working capital with spontaneous sources because the real choice of current assets financing of the manager in reality, is in between short term or long term sources of finance.

2.7 Review of related articles /Journals

Shrestha (2039) had carried out his article on, “*working Capital Management in public enterprises: A study on financial results and constraints.*” In article he had considered ten selected PEs to measure their working capital needs in those PEs. He had mainly focus on the liquidity, turnover and profitability position of that PEs. In the analysis, he has focused that four PEs has maintained adequate liquidity position; two PEs had excessive liquidity position and rest four enterprises had failed to

maintain desirable liquidity position. About turnover, two public enterprises had negative working capital turnover; four had sum to achieve satisfactory turnover of net working capital. He had also found that six PEs are operating at losses and four of them are being able to achieve some percentage of profit. After analyzing these constraints, he had brought certain policy issues. They are as follows.

-) There is lack of suitable financial planning for determining their working capital needs in PEs.
-) The managers of PEs were being unable to give attention to working capital management.
-) There exists no proper consistency between liquidity position and turnover of assets.
-) PEs being unable to show positive relationship between turnover and return on net working capital.

He had made some suggestive measures to overcome from the above policy issues i.e. identification of needed funds, regular checks, development of management information system. Positive attitude towards risk and profits and determination of right combination of short term and long term sources of funds to finance working capital needs.

Pradhan, Radha shyam (2043) has published a book on “*Management of Working Capital*”, in journal which generally includes short-term borrowing and investment by the selected manufacturing public enterprises (PEs) of Nepal. The research is based on the study of nine manufacturing public enterprises of Nepal for the duration of ten years from 1973 to 1982 A.D. The major objectives of the study are to examine the behavior and management of working capital in manufacturing PEs of Nepal. He has also dealt with another issues viz. liquidity position, structure of working capital, nature of working capital, utilization and demand for working capital and its various components with changing value of sales in that PEs. The study used a variety of financial ratios to accomplish the objectives. His major findings are as follows:

-) The liquidity measures showed a poor liquidity position in majority of public enterprises. It has also been showed that the enterprises either positive cash flow or negative EBT or they have excessive net current debt. The selected PEs have on an average, ½ of the total assets is in the form of current assets.
-) In his study, he reveals that most of selected PEs achieve a trade off between risk and return there by following neither an aggressive nor a conservative approach. Almost all the selected enterprises have a position of net working capital.
-) The share of inventories is the largest followed by receivables and cash in most. Turnover ratio shows that there has been improvement in utilization in the majority of PEs.
-) In this study, he has found out that cash followed by inventories. So the inclusion of capacity utilization in the models did not seem to have contributed much to the demand function of working capital and its various components. Further more, the regression result also shows that the level of working capital and its components in enterprises desires to hold depend not only on sales but on holding cost too.

N.P. Poudel (2053) has written an article on "*Financial Statement Analysis: An approach to Evaluate Bank's Performance*". In journal, his article described the necessity and importance of financial statement analysis to evaluate bank's performance. Analysis of bank financial statement is different from other companies due to special nature of assets and liabilities structure of the banking industry. The bank's balance sheet is composed of financial claims a liability in the form of deposits and as assets in the form of loans but fixed asset account for a small portion of the total assets. The described the major balance sheet characteristics of commercial banks which are as follows:

S.N	Characteristics	Significance	Risk	Return
1	Few Fixed Assets	Low degree of operating leverage	Reduce	Reduce
2	Substantial amount of short term liabilities (Deposits)	To be liquid	Increase	Increase
3	Substantial amount of financial assets	High degree of operating leverage	Increase	Increase

At last, he added that analysis of financial statements can give a good insight into financial health and performance of a bank.

Pradhan and Koirala (2063) has jointly published an article on “*some Reflection on Working capital Management in Nepalese corporations.*” In the Journal article basically aims to find out the difficulty, importance and problem of current assets management and also aims to find out the motive for holding cash and inventory. The study uses only primary data to find out the basic constraints and distributed 200 questionnaires. For the purpose of the study, they use both manufacturing public corporations as a sample companies. After analyzing the collected data the major finding of the study were as follows:

-) The major reason for holding inventories is to facilitate smooth operation of production and sales.
-) To provide a reserve for routine net outflows of cash is the major motive for holding cash in Nepalese corporations.
-) The major factor affecting the large investment in receivable is found to be the liberal credit policy followed by Nepalese corporations. The late paying practice of customer is also responsible for large investment in receivables. However, corporations are reluctant to take inefficient collection of trade credits as one of the major factors affecting receivables.

Mahat (2064), has published article relating to “*Spontaneous Working Capital Management*”. The article 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 includes 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, provisions and accrued expenses.

The articles 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 as environment should be enough to cope with the possible worst happenings in the future for working capital.

The study has said that managing the working capital resources for a on 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 the 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 profit. Therefore, spontaneous sources of working capital will better to working capital in order to improve its performance.

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

Zeng (2066) made an empirical study on the “*Working Capital channel and cross-sector co-movement*” The paper studies cross –sector co-movement, one of the defining characteristic of business cycle, in a monetary framework. The study argues that monetary factors might be important for understanding this phenomenon thorough a working capital channel. The study showed that in a strictly portfolio adjustment model where firm borrow a finance working capital, appositive money supply shock drives the nominal interest rate down, thereby stimulating firm borrowing and causing employment to rise in different sectors. A positive aggressive technology shock can also drive the nominal interest rate down upon impact and reduce co –movement when the elasticity of labour Supply is large.

2.8 Review of previous Thesis

Some reviewed previous dissertations are as follows.

Gurung (2058) has carried out his research on “*A study on working capital management of Nepal Lever Limited.*” The main objective of his study is to examine the working capital management of Nepal Lever Limited. The major findings of his study are as follows:

-) Inventory holds the major portion of current assets followed by miscellaneous current assets, sundry debtors, cash and bank balance.
-) The liquidity position of NL Ltd. is satisfactory but not perfect though increasing trend implies that liquidity position can be expected to be good in future.
-) There is not trade off between liquidity and profitability; however profitability of NL Ltd. is satisfactory.

Shrestha (2058) has carried out his research on “*working capital management of Dairy Development Corporation.*” The main objective of the study is to analyze the current assets and current liabilities and their impact and relationship to each other. The major findings of his study are as follows.

-) The Corporation’s investment in the form of working capital has been increasing and DDC followed the conservative working capital policy with respect current assets management.
-) The Company has been able to maintain its current ratio in an average 1.78:1 during the study period which is regarding satisfactory level.
-) The average investment in current assets is lower with respect to net fixed assets during this study period and DDC has no clear vision about the investment current assets portion. Cash and bank balance holds the second largest portion of the current assets and has fluctuating trend.
-) Other major components of current assets i.e. inventories and receivables are in fluctuating trend. The company does not follow credit sales policy.
-) The gross and net profit margin in DDC shows that company is suffering from a heavy loss during the study period.

Shrestha (2059) has carried out a research on "*A study on working capital management with respect to National Trading Limited and Salt Trading Corporation Limited.*" Her main objective is to present overall picture of working capital of National Trading Limited. The major findings of the study are as follows.

-) The current assets to total assets of NTL and STCL both are in fluctuating trend.
-) The investment in current is high in both of the trading companies with respect to its total assets and net fixed assets.
-) Cash and bank balance holds the highest portion followed by inventor in NTL whereas cash and bank balance holds the least portion in STCL and inventory hold the highest portion.
-) The turnover position of the NTL and STCL are in fluctuating trend.
-) The liquidity position of the STCL is satisfactory and favorable in comparison to the liquidity position of the NTL.

Aryal (2061) has carried out "A case study on working capital management of Bank of Kathmandu Ltd." His main objective is to evaluate the working capital position of bank of Kathmandu Ltd. During his study, he had basically used the secondary data and mainly financial tools are embodied for analyzing the working capital management of BOK. He had derived following major findings form his study.

-) The working capital of BOKL has been increasing trend.
-) The current ratio of the bank was quite fluctuating.
-) The loan and advances to saving deposit ratio of the bank is in satisfactory position over the study period.
-) The interest earned to total assets ratio of BOKL is not so much satisfactory it means the bank could not able to use its total assets properly to earned interest.
-) The net profit to total assets ratio of the bank was fluctuating. It shows that the bank could not able to utilize its total assets to generate profit.

Bansal (2065) had carried out a research entitled "*A Study on Working Capital Management of Commercial Bank*". During the study, she had used secondary data & used many financial tools analyzing the working capital management. The major findings of the study are as follows.

-) The net working capital of both banks is positive.
-) In case of profitability position, both banks have constant level of growth in profitability during the study period.
-) The liquidity position of both bank are increasing trend. It shows the satisfactory level of working capital
-) The major components of current assets of both banks are cash and bank balance, loan & advance and government securities.

Sharma Subedi Kali Prasad(2066) has conducted thesis research on "*Analysis of working capital management of Joint Venture Banks in Nepal*"

He tries to fulfill the following specific Objectives.

-) To evaluate working capital of the banks and analyze their assets structure and their implications.
-) To analyze of working capital trend position of selected bank,
-) To shed light on creation and mobilization of fund in EBL, NABIL and SCBNL

The major conclusions are as follows:

-) The mean of current ratio of EBL is 1.05:1 as well as SCBNL is 1.068:1 This is lesser than the standard current ratio 2:1 . The banks are unable to maintain the current ratio in accordance with standard.
-) SCBNL is maintaining adequate liquidity position regarding cash reserve ratio than EBL. Too low ratios are also preferable bank should meet its obligations any time when necessary.
-) EBL has emerged as having a large volume of banking operations, mainly its deposits and lending in the light of its greater deposits and greater credits compared on SCBNL.
-) The profitability ratios of the selected banks are fluctuating over the study period. To make bank's profitability and return from loans and advances is satisfactory; the banks should really make an effort in loans and advances efficiently to generate adequate level of return.

-) The coefficient of correlation between two variables (i.e. current assets and current liabilities, total deposit and net profit and total deposit and loans & advances) of the selected banks is nearly 1 so, high degree of positive correlation between these two variables. It also reveals that relationship between two variables of the selected banks is closer to perfect correlation. Correlation of coefficient(r) is greater than 6P.E. Therefore it reveals that relationship between two variables is significant.

Shrestha (2067) has carried out a research on "*A study on working Capital Management of Nepal Lube Oil Limited.*"

Major Objective:

-) To examine the working capital position of Nepal Lube Oil Limited
-) To examine the structure of working capital.
-) To assess the financial position of Nepal Lube Oil Limited.

Findings

-) The company lesser participation of fixed assets in total assets. Cash holds of the company was relatively a small proportion total assets and inventory held largest portion indicating unsounded inventory management.
-) The company has insufficient in collecting receivable.

Recommendations:

-) Nepal Lube Oil limited management determines certain rate of return on its investment and setup sales target.
-) The company should always concern about the current assets and current liabilities and regarding check should make.
-) Manpower planning should avoid both under and over staffing.

The different experts and students on working capital management have conducted many researchers in different ways and at varying level of analysis. These different approaches to working capital management improved with the emergence of more and more literature on the subject over time. The approaches those are included in the study over working capital position, liquidity and profitability position, turnover position and cash conversion cycle in the content of selected enterprises.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

According to Oxford Dictionary research has been defined as the systematic investigation and study of materials, sources etc. in order to establish facts and reach a conclusion. Research refers to various sequential steps to be adopted by a researcher in studying a problem with certain objectives in the process of activities to the solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of facts and figures. It consists of research design, population and sample study, sources of data, data processing procedure and technique of analysis of data. This chapter describes the methodology employed in this study. The main objective of this study is to analyze, examine, highlight and interpret the working capital management and its impact on the financial performance of selected banks. The justification for the present study cannot be obtained without the help of proper research methodology.

This study has used financial analysis techniques as well as statistical tools. It is more analytical and empirical. It is mainly based on secondary data gathered from annual reports of concerned organizations and other publications made by them.

3.2 Research design

Research Design is a method of defining the research problem. "Research design is a plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variances". Research design refers to the framework of the study. It is the blue print for any kind of study. "Research design is the arrangement of conditions and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.

Research design is plan for collection and analysis of data. The purpose of design is to provide answer to research questions and control variance.

For the study of working capital management in Siddhartha Bank Ltd., research design followed is exploratory research approach. This study is based on data from secondary sources. So, in analyzing the data is a descriptive research design has been used to make the study prescriptive to its users.

3.3 Population and Sample

Currently, there are 31 commercial banks in Nepal (including government owned, private owned, private & joint venture). In the study, all commercial banks are population of the study. Among them Siddhartha Bank Ltd has been taken as a sample for the study.

3.4 Nature and sources of Data

This study is mainly based on secondary data. The required data are collected from concerned banks and downloaded from official websites. The Supplementary data and information have been acquired from various sources like newspapers, magazines, brochures, booklets, periodicals and bulletins, published and unpublished reports, related documents and journals available in different libraries, other organization like Nepal stock exchange and Nepal Rastra Bank as well as from official websites of corresponding organizations

3.5 Data Gathering Procedure

Since the data have been obtained from secondary sources, after collection of financial statement, master sheet of financial data have been extracted and tabulated as per the need of this study. In order to process the data, financial statement and other available information were reviewed. These data were grouped in different tables and charts according to their nature. Most of the data have been compiled in one form and processed and interpreted as required.

3.6 Tools and Techniques of Data Analysis

On the basis of historical data financial and statistical tools are used to analysis of different variables.

3.6.1 Financial Tools

Financial tools are those, which are used for the analysis and interpretation of financial data. These tools can be used to get the prescribe knowledge of business which in turn are fruitful in exploring the strength and weakness of the financial policies and strategies. In order to meet the purpose of study, following financial tools have been used.

i) Working capital

Working capital refers to the resources of the firm that are used to conduct day to day operation that makes business successful. Working capital is calculated by subtracting current liabilities from current assets. Due to differences in businesses and the fact that working capital is not a ratio but an absolute amount, it is difficult to predict what the ideal amount of working capital would be for the business. (www.planeware.org.)

ii) Ratio analysis

Ratio analysis is a technique of analysis and interpretation of financial statement evaluate the performance of an organization by creating the ratio from the figures if different accounts consisting in balance sheet and income statement is know as ratio analysis. It is a powerful tool of financial analysis. This is most frequently used tool to evaluate the financial health, operating result and growth of the banks under scrutiny. It helps to summarize the large quantities of financial data and to make quantitative judgments about the firm's financial performance. The ratios calculated for the study is described separately under following headings.

A) Liquidity Ratio

This ratio measures the liquidity position and short-term solvency of the firm indicating the company's ability to meet short-term obligation. The current ratio and quick ratio measure the liquidity position of the company. These ratios are calculated to judge the long term as well as short-term financial position of concerned firm.

