## CHAPTER - I

## INTRODUCTION

### 1.1 Background of the Study

Bank plays an important role in the economic growth of a country. Banking, when properly organized, aids and facilitates the growth of trade and industry. In the modern economy, banks are to be considered not as dealers in money but as the leaders of development. "Banks are not just the storehouse of the country's wealth but are the reservoirs of resources necessary for economic development. Bank renders valuable services to trade and industry. The economic growth of a country depends on the growth and development of trade and industry. Industrial development can take place only if sufficient money is invested in industries. Banks undertake the stupendous task by mobilizing the savings of the people and lending the same to the traders and industrialists. The bank helps in the uniform development of the different regions in the country (Radhaswany, \& Vasudevan, 1994: 521).

Commercial banks have played a vital role in giving a direction to economy's development over time by financing the requirements of trade and industry in the country. By encouraging thrift among people, banks have fostered the process of capital formation in the country. Commercial bank draw the community savings into the organized sector which can then be allocated.

Among the different economic activities according to the priorities laid down on by planning authorities in the country. In the planned economy, banks make 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, joint sector, or in the private sector, or whether the production is undertaken by one types of organization or another. In short, the growth of the economy is tied with the growth of the commercial banks in the economy.

Commercial banks make sound investment in various sectors of the economy, which boost the quality and quantity of investment as well as achieves, its own objectives of profit maximization. Thus, well-formulated and sound investment policies, coordinated and planned efforts accelerate the pace of economic growth.

Nabil bank was established in 1984 A.D under the company act, Dubai. Nabil Bank Limited was the initial foreign joint venture partner with $50 \%$ equity investment. The shares own by Dubai Bank Limited (DBL) were transfer to Emirates Bank international limited (EBIL) Dubai. later on EBIL sold its entire holding to national Nabil Bank Limited, Bangladesh (NBLB). Nabil Bank Limited had the official name Nepal Arab Bank Limited till December 31 ${ }^{\text {st }}$ 2001. Hence $50 \%$ equity share of Nabil Bank Limited are hold by NBLB and out of another 50\% financial institution has taken $20 \%$ and remaining $30 \%$ were issued to general public of Nepal. At present 52 branches are operating in the different part of the country.

Nabil Bank Limited is the first joint venture bank in Nepal with foreign investment. It is rated as a successful commercial bank. The bank became very popular within very short period of time. It has been helping business communities and the government in different ways since its establishment. It provided modern services to customer. Its service is of international standard which attracted people. It helped general people to know about the banking system and the benefits that they provided. It has been playing significant role in the development of Nepalese economy. Nabil bank is highly successful to create banking habit among the Nepalese people the bank not only holds its capital but also holds the deposit of millions of people which make responsible to the society. This bank has become the bank of the year. It is the first joint venture bank, but it is no more joint venture bank since Dubai Bank Ltd has already withdrawn its share. After the success of the Nabil Bank the two old commercial banks named Nepal Bank Ltd. and Rastraya Banijya Bank followed the footstep laid down by the bank and tried to improve their organization and operation. After the success of Nabil Bank other internationally acclaimed banks imitated its path. So, many joint venture banks established within a short period of time.

Now the commercial banks are being run by bank and financial institution ordinance 2061 which has replaced the previous commercial bank act 2031. According to the ordinance, bank and financial institution are divided into four groups. Commercial banks are placed in group 'A' but not mentioned explicitly. Functions of commercial banks are as follows:

- To accept the deposits with or without interest under current, saving and fixed accounts.
- To provide loan against securities, movable property, company share, or debenture, bills of exchange and promissory notes or invest on them
- To issue, accept, discount, buying or selling of bills of exchange and promissory notes and cheques etc.


### 1.2 Statement of the Problems

Liquidity is the most sensible and critical aspect of banks. The managers should be foresighted and able to predict future demand and supply of liquidity. The bank must always stand ready to meet immediate cash demands made by the depositors and borrower that can be substantial at any time. Bank manager should know the trends of liquidity demand on the basis of passed experience.

Bank must give high priority to meet demands for liquidity. Many depositors were crowded into bank to withdraw their deposit. In this situation, most banks in the Kathmandu valley suffered a lot from the scarcity of liquidity. Thus one of the most important tasks of a liquidity manager is to keep close contact with the bank's largest depositors and holders of large unused credit line. It is essential to predict if and when withdrawals of fund will be made. So close contact and prediction of future liquidity demand provide the bank to make sure that adequate funds are available in time.

Nepal is a small and economically weak developing country, where we find most competition among the commercial banks and it forced to improve their image to let the investors, shareholders attract in their organizations. For that reason, we should have an idea about the above mentioned bank.

Although many commercial banks are established, most of them are not seen so serious regarding dividend decision. Each company has its own policy. There are not any certain rules and regulations.

In these circumstances, this study seeks to find out the solution of the following problems.

1. Whether Nabil Bank is able to maintain adequate liquidity or not?
2. What is the position of liquidity and profitability?
3. What are the liquidity trends of Nabil Bank?

### 1.3 Purposes of the Study

Based on this aspect this field work tries to deal with the study of liquidity position of one joint venture banks, namely Nabil Bank

1. To examine whether or not Nabil bank is able to maintain adequate liquid assets.
2. To examine liquidity and profitability position of Nabil bank.
3. To analyze the trend of different ratios .

### 1.4 Significances of the Study

Generally the study gives emphasis liquidity position of the Nabil bank. While preparing this thesis researcher gain knowledge through their own experience enabling them to deal with problems relating to studies. The study also intends to let reader know about required information by themselves.

The importance of the study is mentioned below:-

1. To get acquainted with some aspect of liquidity by performing various financial analysis.
2. To come to conclusion about the liquidity position of Nabil Bank
3. To find out the position of Nabil Bank in the banking field of Nepal.

### 1.5 Limitations of the Study

Never the less, the analysis performed and conclusion drawn regarding the liquidity position of Nabil Bank; there is considerable place for arguing about its accuracy and reliability. There are limitations which weaken the conclusion e.g. inadequate data, time and other variable; this thesis simply fulfills the requirement of Masters in Business Studies M.B.S(semester) program. So this study will be limited by following factors.

1. Only secondary data available have been analyzed.
2. The study period cover five fiscal year beginning from 2011/12 to 2015/16.
3. There are many factors that affect liquidity of bank, International liquidity and valuation of firm however only related factor are taken into consideration in this study.

### 1.6 Chapter Scheme

The whole study has been divided into five chapters:

## Chapter - I: Introduction

This chapter will deal with the general background of the study with the subject matter of the study. This chapter consist the statement of the problem, objectives of the study, significance of the study and limitation of the study

## Chapter - II: Review of Literature

Second chapter deals with review of Literature. It includes conceptual reviews, review of previous thesis, review of journals and articles that are published in the different newspaper

## Chapter - III: Methodology

Third chapter contains research methodology, which includes general introduction, research design, methods of analysis of tools and techniques.

Chapter - IV: data Analysis \& presentation

This chapter is the heart of the study. This chapter deals with presentation and analysis of relevant data and information's through research methodology.

## Chapter-V: Conclusion

Lastly, this chapter summarizes the whole study and states main findings, issues, gaps and offers recommendation of the improvement in future to the related sector and the conclusion of the study.