Liquidity of any business organization is directly related to working capital or current assets and current liabilities of that organization. One of the main objectives of working capital management is keeping good liquidity position. Commercial banks need liquidity to meet loan demand and deposit withdrawals. Without good liquidity, bank is not able to operate its function. To measure or ability to meet its short-term obligation, various liquidity ratios are calculated.

a) Current Ratio

Current ratio is also known as Working capital ratio. The ratio is to evaluate or indicates the current solvency position of the organization. The current ratio (CR) represents a margin of safety for creditors at bad situation. It is the ratio of total current assets to current liabilities. Financial norms say that 2:1 is the optimal position of liquidity and profitability point of view. If the current ratio of the firm is less than 2:1 the solvency position of the firm is not good .The cash may not be available to pay current liabilities. If the ratio of the firm is under financial standard, the firms' liquidity position measured as better. Higher ratio of the firm is measured higher liquidity, i.e. meant the firm has excessive investment in current assets that do not produce a return so more than financial standard is poor utilization of assets.. It is calculated by dividing current assets by current liabilities, which is expressed as follows:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

In which current assets represents those assets which can be converted into cash within an accounting period such as cash balance, bank balance, investment in treasurer bills, money at call, bills purchase, inter branch account, other short terms, receivable, prepaid expenses, etc. Current liabilities refers to short term maturing obligation such as deposits bills payable, tax provisions, dividend payable staff bonus, bank over drafts, accrued expanses and provisions etc.

b) Quick ratio

Quick ratio is used to measure the ability of concerned firms to pay current obligation (short term) without depending on other liquid assets of current ratio. It provides relationship between quick assets with current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of value. Cash is the most liquid asset. Other assets that are considered to be relatively liquid and included in quick assets are book debts and marketable securities. This quick ratio can be found out by dividing the total quick assets by total liabilities.

$$\text{Quick Ratio (QR)} = \frac{\text{Quick or Liquid Assets (QA)}}{\text{Current Liabilities (CL)}}$$

c) Cash and Bank balance to Deposits (Excluding fixed Deposits)

This ratio shows the ability of banks immediate funds to cover their (current, margin, call and saving) deposits. It can be calculated by dividing cash and bank balance by deposits (excluding fixed deposits). The ratio can be expressed as:

$$\text{Cash \& bank balance to Deposit} = \frac{\text{Cash and Bank balance}}{\text{Total deposit (Excluding fixed deposit)}}$$

d) Saving Deposit to total Deposit

Saving deposit is a bearing short term deposit. The ratio is developed in order to find out the proportion of saving deposit, which is interest bearing and short term in nature. It is calculated by dividing the total amount of the saving deposit by the amount of total deposit that can be expressed as follows:

$$\text{Saving Deposit to Total Deposit Ratio} = \frac{\text{Saving Deposit}}{\text{Total Deposit}}$$

e) Absolute liquidity ratio

Although current assets like receivable, marketable securities etc. can be changed into cash as required. It takes time to be changed. It means it is not absolute liquid. The absolute liquidity ratio measures the liquidity of a firm in absolute term. It is calculate by dividing cash by current liabilities.

$$\text{Absolute liquid ratio} = \frac{\text{Cash}}{\text{Current liabilities}}$$

B) Activity or turnover ratio

The fund of creditors and owners are invested in various assets to generate sales and profit. Activity ratios are used to evaluate the efficiency with which the firm manages and utilizes its assets. This ratio indicates how quickly certain assets are converted into cash. From this ratio is can be known whether or not the businesses activities are efficient. These ratios are also called turnover ratios because they indicate speed with which assets are converted or turnover into profit generating assets. These ratios, moreover, help in measuring the banks' ability to utilize their available resources. Following ratios are used under the activity ratio.

a) Loan and advances to total Deposit Ratio

This ratio assesses to what extent, the bank is able to utilize the depositor's funds to earn profit by providing loans and advances. It is computed dividing the total amounts of loans and advances by deposited funds. Higher ratio indicates higher/proper utilization of funds and low ratio is the signal of inefficiency or remaining idle. The formula used to compute this ratio is as,

$$\text{Loans and Advances to Total Deposit Ratio} = \frac{\text{Loans \& Advances}}{\text{Total deposits}}$$

b) Loan and advances to fixed Deposits Ratio

The ratio indicates what proportion of fixed deposits has been used for loans and advances. Loans and advances are the major sources of investment to generate income by the commercial banks. Fixed deposits are long-term interest-bearing obligation. It carries high rate of interest. Funds collected are needed to invest in such sectors, which yield at least sufficient return to meet the obligations. The ratio measures the extent to which the fixed deposits are utilized for the income generating purpose. High ratio means utilization of fixed deposit in form of loans. The ratio is calculated by dividing loans and advances by fixed deposits.

$$\text{Loans and Advances to Fixed Deposits Ratio} = \frac{\text{Loans \& Advances}}{\text{Fixed deposits}}$$

c) Loan and advance to saving deposit Ratio

The ratio indicates how many times the short-term interest bearing deposits are utilized for generating the income. Saving deposits are the short-term interest bearing liabilities. Loans and advances are the major sources of investment to generate income in commercial banks. Loans and advances to saving deposits ratio is measured to find out how many time of fund is used in loan and advances against saving deposit. High ratio indicates greater utilization of the saving

deposits in advancing loans. The ratio is calculated dividing the amount of loan and advances by total deposit in saving account. The following formula is used to calculate this ratio as:

$$\text{Loans and Advances to Saving Deposit Ratio} = \frac{\text{Loans \& Advances}}{\text{Saving deposits}}$$

d) Investment to Total Deposit Ratio

The ratio shows how efficiency the major resources of the bank have been mobilized. High ratio indicates managerial efficiency regarding the utilization of deposits. Low ratio is the result of less efficiency in use of funds. The ratio is obtained by dividing investment by total deposits collected in the bank.

$$\text{Investment to Total deposit ratio} = \frac{\text{Total Investment}}{\text{Total deposits}}$$

Investment comprises investment its HMG treasury bills, development bonds, company shares and other type of investment.

C) Profitability Ratio

The profitability ratios are calculated to measure the operating efficiency of the company. Management of the company, creditors and owners are interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get a reasonable return from their investment (Pandey, 1994:116) Profitability ratios are calculated to measure the operating efficiency of the company. Various profitability ratios are calculated to measure operating efficiency of business enterprises. Though profitability ratios the lender & investors want to decide whether to invest in particular business or not. To meet the objective of the study, following ratios are calculated in this group.

Interest earned to total assets ratio.

This ratio is used to determine total interest earned from investments over the total assets of a firm. High ratio indicates the proper utilization of the bank's assets for income generating purpose. Low ratio represents unsatisfactory performance. The ratio is calculated by dividing interest income by total assets of the bank.

$$\text{Interest Earned to Total Assets Ratio} = \frac{\text{Interest Earned}}{\text{Total Assets}}$$

a) Net profit to total assets ratio.

Net profit to total assets ratio is useful in measuring the profitability of all financial resources invested compared to total assets of a firm. This ratio is calculated by dividing the amount of net profit by the amount of total assets employed. The ratio can be expressed as:

$$\text{Net Profit to Total Assets Ratio} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

b) Net profit to total Deposit ratio

This ratio measures the percentage of profit earned from the utilization of the total deposit. Deposits are mobilized for investment, loan and advances to the public in generating revenue. Higher ratio indicates the return from investment on loans and lower ratio indicates that the funds are not properly mobilized.

$$\text{Net Profit to Total Deposit Ratio} = \frac{\text{Net Profit}}{\text{Total Deposit}}$$

c) Total interest expenses to total interest income Ratio

The ratio shows the percentage of interest expenses incurred in relation to the interest income realized. Lower ratio is favorable from profitability point of view. The ratio is obtained by dividing total interest expenses by total interest income.

Total Interest Expenses to Total Interest Income Ratio

$$= \frac{\textit{Total Interest Expenses}}{\textit{Total Interest Income}}$$

Total interest expenses consist of interest expenses incurred for deposits, borrowing and loans taken by the bank. Total interest income includes interest income received from loans, advances, cash credit, overdrafts, and Government securities, inter bank and other investments.

3.6.2 Statistical Tools

Various financial tools mentioned above were used to analyze the working capital management of Siddhartha Bank Ltd. Likewise, the relationship between different variables related to the study topics were also drawn out using statistical tools.

a) Trend analysis

Different variants change according to change of time. Variation of such variation of such variants with time can be systematically studied and analyzed. The tools that are used to show grandly increase or decrease of variables over a period of time is known as trend analysis. The financial statement may be analyzed computing trends of series of information. This method determines the action upwards or downwards and involves the computation of the percentage relationship that each statement item has been extracted from the same item in base year. The information for a number of years is taken upward first year; generally the first year is taken as a base year. With the help of trend analysis the tendency of variables over the period can be seen clearly.

This section expresses the trend of same related items, which have effect in working capital.

b) Correlation analysis

The correlation analysis is the technique used to measure the closeness of the relationship between the variables. It helps us in determining the degree of relationship between two or more variables. It describes not only the magnitude of

correlation but also its direction. The coefficient of correlation is a number, which indicates to what extent two variables are related with each other and to what extent variations in one leads to the variation in the. It is denoted by 'r'.

The value of coefficient of correlation always lies between ± 1 . A value of -1 indicates a perfect negative relationship between the variables and a value of +1 indicates a perfect positive relationship. A value of zero indicates that there is no relation between the variables. The zero correlation coefficient means the variables are uncorrelated.

The formula for the calculation of coefficient of correlation between X and Y is given below.

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

Under this study following coefficient of correlation are calculated.

-) Co-efficient of correlation between Investment on Government Security and Total Deposits.
-) Co-efficient of correlation between Loan and Advance and Total Deposits.
-) Co-efficient of correlation between Cash and Bank Balance and Current Liabilities.
-) Co-efficient of correlation between Loan and Advances and Net Profit.

Probable error of correlation coefficient

Probable error of correlation coefficient is an old measure of testing the reliability of an observed value of correlation coefficient. It is calculated to find the extent to which correlation coefficient is dependable as it depends upon the condition of random sampling.

Probable error of correlation coefficient denoted by P.E(r) is obtained as;

$$P.E(r) = 0.6745 \left| \frac{1 Z r^2}{\sqrt{n}} \right|$$

where,

$$\frac{1 Z r^2}{\sqrt{n}} = \text{Standard Error}$$

Reasons for taking 0.6745 is that in a normal distribution 50% of observation lie in the range $\mu \pm 0.6745$ where, μ and σ denoted the populations mean and standard deviation.

P.E(r) is used to test if an observed value of sample correlation coefficient is significant of any correlation in the population. It is used to interpret whether the calculated value of r is significant or not.

If $r > P.E$; correlation is insignificant. So there is no evidence of correlation

If $r > 6P.E$. r is definitely significant.

CHAPTER- IV

DATA PRESENTATION AND ANALYSIS

This chapter presents the analysis and interpretation of various components of working capital of Siddhartha Bank Ltd, following the research methodology dealt in third chapter. Relevant data and information of working as well as financial of Siddhartha Bank Ltd are presented and analyzed accordingly. Ratio analysis, trend analysis as well as composition of working capital which means current assets, liquidity, current liabilities, turnover, leverage and profitability of Siddhartha Bank Ltd are analyzed covering the date 061/062 to 065/066 BS. Correlation analysis is used as a statistical tool for further discover the working capital management of Siddhartha Bank Ltd.

4.1 Analysis of composition of working capital.

To operate day to day business activities, different kinds of current assets are needed. According to the nature of business and attitude of management towards risk, different organizations use different current assets. Firms having risk adverse management, maintain high liquid assets in its total working capital and vice versa. The success or failure of the organization depends upon the effective composition of the whole working capital management. Excess current assets increase cost and affect on the profitability and low current assets affects the liquidity position of the organization. Therefore, the effective composition of working capital should be made in any organization.

4.1.1 Percentage of current Assets on Total Assets.

Current assets are generally required to meet working capital, which are to fulfill the need of daily business requirement. The ratio can be analyzed to study the composition of working capital of the company. Higher percentage of current

assets in total assets shows the greater liquidity position of the firm, the lower risk of technical insolvency and vice- versa. The table below represents the percentage of current assets on total assets of Siddhartha Bank Ltd.

Table 4. 1
Percentage of current assets on total assets.

(Rs in million.)

Fiscal year	Current assets	Total assets	% of CA on TA.
065/066	17226.73	17881.78	96.34
066/067	21390.85	22802.43	93.80
067/068	23295.12	24405.87	95.45
068/069	28499.87	29579.20	96.34
069/070	31417.44	33670.55	93.31
Mean			96.85
(r)			1

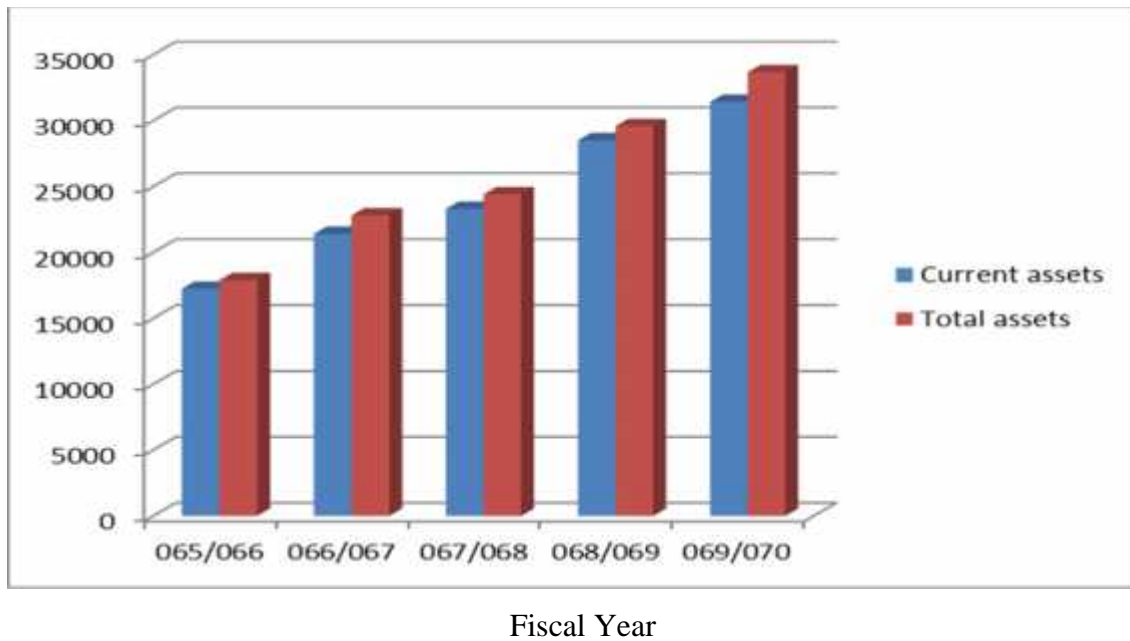
Source: Appendix 1 and 3.

The above table 1 shows that 96.85 % of total assets are held by current assets in all fiscal year during the study period. The proportion of current assets is on fluctuating trend. In the fiscal year 065/066 the volume of current assets is 17226.73 million and it is 96.34 % of total assets, which is the highest percentage proportion in over the study period of time. The proportion of current assets is lowest in the fiscal year 069/070, i.e. 93.31%.

Also, above table shows there is perfectly positive correlation between current assets and total assets during the study period or current assets and total assets are perfectly interrelated with each other during the study period.

The relationship between current assets and total assets can be shown by the help of multiple bar figure more efficiently.

Figure 4.6
Percentage of current assets on total assets.



4.1.2 Percentage of Cash and Bank balance to Current Assets.

This ratio directly affects the working capital management of the organization. High ratio shows the higher liquidity position of the firm. It is calculated by dividing cash and bank balance by current assets, which is presented in following table.

Table 4.2

Proportion of Cash and Bank balance to Current Assets.

Rs in million

Fiscal year	Cash and bank balance	Current Assets	% of cash and bank bal. on CA
065/066	1547.68	17226.73	8.98
066/067	2406.59	21390.85	11.25
067/068	1905.67	23295.12	8.18
068/069	4291.88	28499.87	15.06
069/070	3485.77	31417.44	11.09
Mean	2727.51	24366.02	10.91

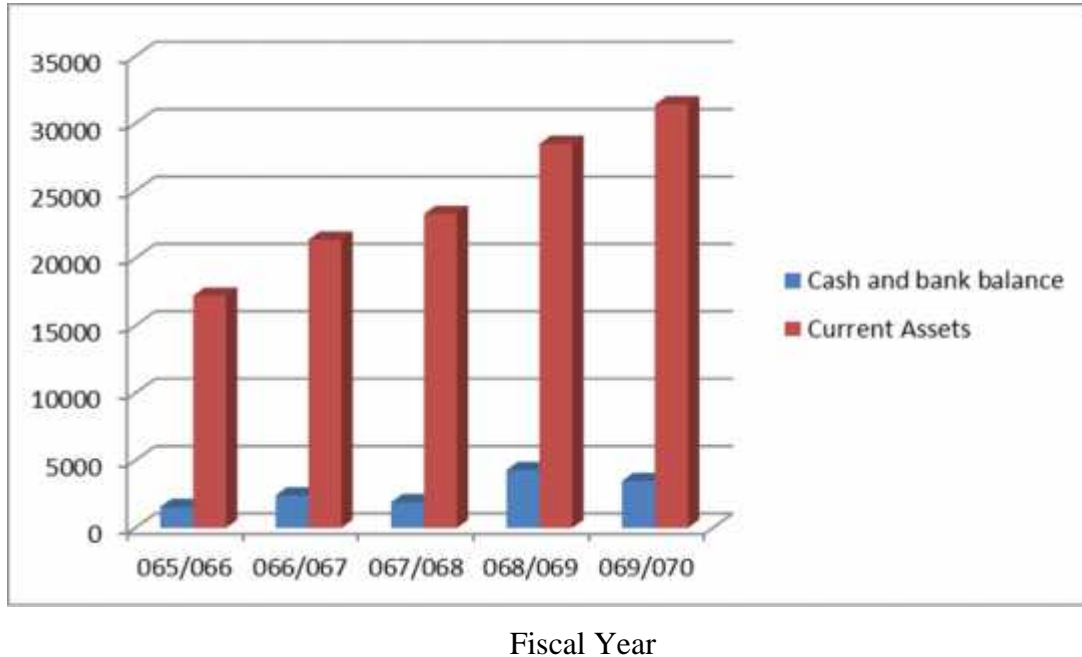
Source Appendix 2 and 3.

From the above table proportion of cash and bank balance to current assets is in fluctuating trend during the study period. The ratio varies from minimum of 8.18 % in the fiscal year 067/068 to maximum of 15.06 % in the fiscal year 068/069. The less of current assets is held by cash and bank balance. From the above analysis, in average 10.91 % of current assets is held by cash and bank balance in all fiscal year during the study period. The average cash and bank balance of five fiscal years, 065/066 to 069/070 is 2727.51 million.

The relationship between cash and bank balance to current assets can be shown more effectively with the help of following figure.

Figure 4.7

Proportion of Cash and Bank balance to Current Assets.



The above figure shows the relation between cash & bank balance and current assets.

4.1.3 Percentage of Net working capital on current assets.

Net working capital represents the excess of current assets over current liabilities. If the current liabilities are in excess rather than current assets, the difference is called working capital deficit. It is the rule of finance that the working capital in a business should be sufficient when compared to current liabilities. If a business has low working capital or working capital deficit, a time will come, when it has to find out some new sources for further funds to increase the working capital, otherwise current assets should have to be liquidity to pay off the current liabilities.

The following table shows the relationship between net working capital and current assets of Siddhartha bank ltd.

Table 4.3
Percentage of Net working capital on Current Assets

Rs. In million

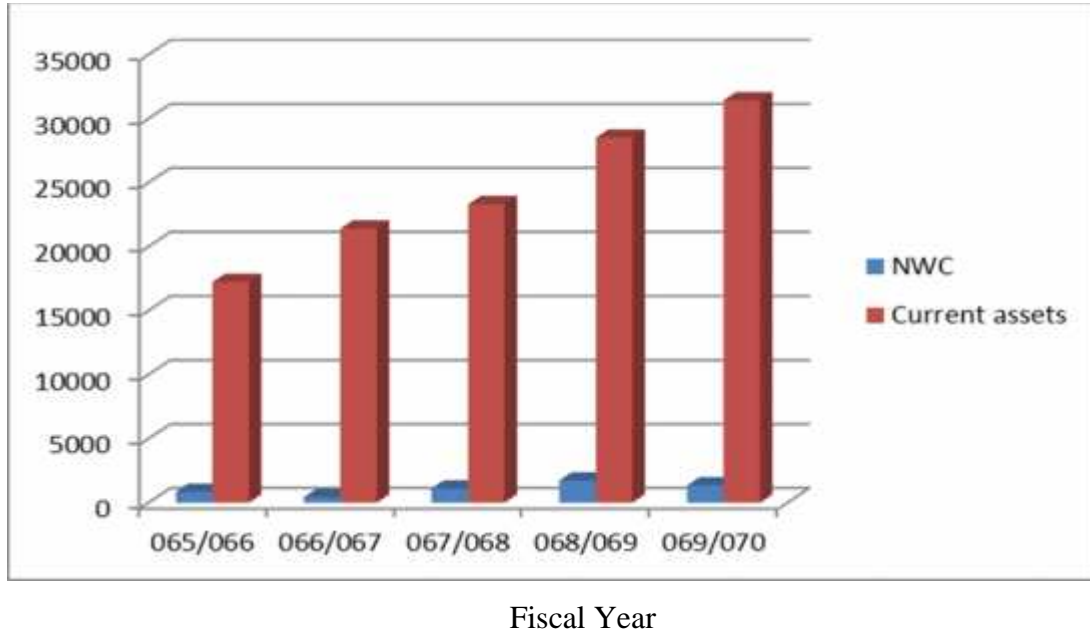
Fiscal year	NWC	Current assets	% of NWC on CA.
065/066	851.49	17226.73	4.94
066/067	419.75	21390.85	1.96
067/068	1105.52	23295.12	4.74
068/069	1731.75	28499.87	5.51
069/070	1351.84	31417.44	4.30
Mean	1092.10	24366.00	4.29
C.V	18.19 %		

Source appendix 3 & 4.

From the above table- 3, the relationship between Net working capital and current assets of Siddhartha bank ltd during the five year period can be seen. It is evident from the table that the current assets are fluctuating during the study period than Net working capital. The ratio of NWC on CA has fluctuated from 1.96 % to 5.51% during the study period. Average NWC is 1092.10 million with coefficient of variation 18.19%. The table also shows that the NWC is less variable than CA being lower C.V. The average percentage of NWC to CA is 4.29 % during the study period.

The relationship between NWC and CA can be shown more effectively by the help of multiple figures as follows.

Figure 4.8
Percentage of Net working capital on Current assets.



The above figure shows the relationship between NWC and Current assets of SBL.

4.1.4 Composition of Current Assets

For the day to day business operation, different types of current assets are required. The compositions of current assets of SBL are cash & bank balance, money at call or short notice, loan & advances and government securities. Miscellaneous current assets are also component of current assets. Pre paid expenses, outstanding income like interest receivable and other current assets are included in miscellaneous current assets.

Table 4.4
Components of Current Assets of SBL

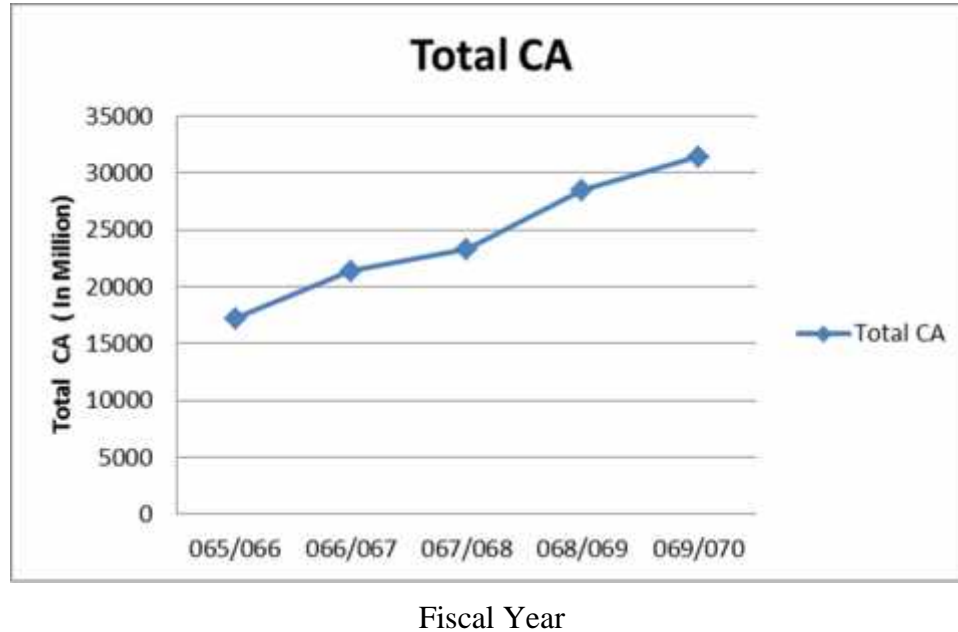
Rs. In Million

Fiscal Year	C&B Balance	Money at Call	Loan & Advances	Government Securities	Misc. C.A.	Total CA
065/066	1547.68	484.84	13328.62	1693.57	172.02	17226.73
066/067	2406.59	699.04	16653.85	1401.35	230.02	21390.85
067/068	1905.67	882.78	18384.03	1795.36	327.28	23295.12
068/069	4291.88	647.47	20217.6	2673.26	669.66	28499.87
069/070	3485.77	1375.25	23110.6	2673.26	772.56	31417.44

(Sources: Financial Summary of Siddhartha Bank Ltd.)

In fiscal year 065/066, total current assets of the bank was amounted to Rs. 17226.73 million which included Rs. 1547.68 million of cash & bank balance, Rs. 484.84 million of money at call or short notice, Rs. 13328.62 million of loan & advances, Rs. 1693.57 million of government securities and Rs. 172.02 million of miscellaneous current assets. The current assets of the bank increased in fiscal year 065/066 to 069/070. In the year during the study periods in fiscal year 066/067, 067/068, 068/069 and 095/070 the level of total current assets are Rs. 21390.85 million, Rs. 23295.12 million, Rs. 28499.87 and Rs. 31417.44 million respectively.

Figure 4.9
Components of Current Assets of SBL



As stated in above figure 9 the current assets of SBL was increasing trend in fiscal year 065/066 to 069/070.

4.1.5 Components of Current Liabilities

Current liabilities is a short term obligation which is payable within a year. The compositions of current liabilities at SBL are deposit, short-term loans (Borrowings), and bills payable and miscellaneous current liabilities. Tax provision, staff bonus, divided payable and other current liabilities are included in miscellaneous current liabilities.

Table 4.5
Components of Current Liabilities of SBL

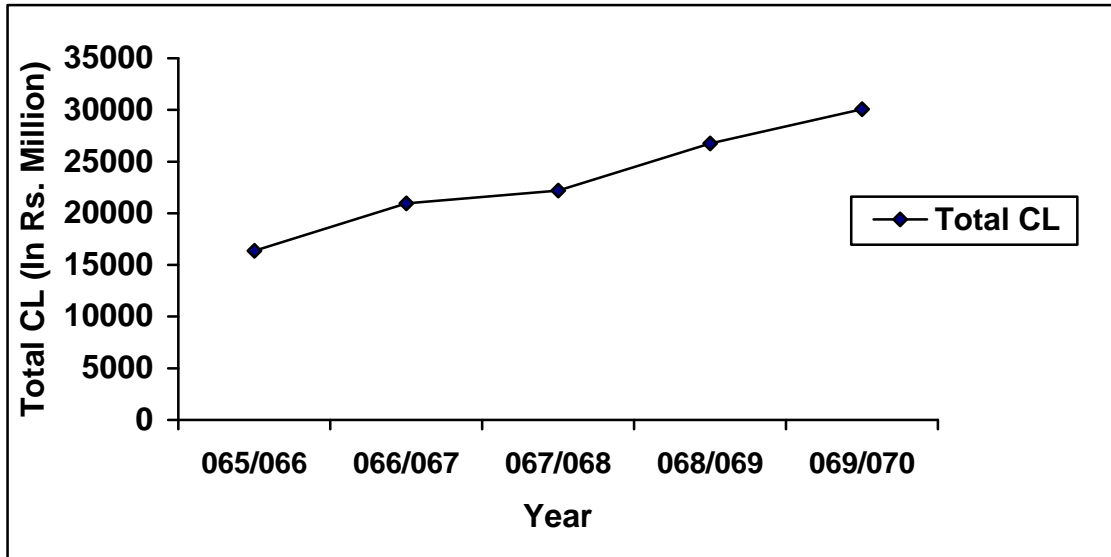
Rs. In Million

Fiscal Year	Deposit & Other A/C	Short Term Loan	Bills Payable	Misc. CL	Total CL
065/066	15854.54	327.60	17.88	174.96	16375.24
066/067	20197.03	345.00	35.70	393.37	20971.10
067/068	21575.65	45.00	2.6	566.35	22189.60
068/069	25948.50	45.00	7.72	766.92	26768.14
069/070	28392.92	787.47		885.21	30065.60

(Sources: Financial Summary of Siddhartha Bank Ltd. & appendix 8)

As stated in above table total CL of SBL was Rs16375.24 million in fiscal year 065/066. The current liabilities of SBL were increasing trend in fiscal year 065/066 to 069/070. At the end of fiscal year 069/070, the current liabilities of SBL is Rs. 30065.60 million which consist of Rs. 28392.92 million, Rs. 787.47 million and Rs. 885.21 million of deposit & other accounts, short-term loan, bills payable & miscellaneous current liabilities respectively.

Figure 4.10
Components of Current Liabilities of SBL



As stated in above figure 4.1 the current assets of SBL was increasing trend in fiscal year 065/066 to 069/070.

4.1.6 Composition of Net working capital of SBL

Net working capital is the difference between current assets and current liabilities. Net working capital can be positive or negative. To achieve the goal of overall business, the determinants of working capital management should be as accurate as possible. It means money invested on working capital should be neither more nor less because the position of working capital affects not only liquidity but also profitability of the organization. The investment decision should be made on any type of current assets by considering their role in banks and determining which one is more beneficial to the bank and which is not.

The following table shows the amount of Net working capital of Siddhartha Bank Ltd. of the study period.

Table 4.6
Net Working Capital of SBL

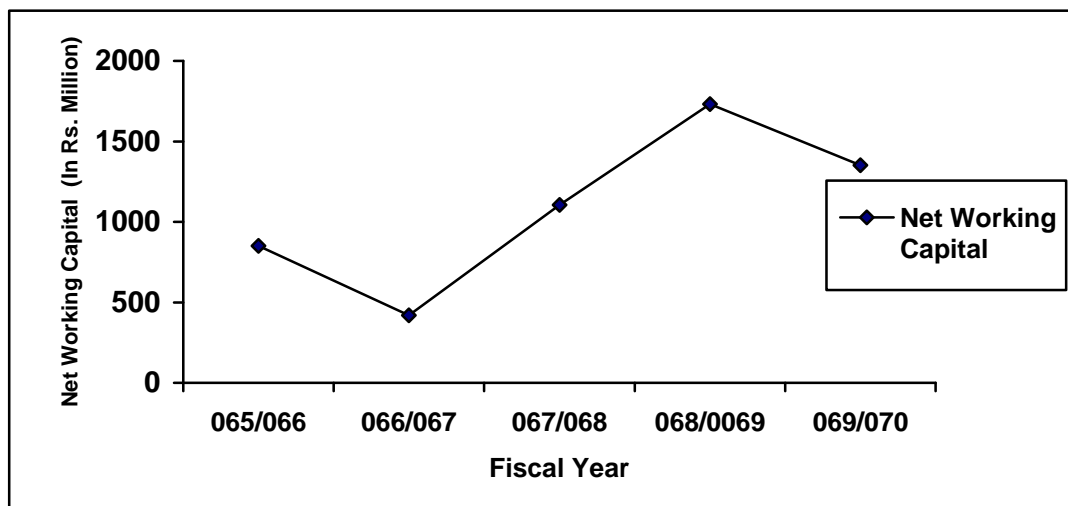
Rs. In Million

Fiscal Year	Current Assets (CA)	Current Liabilities (CL)	Net Working Capital WC = CA-CL
065/066	17226.73	16375.24	851.49
066/067	21390.85	20971.10	419.75
067/068	23295.12	22189.60	1105.52
068/069	28499.87	26768.14	1731.75
069/070	31417.44	30065.60	1351.84

(Sources: Financial Summary of Siddhartha Bank Ltd.)

In above table 6 shows that the net working capital is decreased in fiscal year 065/066 to 066/067 and then increasing trend in fiscal year 067/068 to 068/069. And again decreased in fiscal year 069/070. The highest net working capital is Rs. 1731.75 million in fiscal year 068/069 and lowest is Rs. 419.75 million in fiscal year 066/067 .

Figure 4.11
Net Working Capital of SBL (in million)



As stated in above figure 11 shows the net working capital of the SBL decreased in fiscal year 066/067 and then was increasing trend in fiscal year 066/067 to 068/069. Again decrease in the fiscal year 069/070. The working capital depicts the liquidity position of any organization i.e, higher the working capital higher the liquidity and vice-versa. Therefore above figure status that the liquidity of the SBL was satisfactory position over the study period.

4.2 Ratio and Trend Analysis

Financial tools are an instrument that helps to analyze and interpret the financial performance of an organization. In other words, financial tools help to analyze the strength and weakness of a firm. Ratio analysis is a most important part of financial analysis, which is used in this study that gives us financial performance of selected organization. It helps to show the quantities relationship between two numbers. It may be expressed in terms of proportion, rates and times or in percentage. It is used to compare a firm's financial performance and status with other firms.

Trends give clue to whether the financial situation is improving or whether it is deteriorating. In other words trend analysis of ratio lies in the fact that the analyst can know the direction of movement, i.e. whether the movement is favorable or not.

As mentioned in research methodology, liquidity, turnover and profitability ratio are calculated.

4.2.1 Liquidity Ratio

Liquidity ratios have been employed to test the ability of the banks to pay immediate liabilities (i.e. short term liabilities). Liquidity of any business organization is directly related with the working capital or current assets and

current liabilities of that organization. In other words, one of the main objectives of working capital management is keeping sound liquidity position. Bank is different organization which is engaged in mobilization of funds. Therefore, without sound liquidity position, bank is not able to operate its function. To measure the bank's solvency position or ability to meet its short-term obligation, various liquidity ratios are calculated and to know the trend of liquidity, trend analysis of liquidity ratios have been considered.

4.2.1.1 Current Ratio

This ratio indicates the current short-term solvency position of bank. Higher current ratio indicates better liquidity position. In other words, current ratio

represents a margin of safety, i.e. a cushion of protection for creditors and the highest the current ratio, greater than margin of safety, large the amount of current assets in relation to current liabilities, more the bank's ability to meet its current obligations. It is calculated as follows:

$$\text{Current Ratio (CR)} = \frac{\text{Current Assets (CA)}}{\text{Current Liabilities (CL)}}$$

The following table shows the current ratio to compare the working capital management of Siddhartha Bank Ltd.