Appendix and bibliography will be presented in the last part of the study to get the clear picture of the study

## CHAPTER - II

## LITERATURE REVIEW

### 2.1 Conceptual Review

### 2.1.1 Introduction of Liquidity

Liquidity of the bank should be maintained according to the standard. Excess liquidity as well as lack of liquidity can be considered as bad symptoms to the firm. On the other hand the bank cannot operate its internal and other marketing functions properly. If the bank doesn't hold adequate liquidity, it will not be able to take advantage of favorable business opportunities and meet emergencies such as fires or competitors marketing campaign. A very high degree of liquidity is also bad, here assets remain idle which adds nothing to bank's earning. The firm's funds will be unnecessarily tied up in current assets which could be used otherwise. Thus, researcher can say that the skill of bank to hold adequate liquidity helped to earn its reputation. Thus researcher can say that it is optimum necessity of the bank to maintain a proper balance between high liquidity and low liquidity. Liquidity is the word that the banker uses to describe his ability to satisfy demand for cash in exchange for deposit.

Liquidity is the status and part of asset, which can be used to meet the obligation. Simply it can be viewed in terms of liquidity stored in the balance sheet and in term of liquidity available through purchased funds. The degree of liquidity depends upon the relationship between cash assets plus those assets, which can be quickly turned into cash and the liability awaiting payment (Eugene S.k, 1972 :110).

In banking liquidity is very fundamental for smooth operation of daily banking activities. Thus, liquidity is concerned with maintaining of adequate liquid assets. Liquidity assets of bank includes:-
a. Cash in hand
b. Balance paid with other bank
c. Investment in Government securities
d. Money at call and short notice

### 2.1.2 Principle Theories of Liquidity

Generally the principle theories are specially designed for the banking sectors but it seems not much difference between application of banking sector and financial sector. So in this prospect conflicts between objective of liquidity, safety and profitability relating to finance companies can also be highlighted from given theories. Hence economists have tried to resolve these conflicts by laying down certain theories from time to time. These principle or theories, in fact, govern the distribution of assets keeping in view these objectives. They have also come to be known as the theories of liquidity management, which are discussed as under.

- The Shiftability Theory
- The Real Bill Doctrine
- The Anticipated Income Theory
- The Liability Management


## i) The Shiftability Theory

H.G Mouiton who asserted that if any bank should maintain a substantial amount of assets that can be shifted into the other banks for cash without material loss incase of necessity, then there is no need to rely on maturities propounded the shifted ability theory of liquidity. According to this view, an asset to be perfectly shifted able must be immediately transferable without capital loss when the need for liquidity arises. But in general crisis requires that all banks should possess such asses which can be shifted into the central bank which is the lender of the last resort. This theory has certain elements of truth.

## ii) The Real Bill Doctrine

The real bills doctrine states that any financial company should advance only shortterm self-liquidating productive loans to business firms. Self liquidating loans are those, which are meant to finance the production, storage, transportation and distribution. Which such goods are ultimately sold, the loans are considered to liquidate themselves automatically such short-term self-liquidation productive loan passes three advantage. Firstly they possess liquidity that is why, they liquidate
themselves automatically. Second since they mature in the short run and are for productive purpose, there is no risk of their running into bad debts. Thirdly, being productive such loans earn income for the bank.

## iii) The Anticipated Income Theory

H.V Porch developed the anticipated income theory in 1944 on the basis of the practice of extending term loans by the United State of America (USA) commercial bank of the practice of extending term loan by U.S.A commercial banks. According to this theory, regardless of the nature and character of a borrower's business, the bank or any financial institution plans the liquidation of the long term loan from the anticipated income of the borrower. A term loan is for a period exceeding one year and extending to less than five years. It is granted against the hypothecation of machinery, stock and even immovable property. The bank puts restriction on the financial activities of the borrower while granting loan. At the time of granting a loan, the bank takes into consideration not only the security but also anticipates earning of the borrower. In fact, anticipated income is the main consideration.

This theory is superior to the real bill doctrine and the shiftability theory because it fulfills these objectives of liquidity, safety and profitability. Liquidity is assured to the bank when the borrower saves and repays the loans regularly in installment. It satisfies the safety principle because the bank grants a loan not only on the basis of a good security but also on the ability of the borrower to term loan is assured of regular income. Lastly, the term loan is highly beneficial for the business community, which gets fund for medium-term.

## iv) The Liabilities Management Theory

This theory was developed in the 1960s. According to this theory there is no need for banks to grant self-liquidating loans and keep liquidity assets because they can borrow reserve money in the money market in case of need. A bank can acquire reserves by crating additional liabilities against it, from different sources. These sources include issuing of tie, certificates of deposit, borrowing from other commercial banks, borrowing from central bank, raising of capital funds by issuing shares, and ploughing back profit.

### 2.1.3 Importance of Liquidity

Commercial banks are business firm. Like all business firms, commercial banks attempt to earn profit as high as possible. The bank earns its profit primarily in the form of interest on its earning assets, loan and investments in maximizing profit, it seems reasonable that bank should invest as much as possible it could result into great danger if it could not repay its depositors as demand liquidity is important too, to gain out side confidence and for bank's own survival through difficulties and day to day transaction. The main importance of liquidity is explained below.

## - To Meet the Demand of Depositors

The bank must sage guard its position by maintaining sufficient liquidity. The bank should be able to make prompt payment of cash as demanded by its depositors otherwise will loose its customer's confidence.

## - To Meet the Loan Demand

In order to increase profitability, bank should maintain adequate liquidity to meet demand or borrowers. In case the demand for loan by excellent borrowers could be fulfilled, the bank may loose its customers who are the sources of its high profits.

## - To Maintain Cash Reserve Ratio

Each bank must follow the directive of the Central Bank, otherwise the very bank may be punished. The bank can maintain minimum cash reserve ratio only if it is in good liquidity position.

## - To Maintain Administrative Expenses

A bank having good liquidity position holds adequate cash enough for its internal operation or says administrative expenses, the bank should satisfy its personnel by allowing attractive salary, bonus etc and it will be able to meet other expenses relating to its management affairs.

## - To Maintain Contingencies

Bank should maintain certain position of liquidity for contingencies which may be required to save the bank from future risk such as fire, stickers' competitors etc and
other economic instabilities.

Thus from above explanation researcher can conclude that maintaining adequate liquidity is fundamental function of Bank. Good liquidity position of any bank helps to earn its goodwill.

### 2.1.4 Technique of Liquidity Management

## I. Traditional Model

According to traditional model of liquidity management, it is related to strong liquidity in bank investment or to use control background to use as temporary sources of fund. As this idea is to swift liquid assets into cash and to meet the needs of bank for increased loans demand or deposit to withdrawal is also called as shiftability or assets conversion approach. This approach of liquidity is based on safety at the expresses of profitability; under this approach storing of liquidity can be classified into four types.

## - Primary Reserves

The primary reserve is that part of bank, cash or reserve which can be arranged more than the required statutory such as Cash Reserve Ratio (CRR) or Statutory Liquidity Ratio (SLR). Here the excess statutory reserve can be used for working reserve to avoid impressing cash storage.

## - Secondary Reserve

It includes storing of liquidity in short term government securities such as insuring in treasury bills. It also includes high quality securities with very low default risk.

## - Territory Reserve

It is arranged to provide liquidity protection against long term requirement which is related to increase loan demand or reduce deposit inflow government securities with maturity period of one or two year are includes in it.

## - Investment Reserve

The security with maturity period of more than 2 years is included on investment reserve.