Table 4.7
Current Ratio of SBL

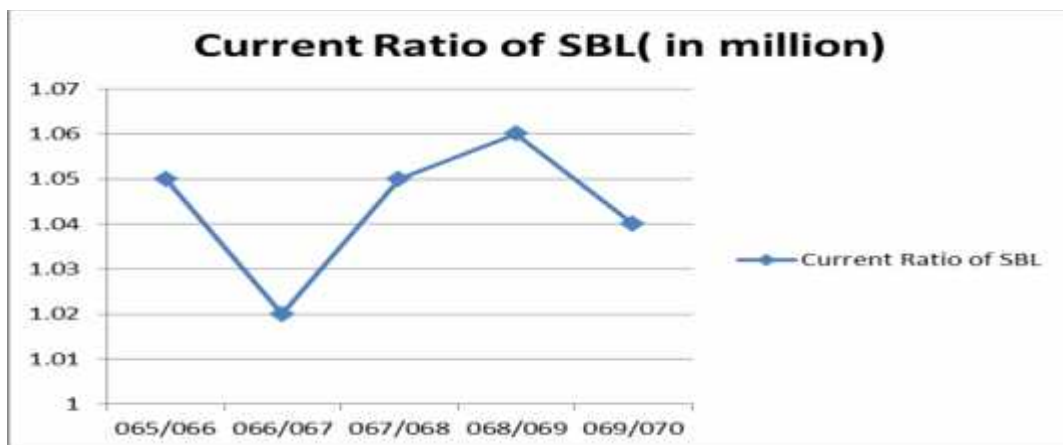
Rs. In Million

Fiscal Year	Total (CA)	Total (CL)	Current Ratio /times
065/066	17226.73	16375.24	1.05
066/067	21390.85	20971.10	1.02
067/068	23295.12	22189.60	1.05
068/069	28499.87	26768.14	1.06
069/070	31417.44	30065.60	1.04

(Sources: Financial Summary of Siddhartha Bank Ltd. And appendix 3)

The above table 7 depicts that the current ratio of SBL which was decreasing. In fiscal year 066/067 and to 069/070, and increase in the fiscal year 067/068 and 068/069. The current ratio was decreasing and increasing trend in the study period. The highest current ratio is 1.06 in the fiscal year 068/069 and the lowest current ratio is 1.02 in the fiscal year 066/067. In fiscal year 067/068 and 069/070, the current ratio is 1.05 and 1.06 respectively.

Figure 4.12
Current Ratio of SBL



Fiscal Year

The above figure 12 depicts that the trend line of Siddhartha Bank Ltd. which was decreasing in fiscal year 065/066 to 069/070.

The above analysis helps to find out the liquidity position of the bank. In current ratio, for many types of business 2:1 is considered to be an adequate ratio. It indicates that the bank has sufficient liquidity to remain solvent even at the ratio of 1.02:1 in fiscal year 066/06. It was the minimum ratio during the study period. It is true that the higher the ratio indicates the greater ability of a firm to pay its bills.

4.2.1.2 Quick / Acid test Ratio

Quick Ratio establishes a relationship between quick or liquid assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of original value. Cash is a most liquid. Other assets which are considered to be relatively liquid and included in quick assets are book debts or money at call or short notice and marketable securities. Under this study cash & bank balance, money at call or short notice and government securities are included in quick assets. This quick ratio is calculated by dividing the quick assets by current liabilities.

$$\text{Quick/Acid Test Ratio} = \frac{\text{Quick Assets (QA)}}{\text{Current Liabilites (CL)}}$$

The following table shows the quick ratio of Siddhartha Bank Limited.

Table 4. 8
Quick Ratio of SBL

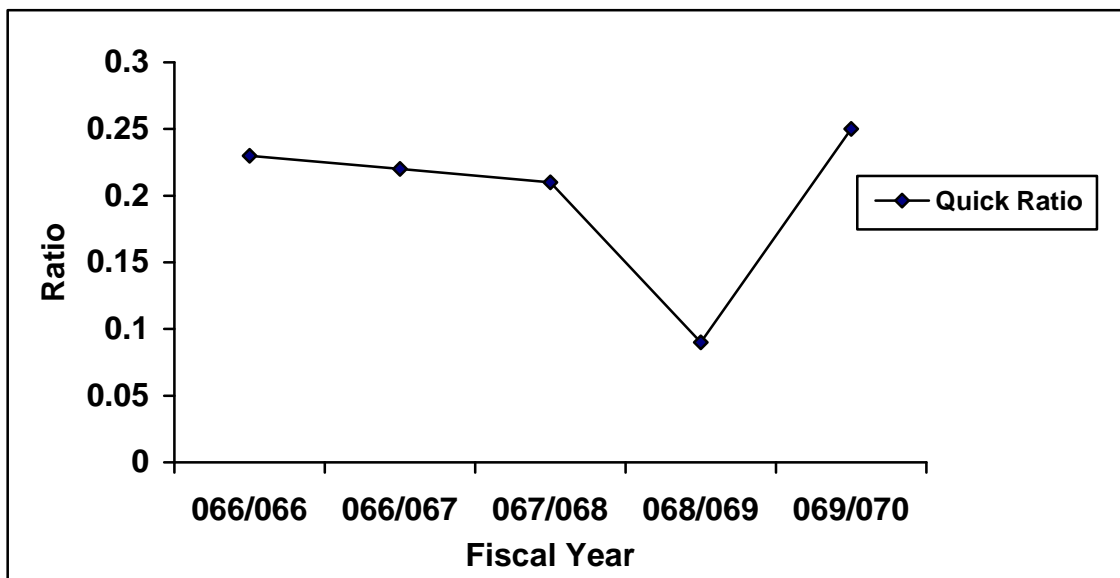
Rs. In Million

Fiscal Year	Total quick assets (QA)	Total (CL)	Quick Ratio
065/066	3726.09	16375.24	0.23
066/067	4506.98	20971.10	0.22
067/068	4583.81	22189.60	0.21
068/069	2612.61	26768.14	0.09
069/070	7534.28	30065.60	0.25

(Sources: Financial Summary of Siddhartha Bank Ltd. & Appendix 6)

The above table 8, depicts that the highest ratio is 0.25 in fiscal year 069/070 and lowest is 0.09 in fiscal year 068/069 .

Figure 4.13
Quick Ratio of SBL



The above figure 13 depicts that the trend line of quick ratio of SBL decreased in fiscal year 068/ and increased in fiscal year 069/070 .The above analysis helps to conclude that the quick ratios of SBL were satisfactory.

4.2.1.3 Cash and Bank balance to Total Deposit Ratio (Excluding fixed deposit)

The ratio shows the ability of bank's immediate funds to cover its (current, margin, call & saving) deposits. It can be calculated by dividing cash and bank balance by total deposits (excluding fixed deposits).

$$\text{Cash and Bank Balance to Total Deposit Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposits (Excluding Fixed Deposit)}}$$

The following table and figure shows the cash & Bank balance to total deposit ratio of the Siddhartha Bank Ltd. over the study period.

Table 4.9
Cash and Bank Balance to Total Deposit Ratio of SBL

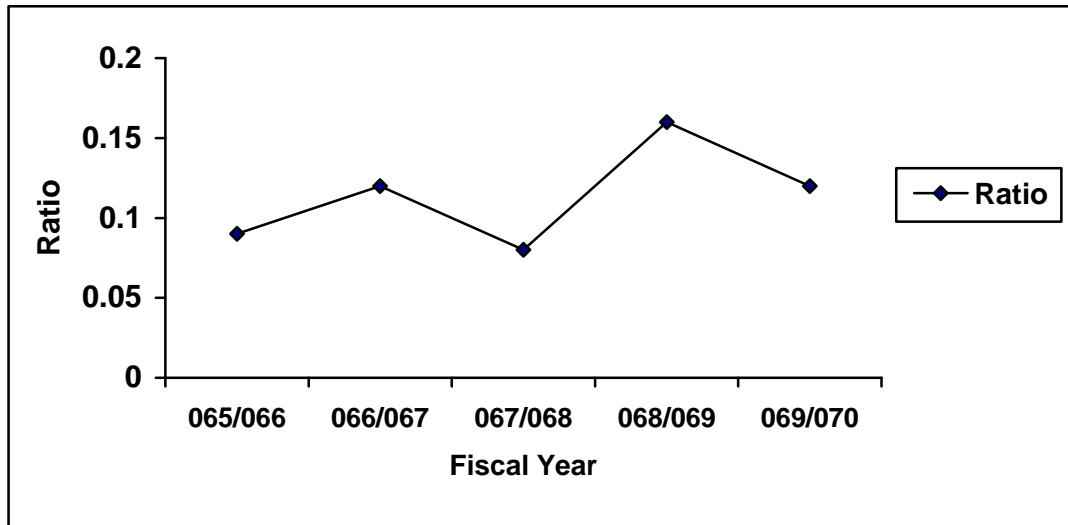
Rs. In Million

Fiscal Year	Cash & Bank Balance	Total Deposit	Ratio
065/066	1547.68	15854.80	0.09
066/067	2406.59	20197.03	0.12
067/068	1905.67	21575.65	0.08
068/069	4291.88	25948.50	0.16
069/070	3485.77	28392.82	0.12

(Sources: Financial Summary of Siddhartha Bank Ltd., Appendix 2 &7.)

The above Table 9 depicts that the cash & bank balance to total deposit of SBL was fluctuating over the study period. The highest ratio is 0.12 in the fiscal year 066/067 and 069/070 and lowest is 0.08 in the fiscal year 067/068.

Figure 4.14
Cash and Bank Balance to Total Deposit Ratio of SBL



The above figure also depicts that the cash and bank balance to total deposit ratio was fluctuating trend up to fiscal year 065/062 to 069/070.

The above analysis helps to find out the ability of banks immediate fund to cover its current margin, call & saving deposit of the bank or liquidity position of the bank. But the large amount of idle cash & bank balance badly affect the profit ability of the bank. So, the position of SBL seems as satisfactory level over the study period.

4.2.1.4 Saving Deposit to Total Deposit Ratio

Saving deposits is interest bearing short term deposit. The ratio is developed in order to find out the proportion of saving deposit, which is interest bearing and short-term in nature. It is find out by dividing the total amount of saving deposits by the amount of total deposits, which is given as follows.

$$\text{Saving Deposit to Total deposit Ratio} = \frac{\text{Saving Deposit}}{\text{Total Deposit}}$$

The following table and figure shows the SBL's saving to total deposit ratio.

Table 4.10
Saving Deposit to Total Deposit Ratio of SBL

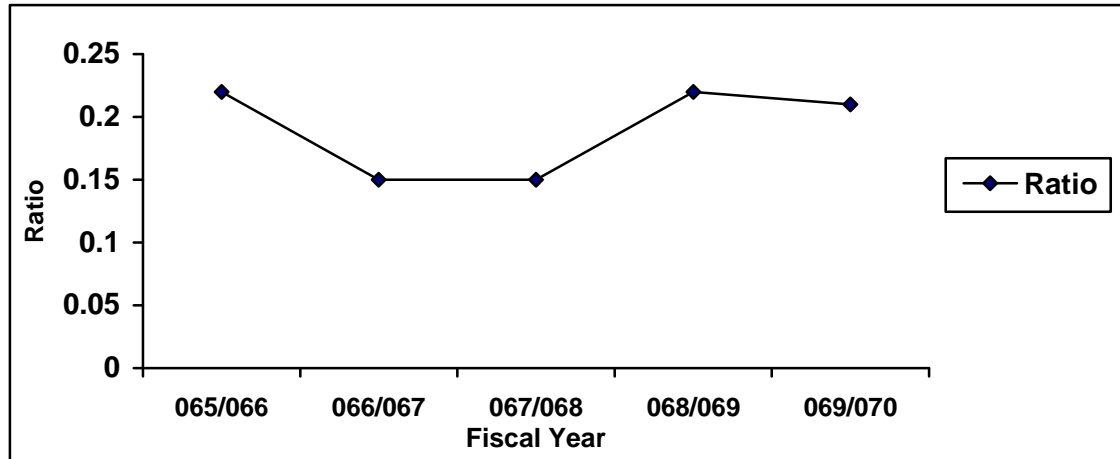
Rs. In Million

Fiscal Year	Saving Deposit	Total Deposit	Ratio
065/066	3445.90	15854.80	0.22
066/067	2961.25	20197.03	0.15
067/068	3169.66	21575.65	0.15
068/069	5661.71	25948.50	0.22
069/070	6050.00	28392.82	0.21

(Sources: Financial Summary of Siddhartha Bank Ltd.& Appendix 7)

The above table 10 depicts that the amount of saving deposit has been increasing during the study period. Similarly, the total deposit of SBL has been increasing during the study period. Likewise, the saving deposits to total deposit ratio of SBL increased in the fiscal year 065/066 to 068/069 and decreased in the fiscal year 069/070. The highest ratio is 0.22 in fiscal year 065/066 and 068/069 and lowest is 0.15 in fiscal year 066/067 and 067/068.

Figure 4.15
Saving Deposit to Total Deposit Ratio of SBL



As stated in above figure 15, the saving deposit to total deposit ratio of SBL was increasing and and decreasing trend in fiscal year 065/066 to 069/070.

Although, saving deposit is short-term liability but its nature is long-term then current margin and other deposits. So, the large portion saving deposit in total deposit shows the liquidity of the bank. Bank also pays interest on saving deposit but current, margin and call deposits are nominal fund. It means higher the ratio higher the liquidity position of the bank & vice versa. In other hand, the higher saving deposit increased interest obligation to the bank. Therefore, the higher ratio of saving deposit to total deposit decreased the profitability of the bank. From the view point of profitability the lower ratio is preferable than higher ratio. In above analysis, the ratio of SBL seems satisfactory level over the study period.

4.2.1.5 Absolute liquidity Ratio

Absolute liquidity ratio measures the capacity of a firm to pay its short term obligations in absolute liquidity assets of the firm i.e. cash. Quick assets include

the account receivables which is less liquid form of assets. It can not be pay the short term obligations easily as cash. Therefore, absolute liquidity ratio is calculated here to find out the short-term solvency of SBL in terms of cash. The absolute liquidity ratio is computed by dividing cash and bank balance by current liabilities.

The following table shows the absolute liquid ratio of SBL.

Table- 4.11
Absolute liquid ratio of SBL

Rs in million

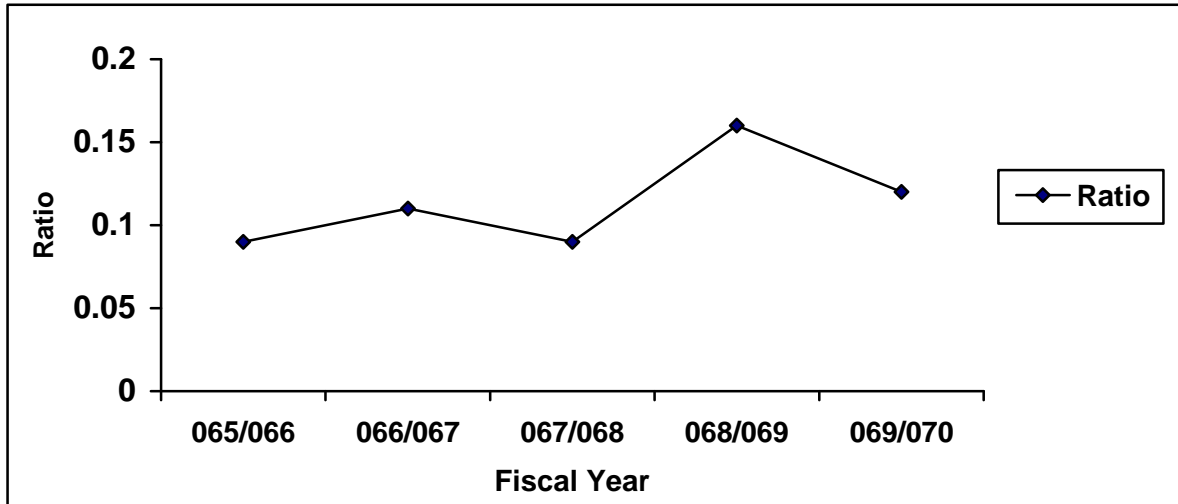
Fiscal year	Cash & Bank bal.	Current Liabilities	Absolute liquid ratio (times)
065/066	1547.68	16375.24	0.09
066/067	2406.59	20971.10	0.11
067/068	1905.67	22189.60	0.09
068/069	4271.88	26768.14	0.16
069/070	3485.77	30065.60	0.12
Average			0.11

Source :-(Appendix 2, 3 and financial summary of SBL)

The above table shows the fluctuating trend of absolute liquid ratio during the study period. It is fluctuated from 0.09 in the FY 065/066 to 0.11 in the FY 066/067. The average absolute liquid is 0.11 In FY 065/066 there is strongest absolute liquidity position and in FY 065/066 and 067/068 there are lowest liquidity position among the two fiscal period data.

The following figure shows more clearly the absolute liquidity position of SBL

Figure 4.16
Absolute liquidity ratio of SBL



Above figure shows that absolute liquidity position of SBL was in the fluctuating trend during the study period.

4.2.2 Activity or turnover ratio

It is also known as activity, efficiency or assets utilization ratio. This ratio shows efficiency of assets management, i.e. how efficient the assets management is. It means how efficiently and rapidly, firm can convert its assets. The greater turnover ratio indicates higher utilization of assets. Thus, it measures the degree of effectiveness in use of resources or fund by a firm. There are following turnover ratios that can be calculated.

4.2.2.1 Investment to total deposit Ratio

This ratio shows how efficiently the major sources of bank have been mobilized. It is calculated dividing total investment by total deposits. Total investment includes government Treasury bill, development bonds, other company's share and other type of investment.

The following table shows the effectiveness in utilization of total deposits.

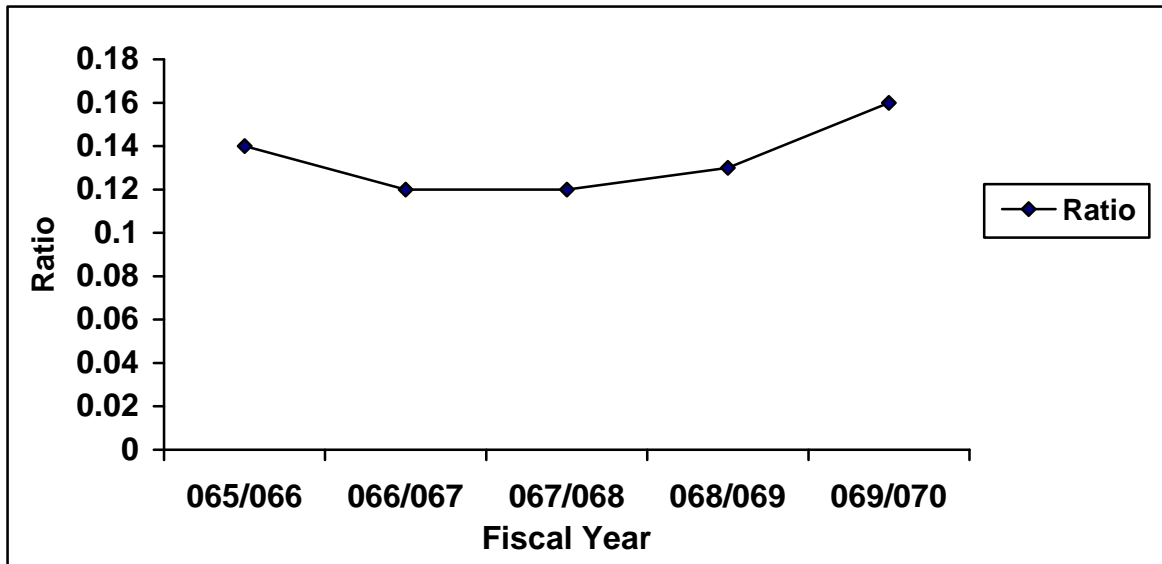
Table 4.12
Investment to total deposit ratio

Rs in million

Fiscal year	Investment	Total deposit	Ratio
065/066	2176.43	15854.80	0.14
066/067	2452.47	20197.03	0.12
067/068	2537.90	21575.65	0.12
068/069	3393.87	25948.50	0.13
069/070	4472.84	28392.82	0.16

Source: financial summary of SBL & Appendix 7.

Figure 4.17
Investment to total deposit Ratio of SBL.



From the above table and figure there is fluctuating trend of investment from the total deposit. It is fluctuated 12% in FY 066/067 and 067/068 . The highest ratio 16% in FY 069/070 indicates the higher utilization of total deposit in the

investment. In average there is 13% investment from total deposit during the study period. High ratio indicates management efficiency regarding the utilization of deposits and low ratio is result of less efficiency in use of fund.

4.2.2.2 Loan and Advances to total Deposit Ratio

This ratio is calculated to find out how the banks are successful utilizing the outsiders' fund i.e. total deposits for profit generating purpose in the form of extending loan and advances. It is calculated as;

$$\text{Loans and Advances to Total Deposit Ratio} = \frac{\text{Loans \& Advances}}{\text{Total deposits}}$$

The following table and figure shows the effectiveness in utilization of total deposits of SBL.

Table 4.13
Loan & Advances to Total Deposit Ratio of SBL

Rs. In Million

Fiscal Year	Loan and advances	Total Deposit	Ratio
065/066	13328.62	15854.80	0.84
066/067	16653.85	20197.03	0.82
067/068	18384.03	21575.65	0.85
068/069	20217.58	25948.50	0.78
069/070	23110.60	28392.82	0.81

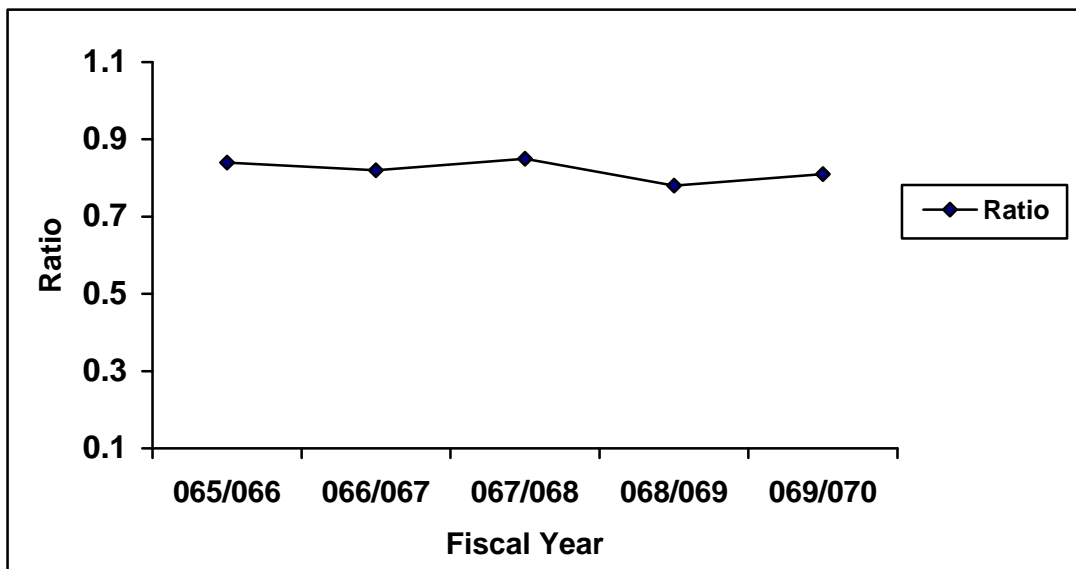
(Sources: Financial Summary of Siddhartha Bank Ltd. & Appendix 7)

The above table 13 shows the position and ratio of loan and advances to total deposit of SBL in fiscal year 065/066 to 069/070. The amount of loan & advances of the bank has been fluctuating over the study period. Similarity, the amount of total deposit of the bank has been also increasing over the study period. Likewise, the loan and advances to total deposit ratio was decreasing in fiscal year 066/067

and 068/069. The highest ratio is 0.85 in fiscal year 067/068 and lowest is 0.78 in fiscal year 068/070.

Below figure 18 states that the loan & advances to total deposit ratio was decreasing and increasing trend in the fiscal year 065/066 to 069/070. Form these analysis, loan and advances to total deposit ratio clearly shows the low capacity of the bank to mobilize its deposit.

Figure 4.18
Loan & Advances to Total Deposit Raito of SBL



4.2.2.3 Loan & Advances to Fixed Deposit Ratio

This ratio examines that how many times the funds is used in loan and advances against fixed deposit. Fixed deposits are interest bearing long-term obligation, whereas loan and advances are the major sources of investment in generating income for commercial banks. It is calculated as follows.

$$\text{Loan and Advances to Fixed Deposit Ratio} = \frac{\text{Loan and Advances}}{\text{Total Deposit}}$$

The following table & figures shows the effective loan and advances to fixed deposit ratio of SBL.

Table 4.14
Loan & Advances to Fixed Deposit Ratio of SBL

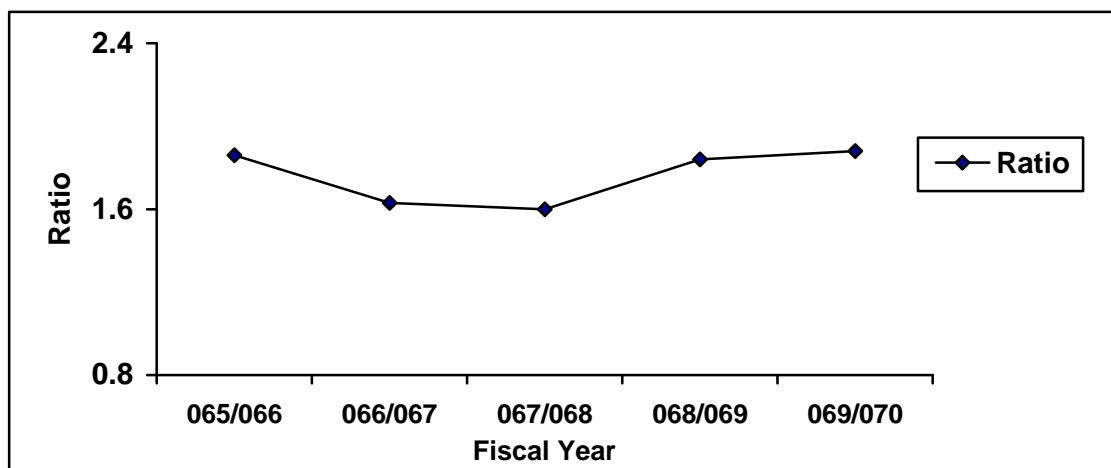
Rs. In Million

Fiscal Year	Loan and Advances	Fixed Deposit	Ratio
065/066	13328.62	7158.20	1.86
066/067	16653.85	10195.73	1.63
067/068	18384.03	11458.27	1.60
068/069	20217.58	10966.95	1.84
069/070	23110.60	12282.82	1.88

(Sources: Financial Summary of Siddhartha Bank Ltd. & Appendix 7)

The above table 14 shows that the loan and advances to fixed deposit ratio of SBL was decreased in fiscal year 066/067 to 067/068 and then, the ratio was increasing in 068/069 to 069/070. The highest ratio is 1.88 in fiscal year 069/070 and lowest is 1.60 in fiscal year 067/068.

Figure 4.19
Loan & Advances to Fixed Deposit Ratio of SBL



The above figure 19 shows that the loan and advances to fixed deposit of SBL was decreased trend in fiscal year 065/066 to 067/068 and then, the ratio has been increasing trend in fiscal year 068/069 to 069/070. It was slightly increased.

The above analysis implies that the utilization of fixed deposit it in loan and advances efficiently or not. The highest ratio implies the efficient mobilization of fixed deposit and vice-versa. Form the above trend analysis we can conclude that the SBL has been mobilizing its fixed deposit quite satisfactory.

4.2.2.4 Loan and advance to Saving Deposit of SBL

Saving deposits are interest bearing obligation for short- term purpose where as loan and advances are long- term investment generating income. So the ratio indicates how much time's short term interest bearing deposits are utilized for income generating purpose. It is calculated as;

$$\text{Loan and Advances to Saving Deposit Ratio} = \frac{\text{Loan \& Advances}}{\text{Saving Deposit}}$$

The following table & figures shows the loan and advances to saving deposit ratio of SBL.

Table 4.15
Loan & Advances to Saving Deposit Ratio of SBL

Rs. In Million

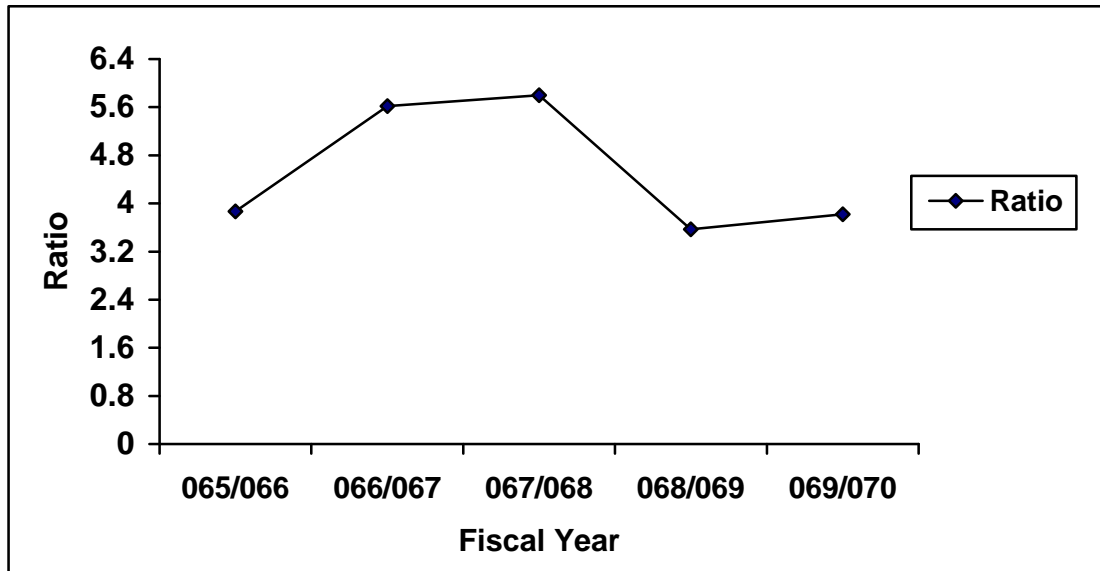
Fiscal Year	Loan and Advances	Saving Deposit	Ratio
065/066	13328.62	3445.90	3.87
066/067	16653.85	2961.25	5.62
067/068	18384.03	3169.66	5.80
068/069	20217.58	5661.71	3.57
069/070	23110.60	6050.00	3.82

(Sources: Financial Summary of Siddhartha Bank Ltd.& Appendix 7)

The above table 15 depicts that the loan and advances to saving deposit ratio of SBL was increasing in fiscal year 065/066 to 067/068 and decreased in fiscal year 068/069 to 069/070. Highest ratio is 5.80 in fiscal year 067/068 and lowest is 3.57 in fiscal year 068/069.

Figure 4.20

Loan & Advances to Saving Deposit Ratio of SBL



The above figure 20 shows that the loan and advances to saving deposit of the SBL was increasing in first three year in fiscal year 065/066 to 067/068 and then was decreasing trend. This ratio is fluctuating. From the above analysis it can be concluded that the saving deposit of the bank has been effectively utilized in loan and advances.

4.2.3 Profitability Ratio

Profit is an important factor that determines the firm’s expansion & diversification. A required level of profit is necessary for the firm’s growth and survives in the competitive environment. Profitability ratios have been employed to measure the operating efficiency of the sampled bank. Through profitability ratio the lender and investor want to decide weather to invest in a particular business or not. Various profitability ratios are calculated as follows:

4.2.3.1 Interest earned to total Assets Ratio.

This ratio shows percentage of interest income as compared to the assets of banks. It indicates how properly utilize the banks assets for income generating purpose. It is computed as;

$$\text{Interest Earned to Total Assets Ratio} = \frac{\text{Interest Earned}}{\text{Total Assets}} \times 100\%$$

The following table and figure shows the interest earned to total assets ratio of the SBL.

Table 4.16
Interest Earned to Total Assets Ratio of SBL

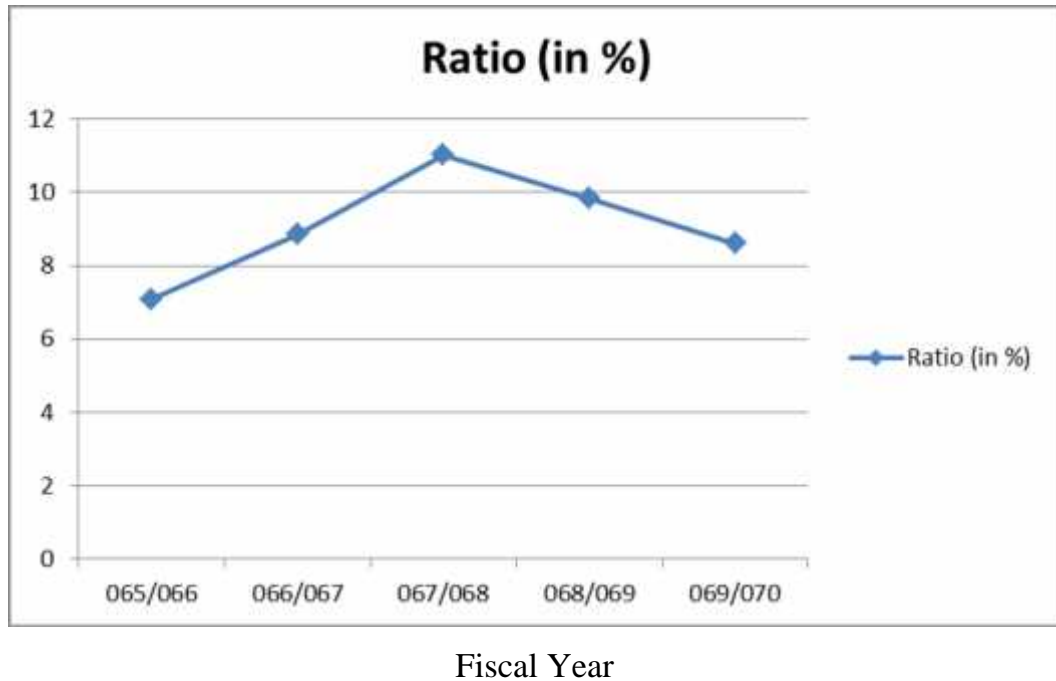
Rs. In Million

Fiscal Year	Interest Earned	Total Assets	Ratio (in %)
065/066	1265.58	17881.78	7.08
066/067	2018.29	22802.43	8.85
067/068	2690.29	24405.87	11.02
068/069	2906.26	29579.20	9.83
069/070	2898.41	33670.55	8.61

(Sources: Financial Summary of Siddhartha Bank Ltd.)

The above table 16 shows that the amount of interest earned has been increasing and decreasing trend of SBL over the study period. Similarly, the amount of total assets of the SBL has been increasing over the study period. The interest earned to total assets ratio of the bank was little bit fluctuating. It was stands at 7.08% in fiscal year 065/066. It was slightly increase in fiscal year 066/067 ie 8.85% and fiscal year 067/068 ie 11.02%. The following figure shows the ratio of interest earned to total assets of the bank.