## ii. Liquidity Management Model

Under the liquidity management any institution may generate liquidity by managing its profitability. Although traditional model shows an important part of cash management, it doesn't help to show the appropriate utilization of fund. Therefore several models have been developed to determine cash balance and to maintain profit position. One of the techniques of mixing the cash balance with loan investment is Baumol Model which is based on the high low cash balance. The following model are described as follows

## - Miller Model

Due to high opportunity cost, all liquidity need should not be maintained in cash that bears no returns. It is necessary to maintain cash balance for transition and compensation balance requirement but the liquidity need for the other purpose doesn't need to be in cash. Therefore any financial institution can take advantage by appropriately balancing the available funds between cash and loan investment. The size of cash needs depends on the pattern \& degree of regulating of inflows and outflows. Hence Miller had developed a model known as Miller model, which takes into account the realistic pattern of cash flow and prescribes which and how much to transfer format to investment account vice-versa. This model is based on the assumption that the daily net cash flows receipt minus payments is random in size as well as in the matter of negative or positive flow. Hence this model set a range of high and low limits within which cash balance is allowed to fluctuate and set the target cash balance between these two limits.

## - Baumol Model

According to this model, minimizing the opportunity cost of holding cash and maximizing the return on the fund, the cash balance should be maintained at a minimum level and the funds not required for immediate use, be invested. Baumol model identifies the cash maintenance as analogous to inventory maintenance and demonstrates that the model of economic order quantity. Baumol model is based on the assumption that:

- Cash is used at constant rate
- The periodic cash requirement is more or less save
- There are some cost such as the opportunity cost that increase and other cost such as transaction cost that decrease cash balance

Hence Baumol has conducted that minimum size is the amount of cash that is enough to start with at the beginning of a period to meet the cash need of that period transaction.

### 2.1.5 Strategy of Liquidity Management

Bank needs liquidity to meet loan demands, deposit withdrawal and for maintaining cash reserve ratio as prescribed by central bank. So far the proper management of banking needs good strategy to follow. The liquidity of a bank may be affected by external and internal factors.

The external factor includes

1. Primary Interest Rate
2. Supply and demand position of loan, saving and investment situation
3. Central bank requirement
4. The growth and position of financial markets

The internal factors are:

1. Lending policy
2. Management Capacity
3. Strategic Planning
4. Funds flow situation

The degree of liquidity depends upon the relationship between cash, assets plus those assets, which can be quickly converted into cash. The bank should have proper strategy to invest in those assets which can be quickly converted into cash.

### 2.1.6 Demand and Supply of Bank Liquidity

Bank should maintain sufficient level of liquidity in order to meet immediate nature liabilities and to satisfy the depositors claim for cash when demanded. To maintain the sufficient amount, the bank should observe demand and supply of bank liquidity.

### 2.1.6.1 Demand of Bank Liquidity

In the bank business, liquidity is demanded for following purpose

## - To Meet Depositors Claim

In order to operate banking business, sufficient cash balance or sufficient level of liquid assets must be maintained by all bankers. The requirement of maintaining cash balance as liquid assets depends upon amount of depositors.

To meet off balance sheet liabilities like Letter of Credit (L/C) outstanding guarantee outstanding, forward contact etc.

## - To Meet Cash Reserve Ration (CRR)

Each commercial bank must maintain satisfactory minimum cash reserve ratio as prescribe by central bank because the directive of central bank must be followed by each commercial bank. At present in Nepal each commercial bank must maintain at least $2 \%$ cash in hand in their safety valve $7 \%$ of total value of current and saving account and $4.5 \%$ of total fixed deposit must be maintain as cash reserve with Nepal Rastra Bank

- To meet contingencies like priority sector lending
- To disburse loans and advances
- Payment of interest and commissions


### 2.1.6.2 Supply of Bank Liquidity

The supply of liquidity of a bank will arise from the following headings of its assets and liabilities

## - Cash Balance

The main supply of liquid of a bank comes from cash balance held by itself. So cash balance is the first source of liquidity. Cash balance is also called the first line of defense of bank.

## - Balance with Other Banks

The commercial bank should maintain current account with local and foreign banks for transaction purpose. The banks may maintain more balance with the central bank in excess of required cash reserve ratio will be the source of liquidity.

## - Money of Call and Short Notice

Bank utilize some portion of fund in inter bank call money or overnight placement of fund or advancing for very short period. These funds can be called back with short notice. So it is called as second line of defense of liquidity.

## - Public Deposits

The main source of supply of liquidity is the deposit received from different individuals and institutional deposition. The successful operation and existence of a commercial bank depends upon the proper and profitable mobilization of deposit.

## - Line of Credit from Agency Bank

The other sources of short term capital may be available from foreign banks such as line of credit and over drafting facility allowed by different foreign banks outside the country.

## - Investment in Government (Govt.) Securities

At the time of surplus fund, the bank may invest such funds in government securities, which are very liquid. So investment in the Government (Govt.) securities is also good sources of investment.

### 2.1.7 Predicting Banks Liquidity Needs

Banks liquidity needs can be predicted from following factors.

## - Growth of Banking Habit

Incase people don't transact their business activities like receipts and payment through cheque and credit cards, the actual cash payment by the bank will decline. Thus resulting in the decline of liquidity need in same ratio. On the other hand, if all most people transact through bank then bank is included to maintain sufficient liquidity.

## - Existence of Clearing House

If there is clearing house arrangement, the bank will not need to handle all cash because settlement of going and receiving payments will be done through the debit and credit entries made in the $\mathrm{a} / \mathrm{c}$ book of trading house.

## - The Type and Size of Deposit Accounts

If the bank holds fixed deposit accounts mainly, it need not maintain more liquidity because these deposits will be repaid only after the expiry of fixed period. In case of saving account, withdrawals will be regulated and incase of current $\mathrm{a} / \mathrm{c}$ deposits are withdrawn periodically. The withdrawals might be expected at the time of price fluctuations.

## - Occasion and Festival Period

When people are in festival mood like in Dashain or Tihar or when they are to celebrate certain occasions like marriage ceremonies, they need more money. At that time more liquidity needs can be predicted.

## - Nature of Advance and Facilities of Refinance

The liquidity needs of the bank depends on the credit policy of central bank of securing and refinance facility or the loans already granted by commercial banks and discounting of bills if a bank has utilized discounting business and approved loans then the central bank may provide rediscounting and refinancing facilities in this case bank can predict less liquidity needs.

### 2.2 Review of Related Studies

### 2.2.1 Review of Journals

A central bank is regular controller and supervisor of all banking and monetary
system in any nation. As such, central bank in any country issue directive for maintaining liquidity of each commercial bank. The directive of a central bank of each country of the world depends upon economy and monitory situation for particular nation from time to time. As such in Nepal, Nepal Rastra Bank issue directive of maintaining liquidity to all commercial banks, which does not follow its directive of maintaining required liquidity. In this contest NRB has been issuing several instructions related to criteria of measuring bank liquidity from time to time as per need of the situation of the country.

As defined in the directives effective from 2049 Push $13^{\text {th }}$ to 2050 Ashad $31^{\text {st }}$ each commercial bank has to maintain a type of liquidity which was known as statutory liquidity ratio:

- Statutory Liquidity Ratio(SLR)

1. Each commercial bank must invest at least $22 \%$ of its total deposit liability in Govt. bond, treasury bills and NRB bonds.
2. Each commercial bank must maintain at least $4 \%$ of total deposit in its treasury and at least $8 \%$ of total deposit must credits with NRB a/c.

In $1^{\text {st }}$ Shrawan 2063, the compulsory account investment of $22 \%$ of total deposit by each commercial bank on government bonds, treasury bills and NRB bonds were cancelled. Accordingly from time to time each commercial bank has to maintain cash reserve ratio of $12 \%$ of total deposit by keeping $4 \%$ of cash balance with itself and $8 \%$ with NRB.