Figure 4.21
Interest Earned to Total Assets Ratio of SBL



The above figure depicts that the interest earned to total assets ratio of SBL seem quite fluctuating over the study period. From fiscal year 065/066 to 067/068 the trend line of the bank was increasing position and then decreasing trend line of fiscal year from 067/068 to 069/070. From the above analysis we can conclude that the interest earned to total assets of the SBL satisfactory, it is quite ok. It implies that the bank might able to use its total assets of funds to earn interest.

4.2.3.2 Net profit to total assets ratio (ROA)

The ratio is useful in measuring the profitability of all financial resources invested in the firm's assets. It is also called net profit or loss to total assets or working fund ratio and denoted by ROA. It is calculated as;

$$\text{Net Profit to Total Assets Ratio} = \frac{\text{Net Profit After Tax}}{\text{Total Assets}} \times 100\%$$

The following table and figure shows the net profit to total assets ratio of SBL.

Table 4.17
Net Profit to Total Assets Ratio of SBL

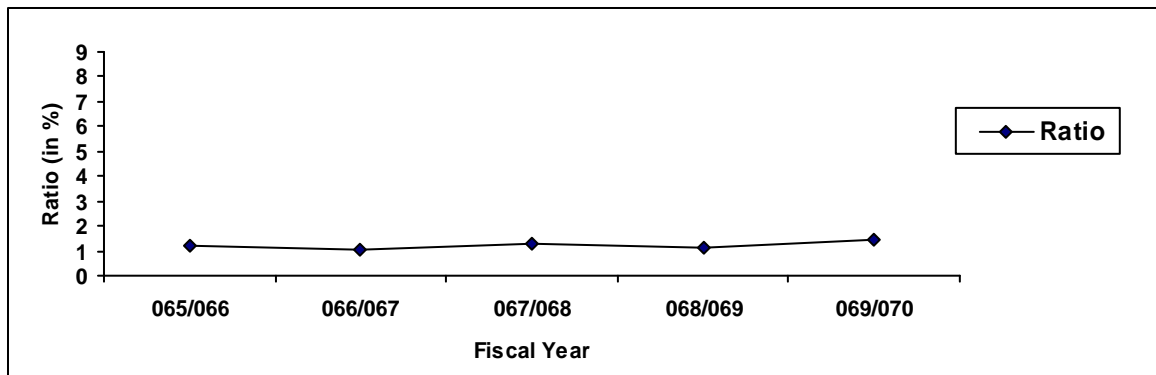
Rs. In Million

Fiscal Year	Net Profit	Total Assets	Ratio (%)
065/066	217.92	17881.78	1.22
066/067	240.85	22802.43	1.06
067/068	311.42	24405.87	1.28
068/069	330.45	29579.20	1.12
069/070	490.49	33670.55	1.46

(Sources: Financial Summary of Siddhartha Bank Ltd.)

The above table depicts that amount of net profit was increasing in fiscal year 065/066 to 069/070. The amount of total assets was increasing over all period during the study. Likewise, the ratio of net profit of total assets stands at 1.46% in fiscal year 069/070.

Figure 4.22
Net Profit to Total Assets Ratio of SBL



The above figure implies that the fluctuating net profit to total assets ratio in percentage of SBL.

Above analysis help to find out whether the bank efficiently used it working funds or total assets to earned higher rate of profit or not. The ratio of net profit to total assets of SBL implies that the bank could not able to use its available working funds affectively over the study period.

4.2.3.3 Net Profit to Total Deposit Ratio

The ratio shows the relation of net profit earned by firm with the total deposits accomplished. It is used to measuring the internal rate of return form deposits. It is computed dividing the net profit by total deposits. Higher ratio indicates the return form investment on loans and advances are desirable and lower ratio indicates the funds are not properly mobilizing. The following formula is used as:

$$\text{Net Profit to Total Deposit Ratio} = \frac{\text{Net Profit After TAX}}{\text{Total Deposit}} \times 100\%$$

The following table and figure shows the net profit to total deposit ratio.

Table 4.18
Net Profit to Total Deposit Ratio of SBL

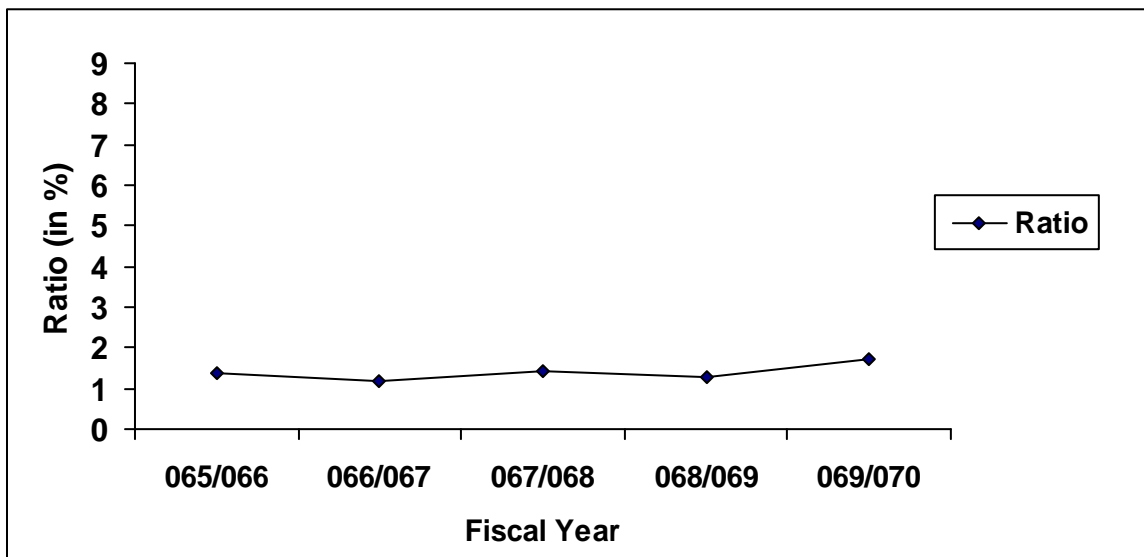
Rs. In Million

Fiscal Year	Net Profit	Total Deposits	Ratio (%)
065/066	217.92	15854.80	1.37
066/067	240.85	20197.03	1.19
067/068	311.42	21575.65	1.44
068/069	330.45	25948.50	1.27
069/070	490.49	28392.82	1.73

(Sources: Financial Summary of Siddhartha Bank Ltd.)

Above table 18 depicts that the ratio of net profit to total deposit ratio was fluctuating over the study period. Highest ratio is 1.73 in fiscal year 069/070 and lowest is 1.19 in fiscal year 066/067.

Figure 4.23
Net Profit to Total Deposit Ratio of SBL



The above Figure 23 depicts that the ratio net profit to total depict of SBL was decreasing trend in over the study period.

The above analysis helps to find out whether the bank could able to mobilize of outsiders funds properly or not. The mobilization of outsiders fund is very important to earn profit for a commercial bank. The efficient mobilization of deposit indicates the better performance of the bank. Therefore, the bank mobilized its deposit as efficiently as possible. As shown in table we can easily conclude that the bank could not able to mobilized its deposit or outsiders funds efficiently. The bank should mobilize its deposit properly to increase profit.

4.2.3.4 Total interest expenses to total interest income ratio.

The ratio shows the percentage of interest expenses incurred in relation to the interest income incurred. In other words, it indicates the how much percent of interest income is used as interest paid. Low ratio is favorable from profitability point of view and expressed as;

$$\text{Total Interest Expenses to Total Interest Income Ratio} = \frac{\text{Total Interest Expenses}}{\text{Total Interest Income}}$$

Following table and figure shows the net profit to total deposits ratio;

Table 4.19
Total interest expenses to total interest income.

Rs in million

Fiscal year	Total interest expenses.	Total interest income.	Ratio %.
065/066	813.62	1265.58	64.29
066/067	1406.49	2018.29	69.69
067/068	1925.24	2690.29	71.56
068/069	2048.91	2906.26	70.50
069/070	1742.84	2898.41	60.13

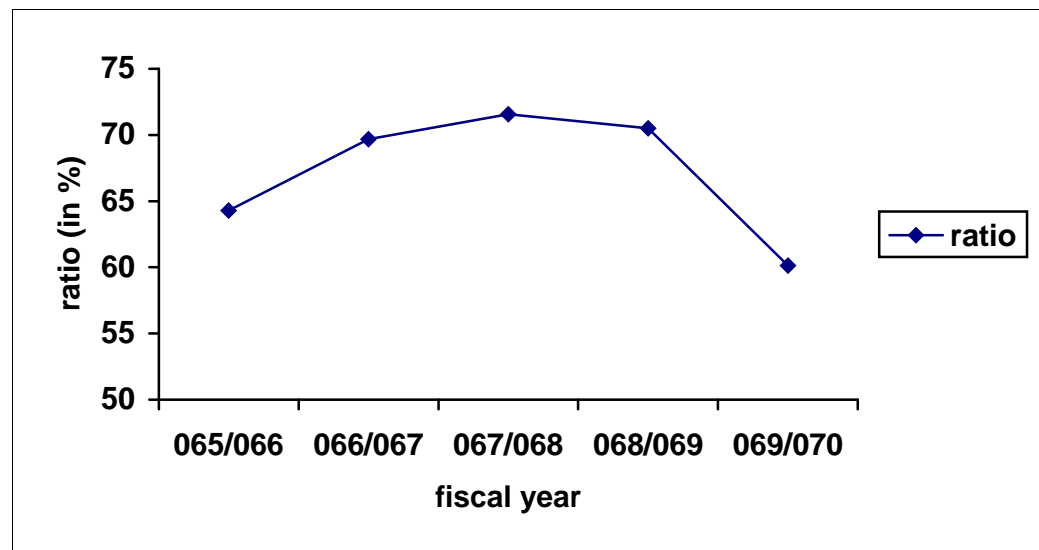
Source: - financial summary of SBL.

The above table shows the fluctuating trend in the ratio of total interest expenses to total interest income. From the FY 065/066 to 069/070. The ratio was highest at FY 067/068, i.e. 71.56 % and lowest at 069/070, i.e. 60.13%.

From the above analysis we can conclude that from the interest income, interest expense is increasing year to year except in FY 068/069 and 069/070, which also indicates that the profitability position of SBL is decreasing due to increase in interest expenses than increase in interest income, which may be harmful for the bank.

Following figure more clearly shows the trend of interest expenses to interest income ratio,

Figure 4.24
Interest expenses to interest income ratio



The above figure more clearly shows the increasing interest expenses than interest income of SBL. Thus SBL should try to decrease its interest expenses as compared to interest income.

4.3 Correlation Analysis

Correlation Analysis is used to measure the degree of association between two or more variables such that changes in one variable are accompanied by systematic changes in the other. In other words, correlation is the statistical tool that we can use to describe the degree to which one variable is linearly related to another. So for the researcher, correlation analysis is a useful tool in many ways such that,

-) To determine whether the relationship exist or not.
-) Weather the relationship significant or not.
-) Establish cause and effect relationship if any.

Under this analysis Karl Pearson's method of coefficient of correlation is applied. The coefficient of correlation measures the degree of relation of correlation is always between +1 and - 1, when r is +1 it means there is perfect relationship between two variables and vice-versa. When r is 0, it means there is no relationship between two variables.

4.3.1 Correlation between Net profit and Net working capital

The coefficient of correlation between net working capital and net profits is to measure the degree of relationships between net working capital and net profit. In correlation analysis, net profit is independent variable (y) and net working capital is the dependent variable (x). The purpose of computing co-efficient of correlations is to find out weather the changes in working capital affects the profitability of the bank or not and weather there is any relationship between these two variables. The correlation coefficient between NP and NWC is as follows;

Table- 4.20

Correlation between Net profit and Net working capital

Firm	r	Relationship	PEr	6 PEr	Significant/ Insignificant
SBL	0.8760	positive	0.070	0.4208	Significant

Source:- (Appendix 9 & 4.)

The above table shows the relationship between NWC and NP of SBL during the 5 year study period from 065/066 to 069/070. Coefficient of correlation between NWC and NP of SBL is 0.8760, which shows that there is positive correlation between NWC and NP. By considering the probable error, since the value of 'r' is more than six times of Per (6PEr) then we can say that the value of 'r' is significant and vice- versa.

Hence from the above analysis, it can be concluded that there is significant relationship between NWC and NP of the bank over the study period.

4.3.2 Correlation between Loan & Advance and Total deposits

The coefficient of correlation between loan and advances and total deposits is to measure the degree of relationship between major components of current assets i.e. loan and advances and major sources of fund on bank i.e. total deposit. In correlation analysis total deposit is independent variable (Y) and loan & advances is dependent variable (X). The purpose of computing coefficient of correlation is to justify whether the deposits are significant used in loan and advances or not and whether there is any relationship between these two variables. The following table shows the coefficient of correlation (r) between loan and advances and total deposits, i.e. r, PE, 6PEr.

Table 4.21

Coefficient of Correlation between Loan and Advances and Total Deposit

Firm	r	Relationship	PEr	6 PEr	Significant/ Insignificant
SBL	0.0455	positive	0.02391	0.1434	Insignificant

Source:- (Appendix 10.)

From the above table 21 shows that the coefficient of correlation between loan and advances and total deposit value 'r' is 0.0455. It shows positive relationship between two variables loan and advances and total deposit of SBL. By considering

the probable error, since the value of 'r' i.e. 0.0455 less than six times of probable error i.e. 0.1434, we can say that the value of 'r' is insignificant.

Thus from the above analysis; it can be concluded that there is not significant relationship between loan & advances and total deposits thus change in any variable can not affect the value of other variables.

4.3.3 Coefficient of correlation between Cash & Bank balance and current liabilities.

Cash is required to meet the unexpected short-term obligation i.e. current liabilities. The coefficient of correlation between cash & bank balance and current liabilities is to measure the degree of relationship between cash & bank balance and current liabilities. In correlation analysis, cash & bank balance is dependent variables (X) and current liabilities are independent variable (Y).

The following table shows the coefficient of correlation between cash & bank balance and current liabilities i.e. 'r', PEr, 6PEr of Siddhartha Bank Ltd.

Table 4.22
Coefficient of Correlation between Cash & Bank Balance and Current Liabilities

Bank	r	Relationship	PEr	6PEr	Significant /Insignificant
SBL	0.3048	Positive	0.02736	0.1641	Significant

(Sources: Appendix-11)

From the above table 22, we can find that coefficient of correlation between cash & bank balance and current liabilities of SBL is 0.3048 which shows the positive relationship between two variables cash & bank balance and current liabilities. By considering the probable error, since the value of 'r' i.e. 0.3048 is greater than six times of PEr i.e. 0.02736, we can say that the value of 'r' is significant.

From the above analysis, it can be concluded that there is significant relationship between cash & bank balance and current liabilities.

4.3.4 Coefficient of Correlation between Loan & advance and Net Profit.

The coefficient of correlation between loan & advances and net profit is to measure the degree of relationship between loan & advances and net profit. In correlation analysis, loan and advances independent variable (Y) and net profit is dependent variable (X). The purpose of computing the correlation of the coefficient is to justify whether the loan and advances are significantly generate profit or not and whether there is any relationship between these two variables. The following table shows the coefficient of correlation between loan and advances and net profit i.e. 'r', PEr and 6PEr of Siddhartha Bank Ltd.

Table 4.23

Coefficient of Correlation between Loan & Advances and Net Profit

Bank	r	Relationship	PEr	6PEr	Significant /Insignificant
SBL	0.9425	Positive	0.0108	0.0649	Significant

Source:- (Appendix 12)

As stated in above table 23, the coefficient of correlation between loan & advances and net profit of SBL over the study period is 0.9425. It shows the positive relationship between two variables loan & advances and net profit. By considering the value of probable error and six times of probable error which value are 0.0336 and 0.2019 respectively, these values are lesser than coefficient of correlation, so the relationship between Loan & advances and Net profit is obviously significant and there is no doubt that if one increase, the another one will also increase and vice-versa.

4.3.5 Coefficient of Correlation between Total deposit and Net profit.

Coefficient of correlation between total deposits and net profit measures the degree of relationship between total deposits and net profit. In correlation analysis total deposit is the independent variable (Y) and net profit is dependent variable (X). The purpose of computing the coefficient of correlation is to justify whether the bank significantly utilization of deposits for income generating purpose or not and whether there is any relationship between these two variables. To find out the correlation (r) various calculation are done. The following table shows the correlation coefficient between Loan & advances and Net profit.

Table-4.24

The correlation coefficient between Total deposit and Net profit.

Bank	r	Relationship	PEr	6PEr	Significant /Insignificant
SBL	0.7798	Positive	0.007321	0.04392	Significant

Source:- (Appendix 13)

From the above table 24, we find coefficient of correlation between Total deposit and Net profit of SBL is 0.7798, which shows the near the perfectly positive correlation between two variables, total deposit and net profit. By considering the probable error, since value of 'r' i.e. 0.7798 is greater than 6 times of PEr i.e. 0.1182, we can say that the value of 'r' is significant.