According to Banking act of 2063, Nepalese finance company has to maintain the cash under following heading.

- Each finance company has to maintain $7 \%$ cash reserve ratio into current and saving account.
- Each finance company has to maintain cash reserve ratio of $4.5 \%$ under fixed deposit.
- Each finance company has to maintain $2 \%$ cash in hand in their safety valve.

So, Nepal Rastra Bank, as the central bank of Nepal has issued directives of mainly of liquidity to all finance companies operating in Nepal. Nepal Rastra Bank can take strong direct action against any finance companies, which doesn't follow its directives instruction, related to criteria of measuring of bank liquidity from time to time in accordance with the nee of situation of the country regarding the maintenance of cash.

According to NRB act commercial bank has to maintain $10 \%$ reserve of the total deposit that was collected 4 weeks before from the general public, this reserve is calculated by taking 4 week's average. From that $7 \%$ must be deposited into central bank as Cash Reserve Ratio (CRR) and remaining 3\% should be kept as (Statutory Liquid Ratio) SLR by the commercial balk themselves in their safety vault.

If these reserves are not maintained according to the NRB act or less than require is maintained then they are fined according to section 32 's sub-section 2 . In this case for the first week $0.03 \%$, for the second week $0.05 \%$ and $0.1 \%$ for the third week or more shall be fined in the remaining amount.

Despite several policy changes, the problem of excessive liquidity in the banking sector could not be resolved. From $39.3 \%$ in 1997 the liquidity in the banking sector now stands at $44.1 \%$.

In the very first month of 2055 NRB lowered the compulsory cash reserved ratio by $2 \%$ to encourage bank to reduce the spread between their interest rates on lending and deposits. As it failed to generate the desired response, NRB later directed the banks to reduce their interest on lending by $2 \%$ and deposit by $1 \%$.

NRB also changed a statutory requirement for finance companies. Of the reserve that the companies are required to maintain at $8 \%$ of their risky assets, $5 \%$ must be in the form of primary reserves according to the revision, as compared to only $4 \%$ required earlier. (Business Age, April 1999. Vol.:-1 No:-6)

### 2.2.2 Review of Articles

Pradhan (2015) in his article "Financial liquidity assessment and discriminate analysis" the financial ratio analysis to judge the liquidity position of enterprise has become a conventional approach to deal with the problem. However, it does not mean to say that the ratio analysis is not in assessing financial liquidity. It is useful but
seems inadequate.

It may sometime produce misleading results. Moreover, the limitations of ratio analysis arise from the fact that methodology is basically unvaried. That is each ratio is examined in isolation. The combined effects of several ratio are based solely on the judgment of the financial analyst. Therefore, to overcome these shortcomings of ratio analysis, it is necessary to combine different ratios into a meaningful predictive model. For that purpose, the discriminate analysis has been proposed and Altman appeared to be the first person to use it in bankruptcy prediction context in this paper, an effort has been made to show how a discriminate analysis may be useful in assessing the financial liquidity position of the selected public useful, if not optimal result.

### 2.2.3 Review of Thesis

Joshi (2008) in his research paper titled "A study of Financial Performance of Commercial Banks". He has analyzed different ratio of Nabil Bank Ltd for the period of five years till fiscal year 2009. He concludes, liquidity position of commercial banks is sound. Their debt equity ratio is higher and debt on solvency to debt equity ratio is under doubt. Regarding debt solvency to debt equity ratio of local commercial banks is higher than joint venture banks. Conservative credit policy is followed by commercial banks for asset utilization. That is why more investment is done in loan and advances, assets utilization for earning purpose is two third of the total assets. The main source of income for those banks is interest from loans and advances. Overall profit position of NABIL is better than other. Dividend layout ratio of commercial bank should be determined which should be kept in mind of the shareholder's expectations and their growth requirements of the banks.

Karki (1998) entitled "A Comparative Study on the Financial Performance of Finance Companies in Nepal". His studies primarily based on the two finance companies i.e. Universal finance \& Capital market Ltd (UFCM) and Nepal Housing \&Merchant finance (NH\&MF). Its main objective is to find out comparatively the actual financial position of the finance companies. In this regard he has tried to focus on the major problem of finance companies whose stages are only at the growth level as well as the relevant problem in the today's context. Beside, he has also raised relevant problems on interest rates. Other problems, which he has focused, are:

- Financial problem faced by the finance companies.
- With the very few studies on the finance companies is also shown as one of the problem of declaring these studies.
- Nepalese finance companies seem to lack opportunities and counseling if they could overcome these difficulties they could easily attract the prospective entrepreneurs.
- Unfavorable economic situation is also focused on the lacking of the funds and the smooth operation of the finance companies.


## Major Findings:

- Two ratios i.e. current ratio and quick ratio are used to measure the liquidity position. The means of current ratio maintained by UFCM and NH\&MF is found to be lower than the desired standard ratio $2: 1$ which is not assumed as satisfactory.
- The mean of quick ratio maintained by UFCM and NH\&MF are found to be in standard norms $1: 1$ but quick ratio of UFCM is higher than that of NH\&MF although UFCM is in better position than NH\&MF according to the loans and advances to total deposit ratio but in term of total deposit NH\&MF is better than UFCM.
- The overall profitability of NH\&MF is better than that of UFCM; UFCM has also been successful in achieving profitability, even though during the fist year it had negative return. The company was forced to show its loss in subsequent year.
- Debt employed by is observed as 9.03 terms UFCM than its equity so that D/E ratio of UFCM is found to be very high.
- Overall impact of NH\&MF is higher than UFCM. Both companies coefficient of correlation between debt and profit shows their significant condition but NH\&MF is greater than UFCM.
- Return on investment of NH\&MF is in better position than UFCM, which
means it has efficiently generated more profit from investment.
- NH\&MF has contributed more than UFCM to the government for the development of national infrastructure.
- Interest is the major sources of income for both the companies but on an average UFCM is higher than that of NH\&MF. Both companies should try to invest in other sector. Interest expenses of both companies are increasing every year but staff expenses and operating expenses are decreasing gradually.

Finally, he recommended the finance companies to actively participate on the social matters and program in which today's finance companies are far behind. As well as he revealed the paramount field like agriculture for the involvement of the finance companies by opening up operating different branches and to raise the rural economy by making investment in the minimum possible low interest rate. In future companies should explore the areas by expanding their business like leasing, bridge financing and venture capital financing.

Neupane (1999) entitled "Prospect of Finance Companies in Nepal". The study has tried to analyze the overall finance companies. The major objective is to find out the market demand of finance companies in Nepal with reference to the solvency position as well as investment and lending practice. In this regard he has tried to focus his studies on studies on finance company as one of the supportive role in the economic development activities. In possible circumstance, researches believe that it has to prove itself to be the helping status for various concerns. He has tried to show problems regarding to:

- The role of finance company and commercial banks.
- Lack of performance of the finance companies in respect of NRB regulation
- Lack of investment opportunity which they turn out to be a serious matter and may turn out to be disastrous for financial sectors and thus for while country

Major Findings:

- Short terms solvency position of finance companies will be satisfactory. If they continue the same trend and Long-term solvency position is concerned and it
shows weaker trends as they were increasing highly the assets year by year in comparison to shareholder fund.
- A liquidity crisis in future is a case which may come some major credit defaults individual companies as well as financial position and performance of the individual companies are concerned; the wide range of variation among them selves regarding some important financial ratio
- The companies were found highly traditional on lending and investment practice fee based merchant banking activities in satisfactory level

Finally he recommended using management practices, and on this ground he has suggested to mobilize fund non-resident Nepalese as working Nepalese are in high liquidity in foreign countries.

Kandel (2003) in his study-review has conducted that:

- Current ratio, quick ratio and loans and bank balance to total deposit ratio is used to measure the liquidity position of GFIL (Goodwill finance \&investment company ltd) and NH\&MF (Nepal housing and mercantile finance company ltd). According to current ratio, is better than NH\&MF although both companies can discharge their liabilities, they have poor liquidity position of $2: 1$. In general quick ratio of $1: 1$ is considered satisfactory. It is nearly one in case of NH\&MF. So NH\&MF is better than GFIL according to this ratio GFIL is in better position than NH\&MF.
- Loan and advance to total deposit ratio is used to measure the turnover of companies. This strategy is very high in both companies (almost nearly one percent) but in comparison GFIL is able to mobilize its deposit more effectively than NH\&MF.
- Although three ratio viz net profit to total assets, net profit to total assets, net profit to total deposit and return on net worth are used to measure the profitability of GFIL and NH\&MF. During the research, GF is better than NH\&MF is respect of net profit total assets net profit to total deposit and return on net worth ratio. But it has higher fluctuation than NH\&MF.
- Only debt equity ratio is used to measure the capital structure of GFIL and NH\&MF. According to debt equity ratio GFIL is in better position than NH\&MF because according to the general conviction higher the d/e ratio, the grater than risk to the creditors, high proportion of debt in the capital structure will lead to the inflexibility in the operation of the company.
- Nine ratios are used to measure the profit in relation to investment. Although both companies have much less average ROA(Return on assets), GFIL is in better position than NH\&MF but both companies are not utilizing their assets efficiently. According to the return on capital employed ratio, NH\&MF is in better situation than GFIL.

The difference of race between these two companies is very high but both companies have less ROA compared to commercial banks. Return on shareholders equity is high in GFIL. NH\&MF is considered better than GFIL according to the return on investment ratio.

Although GHIF is better than NH\&MF in terms of investment total deposit ratio, it has more fluctuation i.e. $31.63 \%$ against $22.67 \%$. it indicates that GFIL has utilized its deposit in more productive investment opportunities. On an average, ratio of earning per share in NH\&MF is higher than in GFIL. But its fluctuation and range is also high. Thus, NH\&MF is considered to be better than GFIL, although the payment of GFIL dividend is irregular in both companies. GFIL has distributed more dividends within five-year period.

NH\&MF has distributed dividend only in three year, but GFIL has paid dividend in four year and was suffering loss in the year 1994/1995. Both the companies need to adopt a specific dividend policy. In other words, they should adopt a stable dividend policy, such step will probably maximize the wealth of shareholders, reduces uncertainty and help investor to feel more secured. NH\&MF has contributed more than GFIL to the government for the development of national infrastructure. The average tax paid per share of GFIL is less than NH\&MF, due to the loss of both companies i.e. GFIL and NH\&MF couldn't pay any tax in the year 1995/1996 and 1996/1997 respectively. The retention of profit is higher in NH\&MF than in GFIL. The average dividend payout ratio of GFIL is much higher than NH\&MF. It indicates that GFIL has distributed their dividend to its shareholder than NH\&MF.

Profit and loss account of GFIL and NH\&MF shows that major sources of income (i.e. almost $85 \%$ ) is from interest than it is from miscellaneous and other insurance income from interest is increasing every year in both companies. But on an average income from interest is higher in NH\&MF than in GFIL. Similarly, major expenses for both companies are increase. This expense has increased gradually year by year but the average interest expenses of NH\&MF are higher in comparison with GFIL staff expense and office operating expenses of GFIL have decreased every year. In the case of NH\&MF interest has decreased as expected in the fiscal 1999/2000 and 1997/1998.

Bohara (2002) in his research paper titled "A Comparative Study of the Financial Performance of Nepal Arab Bank Limited and Nepal Indosuez Limited" Concludes that to meet the short term obligations both the banks had been maintaining adequate liquidity and utilization of deposit was satisfactory. Both the banks have highly geared capital structure and the capital adequacy ratio of both banks had been maintained in excess than actually required. This study suggested to increased same status of capital structure to reduced financial risks.

Amihud and Mendelson (1988) entitled "Liquidity and Assets Prices: Management Implication", assert that the greater the liquidity of assets, the greater its value. They examine the benefits and increasing liquidity, and the role of a number of financial management policies and institutional arrangements as liquidity enhancing investments. However, this study was not directly related to the stock market but gives clear picture that what is liquidity, why it is important in financial management decisions

They suggested in their study that firms should carry out policies which increase the liquidity of financial claims they issue, since this may lower the required return on these claims and increase their value. Which implies that other thing being equal, a firm could increase its market value by increasing the liquidity of the claims it issues. Increasing liquidity is however costly; thus the firm has to balance the benefits of increased liquidity with the costs. Amihud and Mendelson suggested and observed variety of means which firm can use to increase the liquidity of the claims. The observed corporate financial policies and institutional arrangement are standardization of claims, corporate borrowing, disclosure of inside information, underwriting new public issues, stock denominations listing on organized stock exchange etc.

## CHAPTER-III

## METHODOLOGY

### 3.1 Introduction

Research methodology is the systematic way of solving research problems and which Ultimately refer to the overall research process.

Financial analysis is a major tool of research analysis. This is useful to reflect the liquidity position of the nabil bank. The objective of this study is to analyze the liquidity position of nabil bank to accomplish the objective the study follows the research methodology.

## 3.2 research design

The research is based on the resent historical data, so simply it is a historical research.

Secondary data includes the annual reports published by the relative banks materials have been processed through various process like editing, tabulating, calculating and Result have been interpreted in the form of ratio percentage for clear view.

### 3.3 Population \& Sample

This study is an analysis of liquidity position of Nabil Bank limited .population is all the listed companies in bank. There are a total of 28 commercial banks registered under Nepal. For this, study Nabil bank limited is taken on the basis of convenience sampling.

### 3.4 Sources of Data

Mainly the study is conducted on the basis of secondary data with negligible primary data collected. The data selecting to liquidity position of bank are obtained with the help of concerned bank, balance sheet from 2011/12 to 2015/16. The supplementary data and information have been acquired from journals published by various institutions. Sources of Data are as follows:

### 3.4.2 Secondary Data

The sources of secondary data are those which have already been published, which have been collected by other people. Here the secondary data include the balance sheets of the concerned bank covering fiscal year 2011/12 to 2015/16, literature in college, journal published by various institutions etc.

### 3.5 Data Processing Procedure

Methods of analysis are applied as simple as possible. The obtained data are presented in various tables, diagrams, and charts with supporting interpretation. Those detail calculation that cannot be shown in the body part are presented in the appendices at the end.

### 3.6 Analysis Tools

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

### 3.6.1 Financial Tools

In this thesis various financial tools are used to analyze. There are various ratios but some selected ratios among them are used.

### 3.6.2 Ratio Analysis

Ratio is the expression of one figure in terms of another. It is the expression of relationship between the mutually independent figures. In financial analysis, ratio is used as an index of yardstick for evaluating financial position and performance of firm. So ratio analysis is very much powerful and widely used tool for financial analysis. It is said, as the systematic use of ratio is to interpret the financial statement so that the strengths and weakness of a firm as well as its historical performance and current financial condition can be determined. The essential measured in terms of our studies requirement are as follows.