From the above analysis, it can be concluded that there is significant relationship between Total deposits and Net profit. Thus change in any variable adversely affects the value of other variables.

4.4 Major findings of the study.

- J The composition of current assets on total assets of SBL was fluctuating trend over the study. In average 96.85 % of total assets is held by current assets during the study period. In FY 065/066 the volume of current assets was 17226.73 million which was 96.34 % of Total assets, which is the highest percentage over the study period. All the ratios over the study period are above 96.34 %, which indicates that SBL has high level of working capital in its daily business activities and also it indicates that the bank followed aggressive financing policy.
- J The composition of cash & bank balance to current assets of SBL is in fluctuating trend. The ratio varies from minimum of 8.18 % in the FY 067/068 to maximum of 15.06 % in the FY 068/069. In average there is 10.91 % of current assets is held by cash and bank balance during the study period.
- J The composition of NWC on Current assets of SBL during the 5 year study period was in decreasing trend. The % of NWC on TA was 5.51 % in FY 068/069 & it was 1.96 % in FY 066/067. In average there was 4.29 % of NWC on current assets during the study period. Average NWC is 1092.10 million with coefficient of variation 18.19 %. Also NWC is less variable than Current assets being lower CV.
- J The net working capital of SBL has been increasing and decreasing trend over the study period (065/066 to 069/070). The working capital depicts the liquidity position of any organization. It means higher the working capital higher the liquidity of the firm and vice-versa. Total net working capital of the bank was to Rs. 851.49 million, Rs. 419.75 million, Rs. 1105.52

million, Rs. 1731.73 million, and Rs. 1351.84 million at the end of fiscal year 065/066, 066/067, 067/068, 068/069 and 069/070 respectively.

- J) The current ratio of the bank was decreasing trend, which stands 1.05 of F/Y 065/066, 1.02 at F/Y 066/067, 1.05 at F/Y 067/068, 1.06 at F/Y 068/069 and 1.04 at F/Y 069/070 respectively. As stated by the result, the bank has enough liquidity to remain solvent at the ratio 1.02:1, which is minimum in F/Y 066/067. As depicted by the study, SBL's has satisfactory liquidity.
- J) The quick ratio of the bank is also representing by the current ratio the quick ratio of the bank was quite. Fluctuating, which stands 0.23 at F/Y 065/066, 0.22 at F/y 066/067 , 0.21 at F/y 067/068, 0.09 at F/Y 068/069 and 0.25 at F/Y 069/070.
- J) The cash and bank balance to total deposit ratio excluding fixed deposit of the bank was quite fluctuating which stands 0.09 at F/Y 065/066, 0.12 at F/Y 066/067, 0.08 at F/Y 067/068, 0.16 at F/Y 068/069 and 0.12 at F/Y 069/070. It indicates that how much fund available with the bank to cover its current margin, call and saving deposit of the bank immediately. But the large amount of idle cash and bank balance affects profitability of the bank. As per the study, the bank is in satisfactory position.
- J) The saving deposit to total deposit ratio of the bank was increased in the fiscal year 065/066 and decreasing trend, in F/Y 066/067 to 067/068, which stand 0.22 at F/Y 065/06, 0.15 at F/Y 066/067, 0.15 at F/Y 067/068, 0.22 at F/Y 068/069 and 0.21 at F/Y 069/070. Thus, the ratio indicates the bank's liquidation position. Higher level liquidation position. Higher level of this ratio of the bank indicates to the idle fund too. Form profitability point of view, the bank should minimize the ratio. As stated by the study, SBL's position seems satisfactory level over the study period seems satisfactory level over the period.

-) The absolute liquid ratio during the study period was quite fluctuating. It was fluctuated from 0.09 in the FY 065/066 to 0.12 in the FY 069/070. The average absolute liquid ratio is 0.11. In FY 069/070 there is strong absolute liquidity position and in FY 065/066 & 067/068 there is lowest absolute liquidity position among the study period. As stated by the study SBL's position seem to not satisfactory level over the study period. So management should give extra emphasis over it.
-) Investment to total deposit ratio of the bank was fluctuating trend during the study. It is fluctuated 12% in FY 066/067 & 067/068 to 16% in FY 069/070. The highest ratio 16% in FY 069/070 indicates the higher utilization of total deposits in the investment. As stated by the study, the investment from the total deposit of the bank is not satisfactory level over the study period.
-) The loan and advances to total deposit ratio of SBL was decreasing and increasing trend over the study period. The ratio stands 0.84 at F/Y 065/066, 0.82 at F/Y 066/067, 0.85 at F/Y 067/068, 0.78 at F/Y 068/069 and 0.81 at F/Y 069/070. The ratio indicates the capacity of the bank to mobilization its deposit. As stated by the study, the mobilization of deposit of the bank is not satisfactory level over the study period.
-) The loan and advances to fixed deposit ratio SBL was slightly decreased in F/Y 066/067 to 067/068 but is increase thereafter till at the end of study fiscal year. It stands at 1.88 at the end of study period. These ratios indicate the capacity of mobilizing its fixed deposit to loan and advances. It means, these ratios implies to the utilization of fixed deposit in loan & advances efficiently or not. Form the study; it is found that the bank has been mobilizing its fixed deposit quite satisfactory.
-) The loan and advances, to saving deposit ratio of SBL was decreased in F/Y 065/066, 068/069 and 069/070 and then it's was increasing in F/Y 066/067 & F/Y 067/068. It stands at 3.82 at the end of study period. These

ratios implies that the bank either able to mobilize its saving or not. As per the study, the bank is in satisfactory position over the study period.

- J Interest earned to total assets ratio of any organizations indicates the profitability ratio. The ratio stands 7.08% at F/Y 065/066, 8.85% at F/Y 066/067, 11.02% at F/Y 067/068, 9.83% at F/Y 068/069 and 8.61% at F/Y 069/070, among these ,which 11.02% is maximum and 7.08 is minimum over the study period. Form the study, it is concluded that the interest earned to total assets ratio of SBL is not so much satisfactory. It means, the bank could not able to use its total assets properly to earned interest.
- J The net profit to total assets ratio of the bank SBL was quite fluctuating. The ratio stands 1.22% at F/Y 065/066, 1.06% at F/Y 066/067, 1.28% at F/Y 067/068, 1.12% at F/Y 068/069 and 1.46% at F/Y 069/070, ratio 1.46% is maximum and 1.06% is minimum over the study period. The study depicts that the bank could not able to utilize its total assets to generate profit.
- J The net profit to total deposit ratio of the bank was decreasing and increasing trend. The ratio stands 1.37% at F/Y 065/066, 1.19% at F/Y 066/067, 1.44% at F/Y 067/068, 1.22% at F/Y 068/069 and 1.73% at F/Y 069/070, which 1.73% is maximum and 1.19% is minimum over the study period. This ratio is used to find out whether the bank could able to mobilize outsider's funds properly or not. The efficient mobilization of deposit indicates the better performance of the bank. But at stated above the study, we can found that the bank could not able to mobilize its total deposit efficiently.
- J Total interest expenses to total interest income ratio of SBL during the study period is increasing trend except in FY 067/068 & 068/069, which indicates the decreasing profitability position due to increase in interest expenses than increase in interest income. It was 60 % in 069/070 & in 067/068 it become the highest i.e. 71.56 %, which indicates the increasing

interest expenses than interest income. From the stated above, management of SBL is not able to decrease the ratio of interest expenses to total interest income and which can't be regarded as a satisfactory position.

-) The coefficient of correlation between Net profit and Net working capital was 0.8760 it means high degree of correlation, which is significant. It means there is positive relationship between Net profit and NWC over the study period.
-) The coefficient of correlation between loan and advances and total deposits was 0.0455. It means low degree of correlation, which is insignificant over the study period.
-) The coefficient of correlation between cash & bank balance and current liabilities was 0.3048. It means low degree of correlation, which is insignificant.
-) The coefficient of correlation between loan & advances and net profit is 0.9425. It means high degree of correlation, which is significant.
-) The coefficient of correlation between total deposit and Net profit is 0.7798, it mean high degree of correlation, which is significant.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMENDATIONS

This chapter is the important chapter for the research because this chapter extracts of all the previously discussed chapters. This chapter consists of mainly three parts: Summary, conclusion and Recommendation. In summary part, revision or summary of all four chapters is made. In conclusion part, the result from the research is summed up and in recommendation part, suggestion and recommendation is made based on the result and experience of thesis. Recommendation is made for improving the present situation to the concerned parties as well as for further research.

5.1 Summary

Establishment of commercial banks especially joint venture bank or commercial banks, has economic liberalization policies of the government. As a result, in Nepal there are twenty eight commercial banks at present competing with each other's in their business. These banks have concentrated themselves on financing foreign trade, commerce and industry.

In competitive financial market, performances of commercial banks are very good. The main objective of the study was to evaluate the working capital management as well as financial performance of Siddhartha Bank Ltd. 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. 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 issue 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, current liabilities and interrelationship that exist between them.

The main objective of this study is to evaluate the working capital management of Siddhartha Bank Ltd. The specific objective of the study as:

- a) To analyze the current assets and current liabilities of the bank.
- b) To evaluate the liquidity and profitability position of the bank.
- c) To analyze the financing policy of the bank.

To fulfill the objective, an appropriate research methodology has been developed, which includes ratio analysis as financial tool and trend analysis and correlation coefficient as statistical tools. The major ratio analysis consists of the composition of working capital, liquidity position, turnover position and profitability position. 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.

The following are the major necessary data derived from the balance sheet and profit & loss account of SBL for the period of five years from fiscal year 065/066 to 069/070. In this chapter an attempt has been made to present conclusion and some suggestions and recommendations. The following are the major findings of the study.

- J) Composition of current & total assets percentage were on fluctuating trend over the study period. In average 96.85 % of total assets were held by current assets during the study period. Composition of cash and bank balance with current assets ratios were also in fluctuating trend. In average 10.91 % of current assets were held by cash and bank balance during the study period but composition percentage of NWC on current assets were on

decreasing trend over the study period. In average 4.29 % of current assets were held by Net working capital during the study period.

-) The net working capital of SBL has been increasing trend over the study period.
-) The liquidity positions of banks are analyzed with the current ratio, quick ratio, cash & bank balance to total deposit ratio, saving deposit to total deposit ratio and absolute liquidity ratio. The current ratio of the bank was decreasing trend over the study period. The quick ratio of the bank was fluctuating trend. The cash & bank balance to total deposit ratio of bank was also fluctuating trend over the study period. The saving deposit to total deposit ratio of the bank was increased trend in first two year and then decreasing trend. The quick ratio was in fluctuating trend.
-) The activity of turnover positions of banks are analyzed with the investment to total deposit ratio, loan & advances to total deposit ratio, loan and advances to fixed deposit ratio and loan & advances to saving deposit ratio. The investment to total deposit ratio was in fluctuating trend, the loan & advances to total deposit ratio of the bank was decreasing trend over the study period. The loan & advances to fixed deposit ratio of the bank was increased in F/Y 065/066, 068/069 and 069/070 then decreasing trend. The loan & advances to saving deposit ratio of the bank was fluctuating trend over the study period.
-) The profitability position of the banks are analyzed with interest earned to total assets ratio, Net profit to total assets ratio, Net profit to total deposit ratio and total interest expenses to total interest earned ratio. Interest earned to total assets ratio was in fluctuating trend, Net profit to total assets ratio was also in fluctuating trend, Net profit to total deposit ratio was in decreasing trend and total interest expenses to total interest earned ratio was in increasing trend except in FY 066/067 and 068/069 during the study period.

) The coefficient of correlation between Net profit and Net working capital was 0.8760 it means high degree of correlation, which is significant. The coefficient of correlation between cash & bank balance and current liabilities was 0.3048 it means low degree of correlation, which is insignificant. The coefficient of correlation between loan & advances and net profit was 0.9425. It means high degree of correlation, which is significant. The correlation between total deposit and net profit was 0.7798. It means positive correlation, which is significant.

5.2 Conclusion

In liquidity position, the net working capital of the bank SBL was increasing trend during the study period & the current ratio of SBL was decreasing trend during the study period. It seems to be satisfactory position of liquidity. The cash & bank balance to total deposit ratio of SBL was fluctuating during the study period. But it seems to be satisfactory level.

In activity or turnover position the loan & advances to total deposit ratio of the bank was decreasing trend during the study period. It shows the low capital of the bank to mobilize its deposit.

In profitability position, the interest earned to total assets ratio of the bank was fluctuating trend over the study period. The net profit to total assets ratio was also fluctuating trend during the study period. The net profit to total deposit ratio was decreasing trend during the study period. It seems not to satisfactory level.

In correlation analysis, the coefficient of correlation between loan & advances and total deposit is insignificant over the study period. The coefficient of correlation between loan & advances and net profit, net profit and net working capital, cash & bank balance and current liabilities are significant over the study period.

5.3 Recommendation

On the basis of analysis and finding of this study, some recommendations have made so as to overcome some shortfalls regarding the issue of working capital management of the bank.

-) Working capital is essential to meet short-term obligations. But high level of working capital increased idle fund which affects the profitability of the bank. Therefore, the bank should maintain sound working capital position. It means neither more nor loss. The working capital of SBL has been increasing trend. Thus, the bank should try to maintain sound working capital.
-) The current ratio of the bank is more than one. it means, the bank has sufficient liquidity to remain solvent even at the ratio of 1.02:1 in fiscal year 066/067, which was minimum ratio during the study period. It is true that such higher ratio supposed by the greater ability of bank to pay its bills. But if a bank has more than sufficient current assets is indication of unfavorable of distribution of current assets then current liabilities. Therefore, there is quite higher idle fund. This may result unproductive for bank. Thus, the bank should try to reduce its current assets to increase to increase its profitability.
-) The loan and advances to total deposit ratio indicates the capacity of bank to mobilize, its deposit into loan and advances. It also majors the efficiency of management to utilize their available resources. As found in the above study, the loan and advances to total deposit ratio of SBL was decreasing trend over the study period. The bank could not able to mobilize its total deposit through loan and advances. Therefore, the bank should disburse its total deposit as much as possible by means of loan and advances.
-) The interest earned to total assets ratio is not satisfactory so far. It indicates the bank could not able to utilize its total assets to earned interest.

Therefore, the bank should utilize its available assets as properly as possible to earned interest. For this the bank should lend only in performing loan which makes sure the recovery of principle as well as interest. Therefore, the bank should utilize its available assets as properly as possible to earned interest. For this the bank should lend only in performing loan which makes sure the recovery of principle as well as interest.

-) From the above study, we can found that the bank's net profit to total assets ratio of the bank is not also satisfactory. The bank could not able to utilize its available sources properly to earned profit. Therefore, the bank should utilize its total assets as possible as properly.
-) Net profit to total deposits ratio measures the internal rate of return from the deposits but the above study of SBL shows that bank couldn't able to mobilize the outsiders fund properly because the ratio is in decreasing trend over the study period. Therefore the bank should mobilize its deposits as efficiently as possible.

BIBLIOGRAPHY

Books:

- Gupta, D.P. (1984), *Banking System : Its role in Export Development*, Delhi : Tata McGraw Hill.
- Khan and Jain (1999), *Financial Management Text and Problem*, New Delhi: Third Edition, TATA Mc Graw hall Pvt. Ltd.
- Kothari, C.R. (1989), *Research Methodology Methods & Techniques*, New Delhi: willey Easterley Ltd.
- Manandhar, K.B. and Thapa, kiran (2011), *Managerial Finance*, Kathmandu: Fourth Edition, Khanal Publication Pvt. Ltd.
- Pandey I. M. (1999). *Financial Management* (8th Edition), New Delhi : Vikash Publishing House.
- Pradhan, Radhe Shayam (1986), *Management of Working Capital*, New Delhi : Vikash Publishing House.
- Shrestha K.N and K.D Manandhar (1999), *Statistics and quantitative Techniques for management*, Kathmandu: Valley Publisher.
- Van Horne, Jamess C. (2000). *Financial Management and Policy*. New Delhi : Prentice hall of India Pvt. Ltd.
- Western, J. Fred and Brigham, Dugene, F. (1996) *Managerial Finance*, New Work: Druden Press.

Journal, Articles & Reports:-

- Mahat, L.D. (May 26 2004), *Spontaneous Sources of Working Capital Management*. The Kathmandu Post Daily, Vol. XII.
- Poudel, Narayan Prasad (2053 B.S.), *Financial Statement Analysis*. Nepal Rastra Bank Samachar.
- Shrestha (2039) had carried out his article on, “*working Capital Management in public enterprises: A study on financial results and constraints*.”

Shrestha, Dr. Manohor Krishna (July 1992), *Working Capital Management in Public Enterprise. A Study on Financial Result and Constraint*, Kathmandu, A Quarterly ISDUC Bulletin, Vol. 8.

Siddhartha Bank Limited, Nepal (2065/066-2069/070), *Annual Report*, Kathmandu.

Research Studies:-

Gurung (2058) has carried out his research on “*A study on working capital management of Nepal Lever Limited*.” An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.

Shrestha (2058) has carried out his research on “*working capital management of Dairy Development Corporation.*” An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.