### 1.6.1.1 Liquidity Ratio

Liquidity is the availability of cash at the time needed at a reasonable cost. if the company has adequate liquidity, it can meet its short-term obligations. this ratio helps
management to turn company smoothly with high degree of creditability in the market and used to measure the companies short-term obligation with short-term resources available at given point of time. Inadequate liquidity bears poor company image in the market and in the market and in such a case financial creditability term borrowing or overdraft may become problem. In the worse case inadequate liquidity can lead to the insolvency of the institution. On the other hand excessive liquidity can tend to lease assets yields and contributes to poor earning performance. This following rating is used to lease assets yields and contribute to poor earning performance of the following ratio which is used to find out the short-term solvency.

## i) Quick Ratio

The quick ratio is used to measure the ability of concerned firms firm to pay current obligation (short term) without depending on other liquid assets of current ratio. It access relationship between quick assets with current liabilities. Assets, which can be converted into cash within short-term period, are liquid assets. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of value.

Quick Ratio $=\frac{\text { Quick Assets }}{\text { CurrentLiabilities }}$

## ii) Current Ratio

Current ratio reflects the strength of current assets available with the company over its current liabilities in one accounting year. Prepaid expenses are also included in current assets as they represent the payment that will not be made by the firm in the future. All obligations maturing within a year are included in current liabilities. The current ratio is a measure of the firm's short-term solvency.

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

### 3.6.1.3 Profitability Ratio

Shareholders, bankers, government, tax collectors, employees and all concern with the profitability of the company where as the shareholders are interested with their rate of return, employees in the future prospect of the company, government in company's
tax payment capacity and bankers in the perspective of the company profitability ratios can be determine on the basis of either sales or investment through the ratio the lender investor decide whether to invest particular or not. Some of important profitability ratios are as follows:

## i) Net Profit to Total Deposit Ratio

It is used for measuring the internal rate of return from deposit. it is computed by dividing the net profit to total deposit higher ratio indicate the return from investment on loans and advances are desirable and lower indicates the fund are not properly mobilized.

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

## ii) Investment to Total Deposit

This ratio basically measures the capacity utilization that means this ratio is affected by the concern financial policy, which is based on implementation aspect of deposit i.e. investment. This ratio is calculated by using following formula.

$$
\text { Investment to Total Deposit }=\frac{\text { Total Investment }}{\text { Total Deposit }}
$$

## iii) Return on Net Worth

The word net worth concerns with the owner claims in the assets of banks. It can be found out by subtracting the total external liabilities from total assets it includes.

- Equity and preference share capital
- Past accumulated profit but includes fictitious assets
- Total assets means all the assets excluding the intangible assets and determine whether the investment in the company is attractive or not higher ratio indicates the higher overall efficiency of the firm or vice-versa.

Keturn on Net Worth $=\frac{\text { Net Profit After Tax and Interest }}{\text { Net Worth }}$

### 3.6.1.4 Activity Turnover/ Utility Ratio

The fund of creditors and owners are invested in various assets to generate sales and profit, activity ratio are employed to evaluate the efficiency which the firms managers and utilizes its assets. This ratio indicates now quickly certain current assets are converted into cash. These ratios are also called turnover ratios because they indicate speed with which assets are converted or turnover into profit generating assets. Following ratio are used under the activity ratios.

## i) Cash \& Bank Balance to Total Deposit Ratio

This ratio is employed to measure whether banker's cash balance is sufficient to cover unexpected demand made by depositor. It is calculated by dividing cash and bank balance by total deposit

## Cash \& Bank balance to Total Deposit Ratio $=\frac{\text { Cash and Bank Balance }}{\text { Total Deposit }}$

## ii) Loan \& Advance to Total Deposit Ratio

The ratio assess to what extend the bankers able to utilize the depositors fund to earn profit by providing loans and advances. It is computed by dividing the total amount of loan and advances but total deposit fund. Higher ratio indicates higher/proper utilization of funds and low ratio is the signal of balance of remained unutilized or remaining idle.

Loan $\&$ Advance to Total Deposit Ratio $=\frac{\text { Loan andAdvance }}{\text { Total Deposit }}$

### 3.6.1.5 Profitability Related to Investment

The profitability ratios can be computed by relating the profits of a firm to its investment. Basically there are three different concepts of investment i.e. assets, capital employed and shareholders equity. Based on each of them, there are three broad categories of ROI's. They are categories as (i) return on assets (i) return on capital employed and (iii) return on shareholders equity.

## i) Return on Assets (ROA)

In ROA, we compute the relationship between net profit and assets with the help of the following formula we can compute ROA as follows:

Keturn un Assets (ROA) $=\frac{\text { Net Profit After Tax }}{\text { Total Assets }}$

## ii) Return on Capital Employed (ROCE)

This ratio measure return of total capital employed which includes shareholders equity or net worth and long term borrowing if the short term borrowing is substantial, and then this can also be converted in capital employed. ROCE has to be greater than the rate of interest.

Keturn un Capital Employed (ROCE) $=\frac{\text { Net Profit After Tax }}{\text { Total Capital Employed }}$

## iii) Return on Shareholders Equity (ROSE)

A return on shareholder equity is calculated to see the profitability of the owner investment. It is the most vital tools judge whether a concern has earned satisfactory return to its owner or not the shareholders equity will include common share of capital, share premium, reserves and surplus less accumulated losses, preference share capital. It is computed by dividing net profit after taxes to shareholder equity.

Keturn un Shareholders Equity (ROSE) $=\frac{\text { Net Profit After Tax }}{\text { Shareholder's Equity }}$

### 3.6.2 Statistical Tools

The relationship between different variables related to study topics will be drawn out using statistical tools. The tools to be used are as follows:

### 3.6.2.1 Trend Analysis

The tools that are used to show grandly increase or decrease of variables over a period of time is known as trend analysis. With the help of trend analysis the tendency of
variables over the period can be seen clearly.

For any given value of independent variable x , the estimate value of y denoted by yc given is
$\mathrm{Yc}=\mathrm{a}+\mathrm{bx}$
$\mathrm{a}=\mathrm{y}$ intercept or value of y when $\mathrm{x}=0$
$\mathrm{b}=$ slope of the trend line or amount of change that comes in y for a unit change in x.

### 3.6.2.2 Mean or Average

The average value is a single value within the range of the data that is used to represent all the values in the series. Since an average is somewhere with in the range of the data, it is also called a measure of central value. Since an average represent the entire data, its value lies somewhat in between the two extremes i.e. the largest and the smallest items there are various types of average. Among them, we take arithmetic mean for measuring average. It is so popular that the word Mean or Average along without qualification is implied to denote these particular types of average value is obtained by adding together all the terms and by dividing this total by the number of items. The formula is given below:
$\overline{\mathrm{X}}=\frac{\Sigma \mathrm{x}}{\mathrm{N}}$
Where,
$\overline{\mathrm{x}}=$ Arithmetic Average
$\Sigma \mathrm{x}=$ Summation for total value of the variables
$\mathrm{N}=$ Numbers of items

### 3.6.2.3 Standard Deviation

The standard deviation is the most important and widely used measure of studying dispersion. It is known as root mean square deviation for the reason that the square root of the mean of the square deviations forms the arithmetic mean. It is also denoted by the small Greek letter (read as sigma). The standard deviation measured the absolute dispersion/ or variability of a distribution. A small standard deviation series,
a large degree of uniformity of the observation as well as homogeneity of series a large standard deviation means just the opposite. Hence, standard deviation is extremely useful for judging the representatives of the mean Symbolically:
$(\sigma)=\sqrt{\frac{\sum \mathrm{d}^{2}}{\mathrm{~N}}}$
Where,
$\sigma=$ Standard deviation
$\Sigma \mathrm{d}^{2}=$ Sum of the squares of the deviations measured from the arithmetic average
$\mathrm{N}=$ number of items

### 3.6.2.4 Coefficient of Variation

The coefficient of variation is the corresponding relative measure of dispersion, comparable across distribution, which is defined as the ratio of the standard deviation to the mean expressed in resulting percentage. it is used in such problem where we want to compare the variation is greater is said to be more variable or conversely less consistent, less uniform, less stable or less homogeneous. on the other hand, the series for which co-efficient of variation is less is said to be less variable or more consistent more uniform, more stable or more homogeneous.