Shrestha (2059) has carried out a research on “*A study on working capital management with respect to National Trading Limited and Salt Trading Corporation Limited.*” An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.

Aryal, Kamal Pursad (2061), *Working Capital Management. A Case Study of Bank of Kathmandu Ltd. Kathmandu*, An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.

Bansal, Payal (2065), *A Comparative Study of Working Capital Management of Standard Chartered. Kathmandu*, An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.

Sharma Subedi Kali Prasad(2066) has conducted thesis research on “*Analysis of working capital management of Joint Venture Banks in Nepal*” An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.

Shrestha (2067) has carried out a research on "*A study on working Capital Management of Nepal Lube Oil Limited.*" An Unpublished Master's Degree Thesis, Shanker Dev Campus, T.U.

Official Web Site:-

www. google.com

Nepal Rastra Bank: <http://www.nrb.org.np>.

Siddhartha bank Ltd.: <http://www.siddharthabank.com>.

Financial Summary of Siddhartha Bank Ltd.
Balance Sheet of SBL at F/Y 065/066 to 069/070

(Rs. in Million)

Capital & Liabilities	065/066	066/067	067/068	068/069	069/070
Share Capital	952.20	1310.44	1618.26	1619.24	1619.24
Reserve and Surplus	326.54	293.11	370.14	564.02	1054.52
Debenture and bonds	227.77	227.77	227.77	627.77	931.29
Borrowings	327.60	345.00	45.00	45.00	787.47
Deposit Liabilities	15854.80	20197.03	21575.65	25948.50	28392.82
Bills Payable	17.88	35.70	2.6	7.72	
Proposed Dividend	7.52	131.45	200.94	136.35	
Income Tax Liabilities	4.84	7.44	15.66	27.47	13.65
Other Liabilities	162.60	254.48	349.75	603.10	871.56
Total Liabilities	17881.75	22802.43	24405.87	29579.20	33670.55

Assets	065/066	066/067	067/068	068/069	069/070
Cash Balance	270.94	326.86	491.24	813.18	3485.77
Balance with NRB	984.98	1027.46	1222.41	2925.08	
Balance with Banks & Financial Institutions	291.76	1052.27	192.02	553.62	
Money at Call & short Notice	484.84	699.04	882.78	647.47	1375.25
Investment	2176.43	2452.47	2537.90	3393.87	4472.84
Loan, Advances & Bill Purchased	13328.62	16653.85	18384.03	20217.58	23110.60
Fixed Assets	13328.16	360.42	368.17	358.71	453.51
Non-Banking Assets	-	-	-	-	
Other Assets	172.02	230.02	327.28	669.66	772.56
Total Assets	17881.75	22802.43	24405.87	29579.20	33670.55

Profit & Loss A/C of SBL at F/Y 061/062 to 065/066

(Rs. In Million)

Particular	065/066	066/067	067/068	068/069	069/070
Interest Income	1265.358	2018.29	2690.29	2906.26	2898.41
Interest Expenses	813.62	1406.49	1925.24	2048.91	1742.84
Net Interest Income	451.96	611.80	765.05	857.35	1155.76
Commission & Discount	32.55	42.75	68.04	108.18	113.06
Other Operating Income	46.35	50.69	62.25	94.50	182.09
Exchange Fluctuating Gain	38.68	12.16	38.68	115.62	156.64
Total Operating Income	569.54	717.42	934.04	1175.66	1607.38
Employees Expenses	79.38	103.68	155.80	173.88	216.53
Other Operating Expenses	114.81	175.73	265.48	336.34	376.88
Exchange Fluctuation Loss	-	-	-	-	-
Operating Profit Before Provision for Possible Loan Loss	375.35	438.00	512.76	665.44	1013.97
Provisions for Possible Losses	39.84	65.32	42.63	155.52	221.41
Operating Profit	335.51	372.68	470.13	509.92	792.56
Non-Operating Income/Loss	-	10.85	1.43	0.91	0.94
Possible Loss Provision written Back	8.85	-	20.87	8.10	-
Profit from Regular Activities	344.36	383.54	492.43	518.92	793.51
P/L from Extraordinary activities	8.85	-	-	-	12.79
Net Profit after Extraordinary Items	335.51	383.54	492.43	518.92	780.72
Provision for staff Bonus	30.50	34.86	44.76	47.18	70.97
Provision for Income Tax	87.09	107.82	136.25	141.30	219.25
a. This year provision	87.09	104.91	136.13	146.62	-
b. Provision up to last year	-	1.36	2.04	0.84	-
Net Profit/loss	217.92	240.85	311.42	330.45	490.49

APPENDIX-1
Calculation of Correlation Coefficient between Current Assets and Total Assets
(Rs. in Million)

Year	CA(X)	$x^2=(X-\bar{X})^2$	TA (Y)	$y^2=(Y-\bar{Y})^2$	XY
065/066	17226.73	50969461.70	17881.78	60624598.99	308044595.98
066/067	21390.85	8851636.529	22802.43	519950813.90	487763359.77
067/068	23295.12	1146826.81	24405.87	595646490.46	568537670.35
068/069	28499.87	17088715.82	29579.20	874929072.64	843003354.70
069/070	31417.44	49722524.02	33670.55	1133705937.30	1057842484.39
Total	dX = 121830.01	dx² = 127779164.90	1dY = 128339.83	dy² =3184856913.30	dxy = 3265191465.20

A) Current Assets

i) Mean (\bar{X}) $X \frac{X}{N} X \frac{121830.01}{5} X 24366.00$

ii) $\dagger_x X \sqrt{\frac{x^2}{N}} X \sqrt{\frac{127779164.90}{5}} X 5055.27$

iii) $CV_x X \frac{\dagger_x}{X} X \frac{5055.27}{24366.00} X 20.74\%$

B) Total Assets

i) Mean (\bar{Y}) $X \frac{Y}{N} X \frac{128339.83}{5} X 25667.96$

ii) $r X \frac{\phi_{xy}}{\sqrt{\phi_{x^2}} \sqrt{\phi_{y^2}}} X \frac{3265191465.20}{\sqrt{127779164.90} \sqrt{3184856913.30}} X 0.51$

APPENDIX-2
Calculation of Cash and Bank Balance of Siddhartha Bank

(Rs. in million)

Year Particular	065/066	066/067	067/068	068/069	069/070
Cash Balance	270.94	326.86	491.24	813.18	3485.77
Balance with NRB	984.98	1027.46	1222.41	2925.08	
Balance with Banks & Financial Institutions	291.76	1052.27	192.02	553.62	
Total cash & Bank balance	1547.68	2406.59	1905.67	4291.88	3485.77

APPENDIX-3

Calculation of current assets and current liabilities.

a) **Components of Current Assets of SBL**

(Rs. In Million)

Fiscal Year	Cash & Bank Balance	Money at Call or Short Notice	Loan & Advances	Govt. Securities	Misc. C.A.	Total CA
065/066	1547.68	484.84	13328.62	1693.57	172.02	17226.73
066/067	2406.59	699.04	16653.85	1401.35	230.02	21390.85
067/068	1905.67	882.78	18384.03	1795.36	327.28	23295.12
068/069	4291.88	647.47	20217.60	2673.26	669.66	28499.87
069/070	3485.77	1375.25	23110.60	2673.26	772.56	31417.44

b) Components of Current Liabilities of SBL

(Rs. In Million)

Fiscal Year	Deposit & Other A/C	Short Term Loan	Bills Payable	Misc. CL	Total CL
065/066	15854.54	327.60	17.88	174.96	16375.24
066/067	20197.03	345.00	35.70	393.37	20971.10
067/068	21575.65	45.00	2.6	566.35	22189.60
068/069	25948.50	45.00	7.72	766.92	26768.14
069/070	28392.92	787.47	-	885.21	30065.60

APPENDIX-4

Calculation of Net working capital (NWC) of SBL

(Rs. In Million)

Fiscal Year	Current Assets (CA)	Current Liabilities (CL)	Net Working Capital WC = CA-CL
065/066	17226.73	16375.24	851.49
066/067	21390.85	20971.10	419.75
067/068	23295.12	22189.60	1105.52
068/069	28499.87	26768.14	1731.75
069/070	31417.44	30065.60	1351.84

APPENDIX-5

Calculation of Coefficient of Variation of NWC

(Rs. in Million)

Year	X(NWC)	x(X Z \bar{X})	x²
065/066	851.49	-240.53	57879.70
066/067	419.75	-672.32	452016.87
067/068	1105.52	13.45	180.85
068/069	1731.75	639.68	409187.94
069/070	1351.84	259.768	67479.41
Total	1dx=5460.35		1dx²=986744.77

$$a) \quad \bar{X} = \frac{\sum X}{N} = \frac{5460.35}{5} = 1092.07$$

$$b) \quad \sigma_x = \sqrt{\frac{\sum \phi x^2}{N}} = \sqrt{\frac{986744.77}{5}} = 198.67$$

$$c) \quad C.V_x = \frac{\sigma_x}{\bar{X}} = \frac{198.67}{1092.07} = 18.19 \%$$

APPENDIX-6

Calculation of Quick Assets

Quick Assets = Cash & Bank + Money at call or short notice + government securities

FY	Particular
065/066	270.94+984.98+291.76+484.84+1693.57 = 3726.09
066/067	326.86+1027.46+1052.27+699.04+1401.35 = 4506.98
067/068	491.24+1222.41+192.02+882.78+1795.36 = 4583.81
068/069	813.18+2925.08+553.62+647.47+2673.26 = 7612.61
069/070	3485.77+1375.25+2673.26 = 7534.28

APPENDIX-7

Calculation of Total Deposits

FY	Fixed Deposit	Saving Deposit	Other Various Deposits	Total Deposits	Total Deposit Except Fixed Deposit
065/066	7158.20	3445.90	5250.7	15854.80	8696.60
066/067	10195.73	2961.25	7040.05	20197.03	10001.30
067/068	11458.27	3169.66	6947.72	21575.65	10117.38
068/069	10966.95	5661.71	9319.84	25948.50	14981.55
069/070	12282.82	6050.00	10060.00	28392.82	16110.00

APPENDIX-8

Calculation of Miscellaneous Current liabilities

FY	Misc. Current Liabilities
065/066	$7.52+4.84+162.60 = 174.96$
066/067	$131.45+7.44+254.48 = 393.37$
067/068	$200.94+15.66+349.75 = 566.35$
068/069	$136+27.47+603.10 = 766.92$
069/070	$0+13.65+871.56 = 885.21$

APPENDIX-9

Calculation of Coefficient Correlation between Net working Capital and Net Profit of SBL.

FY	NWC (X)	NP (Y)	X= (X- \bar{X})	X ²	Y=(Y- \bar{Y})	Y ²	XY
065/066	851.49	217.92	240.58	57878.74	100.30	10061.29	185556.70
066/067	419.75	240.85	672.32	452014.18	-77.37	5987.05	101096.79
067/068	1105.52	311.42	13.45	180.90	-6.80	46.32	344281.04
068/069	1731.75	330.45	639.68	409190.50	12.22	149.43	572256.79
069/070	1351.84	490.49	259.77	67480.45	172.26	29674.89	663064.00
	dX= 5460.35	dY= 1591.13		dX² =986744.77		dY² =45918.97	dXY =1866255.32

a) $\bar{X} = \frac{\sum X}{N} = \frac{5460.35}{5} = 1092.07$

b) $\bar{Y} = \frac{\sum Y}{N} = \frac{1591.13}{5} = 318.22$

c) $r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{1866255.32}{\sqrt{986744.78} \sqrt{45918.97}} = 0.8760$

d) $P_{E_r} = 0.6745 \times \frac{1-r^2}{\sqrt{N}} = 0.6745 \times 1 = 0.07014$

e) $6P_{E_r} = 6 \times 0.07014 = 0.4208$

APPENDIX-10

Calculation of Correlation Coefficient between Loan & Advances (L&A) and Total Deposit/ (TD) of SBL

(Rs. in Million)

F.Y.	L&Y(X)	TD (Y)	$x^2=(X-\bar{X})^2$	$y^2=(Y-\bar{Y})^2$	xy
065/066	13328.62	15854.80	25103106.10	42757997.88	211322604.38
066/067	16653.85	20197.03	336315986.77	4825622.69	336358308.07
067/068	18384.03	21575.65	2034.91	669303.97	396647396.87
068/069	20217.58	25948.50	3529363.40	12636176.47	524615874.63
069/070	23110.60	28392.82	22768930.02	35988720.88	656175105.89
	1dX = 91694.61	1dY = 111968.80	1dx² = 387719421.19	1dy² = =96877821.90	1dxy = 2125119289.83

a) $\bar{X} = \frac{\sum X}{N} = \frac{91694.61}{5} = 18338.92$

b) $\bar{Y} = \frac{\sum Y}{N} = \frac{111968.80}{5} = 22393.76$

c) $r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}} = \frac{2125119289.83}{\sqrt{387719421.19 \times 96877821.90}} = 0.0455$

d) $PEr = r \frac{1}{\sqrt{N}} = 0.0455 \frac{1}{\sqrt{5}} = 0.02391$

e) $6PEr = 6 \times 0.02391 = 0.1434$

APPENDIX-11

Calculation of Correlation Coefficient between Cash & Bank Balance (C&B) and current Liabilities (CL) of SBL

(Rs. in Million)

F.Y.	C&B(X)	CL(Y)	$x^2=(X-\bar{X})^2$	$y^2=(Y-\bar{Y})^2$	XY
065/066	1547.68	16375.24	1382599.71	47591923.72	25343631.44
066/067	2406.59	20971.1	435445878.68	439787035.21	50468839.55
067/068	1905.67	22189.6	3631578.15	492378348.16	42286055.03
068/069	4271.88	26768.14	18248958.73	716533319.06	114350281.90
069/070	3485.77	30065.6	12150592.49	903940303.36	104801766.50
	1dX = 13617.59	1dY =116369.68	1dx²= 470859607.76	1dy² =2600230929.51	1dxy = 337250574.40

a) $\bar{X} = \frac{\sum X}{N} = \frac{13617.59}{5} = 2723.52$

b) $\bar{Y} = \frac{\sum Y}{N} = \frac{116369.68}{5} = 23273.93$

c) $r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{337250574.40}{\sqrt{470859607.76} \sqrt{2600230929.51}} = 0.3048$

d) $P_{E_r} = 0.6745 \times \frac{1-r^2}{\sqrt{N}}$
 $= 0.02736$

e) $6P_{E_r} = 6 \times 0.02736 = 0.1641$

APPENDIX-12

Calculation of Correlation Coefficient between Loan & Advances and Net Profit (Rs. in Million)

F.Y.	NP(X)	L&A(Y)	$x^2 = (X - \bar{X})^2$	$y^2 = (Y - \bar{Y})^2$	XY
065/066	217.92	13328.62	10060.09	25102805.47	2904572.87
066/067	240.85	16653.85	5986.12	2839359.80	4011079.77
067/068	311.42	18384.03	46.24	2037.62	5725154.62
068/069	330.45	20217.58	149.57	3529476.12	6680899.31
069/070	490.49	23110.60	29676.95	22769216.32	11335518.19
	1dx = 1591.13	1dy =91694.48	1dx ² = 45918.97	1dy ² =54242895.33	1dxy = 30657224.77

a) $\bar{X} = \frac{\sum X}{N} = \frac{1591.13}{5} = 318.22$

b) $\bar{Y} = \frac{\sum Y}{N} = \frac{91694.48}{5} = 18338.89$

c) $r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{30657224.77}{\sqrt{45918.97} \sqrt{54242895.33}} = 0.9425$

d) $PEr = \frac{1}{\sqrt{N}} r^2 = \frac{1}{\sqrt{5}} (0.9425)^2 = 0.0336$

e) $6PEr = 6 \times 0.0336 = 0.2019$

APPENDIX-13

Calculation of Correlation Coefficient between Total Deposit and Net Profit.

(Rs. in Million)

FY	NP (X)	Total Deposit (Y)	x = (X - \bar{X})	x²	y = (Y - \bar{Y})	y²	xy
065/066	217.92	15854.80	-100.30	10060.09	-6538.96	42757997.88	3455078.02
066/067	240.85	20197.03	5986.12	5986.12	-2196.73	4825622.69	4864454.68
067/068	311.42	21575.65	46.24	46.24	-818.11	669303.97	6719088.92
068/069	330.45	25948.50	149.57	149.57	3554.74	12636176.47	8574681.83
069/070	490.49	28392.82	29676.95	29676.95	5999.06	35988720.88	13926394.28
	1dx = 1591.13	1dY = 111968.80		dX² = 45918.97		dY² = 96877821.90	dXY = 37539697.72

a) $\bar{X} = \frac{\sum X}{N} = \frac{1591.13}{5} = 318.22$

b) $\bar{Y} = \frac{\sum Y}{N} = \frac{111968.80}{5} = 22393.76$

c) $r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} = \frac{37539697.72}{\sqrt{45918.97} \sqrt{96877821.90}} = 0.7798$

d) $PE_r = 0.6745 \times \frac{1-r^2}{\sqrt{N}}$
 $= 0.1182$

e) $6PE_r = 6 \times 0.1182 = 0.7093$