Coefficient of variation (C.V.) $=\frac{o}{\bar{X}}$
Where,
C.V. $=$ Co-efficient of variation
$\sigma=$ Standard deviation
$\overline{\mathrm{X}} \quad=\quad$ Mean/ or average

## CHAPTER- IV

## RESULTS

To achieve the objective set in chapter two, data are presented and analyzed in this chapter. On the whole, this chapter is related to quantity analysis of various ratios.

This chapter is also called the central nervous system, which helps to provide conclusion after detailed analysis, so that proper recommendation can be given at the end of the study. The gist of the research work presents in the form of major findings, vital issues and recommendation in the fifth chapter. In this way this chapter makes proper linkage and associates with every chapter.

On regarding mathematical presentation part this chapter presents the various ratios that affect performance such as: liquidity ratio, activity turnover ratio, profitability ratio. These ratios are the sub-indicator of financial position of a company that compare with the help of statistical tool via trend analysis, mean, standard deviation and co-efficient of variation.

### 4.1 Liquidity Ratio

### 4.1.1 Current Ratio

This 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 the margin of safety, larger the amount of current assets in relation to current liabilities, more the bank ability to meet its current obligations.

The composition of current assets or the main components of current assets of Nabil Bank are cash and bank balance, loan and advance, government securities and other assets.

## Table 4.1

## Current Ratio

(Rs. in million)

| Fiscal Year | Current Assets | Current <br> Liabilities | Ratio | Trend Ratio |
| :--- | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 14602.71 | 10041.03 | 1.45 | 1.40 |
| $2012 / 13$ | 15332.36 | 10969.75 | 1.39 | 1.45 |
| $2013 / 14$ | 18490.1 | 12319.14 | 1.51 | 1.50 |
| $2014 / 15$ | 23186.76 | 14868.90 | 1.56 | 1.55 |
| $2015 / 16$ | 31636.28 | 19482.6 | 1.62 | 1.60 |
| Average Ratio or Mean (M): | 1.51 |  |  |  |
| Stander Deviation: (S.D.) | 0.080 |  |  |  |
| Coe fficient of Variation: (C.V.) | 5.30 |  |  |  |
| a = 1.353, b = -0.051 |  |  |  |  |

Source: Appendix 1 \& 11
The above table no 4.1 depicts that the current ratio of Nabil Bank is fluctuating. In the year 2011/12 current ratio was 1.45 and in the year 2012/13 it decreased to 1.39. in the year 2013/14 it increased and the ratio was 1.51. In year 2014/15 it again increased to 1.51 and increased to 1.56 in the year 2015/16. Highest current ratio was in the year 2015/16 which was 1.62 and the lowest was in the year 2012/13 which was 1.39. The average current ratio is 1.51 . The current ratio in the year 2014/15and 2015/16 is above average. In the year 2011/12 and 2012/13 its ratio is less than the average.

The figure below shows the Current Ratio of Nabil Bank indifferent years

## Figure 4.1

## Current Ratio



Figure 4.2
Trend of Current Ratio of Nabil Bank


The above table shows that the variability in current ratio during the period from $2011 / 12$ to $2015 / 16$ is $5.30 \%$ and the trend of the current ratio is increasing by 0.051 . So this indicates that the current ratio seems to increase in the future. It is a good sign for the company.

### 4.1.2 Quick 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 reasonable soon without a loss of original value. Cash is a most liquid asset. Other assets which
are considered to be relatively liquid and included in quick assets are book debts and marketable securities

For this study, cash and bank balance and government securities are included in quick assets.

## Table 4.2

## Quick Ratio

(Rs. in million)

| Fiscal Year | Quick Assets | Current Liabilities | Ratio | Trend Ratio |
| :---: | :---: | :---: | :---: | :---: |
| 2011/2012 | 5561.83 | 10041.03 | 0.55 | 0.46 |
| 2012/2013 | 3841.75 | 10969.75 | 0.35 | 0.45 |
| 2013/2014 | 4666.61 | 12319.14 | 0.42 | 0.45 |
| 2014/2015 | 6771.71 | 14868.90 | 0.45 | 0.44 |
| 2015/2016 | 9270.39 | 19482.6 | 0.48 | 0.44 |
| Average Ratio or Mean (M): |  |  | 0.45 |  |
| Stander Deviation: (S.D.) |  |  | 0.08 |  |
| Coefficient of Variation: (C.V.) |  |  | 19.33 |  |
| $\mathrm{a}=0.462, \mathrm{~b}=-0.004$ |  |  |  |  |

Source: Appendix 2 \& 12

T he above table no 4.2 depicts that the quick ratio of Nabil Bank are always fluctuating over the study period. In the year 2011/2012the ratio is 0.55 and in the year 2012/2013 it decreased to 0.35 and increased in the year 2013/2014 to 0.42 and again gained points and reached 0.45 in the year 2014/2015 and higher in the year 2015/2016 i.e. 0.48 . By analyzing the above table we can figure out that the highest quick ratio was in the year 2011/2012 and the lowest was in the year 2012/2013. The average ratio is 0.45 The yearly quick ratio in 2011/2012, 2015/2016, are higher than average ratio. In two years of study period i.e. 2012/2013, 2013/2014 the yearly ratio of Nabil Bank are less than average ratio.

The figure below shows the Quick Ratio of Nabil Bank
Figure 4.3
Quick Ratio


Figure 4.4
Trend of Quick Ratio of Nabil Bank


The above table shows that the variability in quick ratio during the period from $2011 / 12$ to $2015 / 16$ is $19.33 \%$ and the trend of the quick ratio is decreasing by 0.004 . So this indicates that the quick ratio seems to decrease in the future. It is not a good sign for the company.

### 4.2 Activity Turnover/ Utility Ratio

### 4.2.1 Cash and Bank Balance to Total Deposit ratio (\%)

This ratio is employed to measure whether banker's cash balance is sufficient to cover
unexpected demand made by depositor. It is calculated by dividing cash and bank balance by total deposit

## Table 4.3

## Cash and Bank Balance to Total Deposit Ratio (\%)

(Rs. in million)

| Fiscal Year | Cash and bank balance | Total Deposit | Ratio (\%) | Trend Ratio |
| :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 970 | 14119 | 6.87 | 4.64 |
| $2012 / 13$ | 559 | 14587 | 3.83 | 5.16 |
| $2013 / 14$ | 630.23 | 19347.4 | 3.26 | 5.68 |
| $2014 / 15$ | 1400 | 23342.3 | 6.00 | 6.20 |
| $2015 / 16$ | 2671.13 | 31915 | 8.37 | 6.72 |
| Average Ratio or Mean (M): |  |  |  |  |
| Stander Deviation: (S.D.) |  | 5.67 |  |  |
| Coefficient of Variation: (C.V.) |  |  |  |  |
| $\mathrm{a}=4.12, \mathrm{~b}=0.52$ |  |  |  |  |

Source: Appendix 3 \& 13

The above table 4.3 shows the capacity of Nabil Bank to meet unanticipated calls on total deposits. Measuring average ratio we can say that only $5.67 \%$ of its total deposit can be fulfilled at the sudden demand of the money. But the large amount of idle cash and bank balance badly affects the profitability of bank.

Fixed deposits are also included in this calculation which has the fixed maturity date and these moneys are not demanded immediately and bank is not responsible to pay those moneys until its maturity.

By analyzing the above table we can say that in the year 2011/12 the ratio was $6.87 \%$ in the year 2012/13 it increased and reached 3.83 and again in the year 2013/14 it increased and reached $3.26 \%$. in the following year it continuously increased and stood $6 \%$, in 2014/15and $8.37 \%$ in 2015/16. Cash and bank balance to total deposit ratio was highest in the year 2015/16 i.e. $8.37 \%$ where as it was lowest in the year 2013/14 i.e. $3.26 \%$. In the yeas 2012/13 and 2013/14the ratio is lower than the average ratio. And in the year 2011/12, 2014/15 and 2015/16 it was higher than
average ratio.

The figure below shows the Cash and Bank Balance to Total Deposit ratio (\%) of Nabil Bank

Figure 4.6
Trend of Cash and Bank Balance to Total Deposit Ratio (\%)


The above table shows that the variability in cash and bank balance to total deposit ratio during the period from $2011 / 12$ to $2015 / 16$ is $33.51 \%$. And the trend of cash and bank balance to total deposit ratio is increasing by 0.52 . So this indicates that the cash and bank balance to total deposit ratio seems to increase in the future. It is a good sign for the company.

### 4.2.2 Loan and Advance to Total Deposit Ratio (\%)

This ratio measures the extent to which bankers are successful in utilizing the outsiders' fund for the profit generating purpose. In other word how quickly total deposits collected are converted into loan and advances given to the client to earn income.

## Table 4.4

## Loan and Advance to Total Deposit Ratio (\%)

(Rs. in million)

| Fiscal Year | Loan and Advance | Total Deposit | Ratio (\%) | Trend Ratio |
| :---: | :---: | :---: | :---: | :---: |
| 2011/2012 | 8190 | 14119 | 58.01 | 63.93 |
| 2012/2013 | 10586 | 14587 | 72.57 | 65.52 |
| 2013/2014 | 13278.8 | 19347.4 | 68.63 | 67.10 |
| 2014/2015 | 15903.02 | 23342.3 | 68.13 | 68.69 |
| 2015/2016 | 21759.5 | 31915 | 68.18 | 70.27 |
| Average Ratio or Mean (M): |  |  | 67.10 |  |
| Stander Deviation: (S.D.) |  |  | 4.83 |  |
| Coefficient of Variation: (C.V.) |  |  | 7.19 |  |
| $\mathrm{a}=62.35, \mathrm{~b}=1.584$ |  |  |  |  |

Source: Appendix 4 \& 14

The table no 4.4 depicts that loan and advance of Nabil Bank is increasing gradually increasing in first two year and then gradually decreasing in last three years. In the year 2011/12 it was 58.01, in 2012/13 it increased and was 72.57 then in 2013/14 it decreased to $68.63 \%$. There after it continuously decreased and was $68.13 \%$ in the year 2014/15 and $68.18 \%$ in the year 2015/16 \%. The average ratio of Nabil Bank was $67.10 \%$ higher than its yearly ratios of first year and last three years and lower than its second year that is (2012/13). The above given ratio shows the percentage of total deposit invested in main income generating assets (i.e. loans \& advances). Measuring the ratio Nabil Bank is unable to meet its full level (i.e. 100\%). Only in year 2012/13 it has reached satisfactory position which is $72.57 \%$.

The figure below shows the Loan and Advance to Total Deposit ratio of Nabil Bank.
Figure 4.7
Loan and Advance to Total Deposit Ratio (\%)


The figure below shows the trend of Loan and Advance to Total Deposit ratio (\%) of Nabil Bank.

Figure 4.8
Trend of Loan and Advance to Total Deposit Ratio (\%)


The above table shows that the variability in loan and advance to total deposit during the period from 2011/12 to 2015/16 is $7.19 \%$ and the trend of the loan and advance to total deposit is increasing by 1.584 . So this indicates that the loan and advance to total deposit seems to increase in the future. It shows that as compared to the previous year total loan and advance is increasing which is a good sign because more loans and advance means more profit to the organization.

### 4.3 Profitability Ratio

### 4.3.1 Net Profit to Total Deposit Ratio (\%)

Deposits are mobilized for investment, loan and advances to the public in generating revenue. The ratio measures the percentage of profit earned from the utilization of the total deposit. The percentage of net profit to total deposit ratio is used for measuring the internal rate of return from deposit.

## Table 4.5

## Net Profit to Total Deposit Ratio (\%)

(Rs. in million)

| Fiscal Year | Net Profit | Total Deposit | Ratio (\%) | Trend Ratio |
| :---: | :---: | :---: | :---: | :---: |
| 2011/2012 | 455 | 14119 | 3.22 | 3.55 |
| 2012/2013 | 519 | 14587 | 3.56 | 3.30 |
| 2013/2014 | 635 | 19347.4 | 3.28 | 3.06 |
| 2014/2015 | 674 | 23342.3 | 2.89 | 2.82 |
| 2015/2016 | 746 | 31915 | 2.34 | 2.58 |
| Average Ratio or Mean (M): |  |  | 3.06 |  |
| Stander Deviation: (S.D.) |  |  | 0.42 |  |
| Coefficient of Variation: (C.V.) |  |  | 13.73 |  |
| $\mathrm{a}=3.79 \mathrm{~b}=-0.243$ |  |  |  |  |

Source: Appendix 5 \& 15

The above table no 4.5 depicts that the net profit to total deposit ratios of Nabil bank. In the first year the study shows $3.22 \%$ and in second year it increased and was $3.56 \%$.In the year 2013/14 it was $3.28 \%$. It starts to decrease from the year 2014/15 to $2.89 \%$ and $2.34 \%$ in the year 2015/16. The ratio was highest in the year 2012/13 and lowest in the year 2015/16. The average ratio is $3.06 \%$. The ratio was above average in the year 2011/12, 2012/13 and 2013/14 and below average in the year 2014/15 and 2015/16.

The figure below shows the Net Profit to Total Deposit ratio (\%) of Nabil Bank
Figure 4.9
Net Profit to Total Deposit Ratio (\%)


The figure below shows the trend of Net Profit to Total Deposit Ratio (\%) of Nabil Bank

Figure 4.10
Trend of Net Profit to Total Deposit Ratio (\%)


The above table shows that the variability in net profit to total deposit ratio during the period from 2011/12 to $2015 / 16$ is $13.73 \%$ and the trend of net profit to total deposit ratio is decreasing by 0.243 . So this indicates that the ratio seems to decrease in the future. It is not a good sign for the company because as compared to the deposit, net profit is in decreasing trend. It does not show the healthy growth of the company.

### 4.3.2 Investment to Total Deposit Ratio (\%)

This ratio basically measures the capacity utilization that means this ratio is affected by the concern financial policy, which is based on implementation aspect of deposit i.e. investment.

## Table 4.6

## Investment to Total Deposit Ratio (\%)

(Rs. in million)

| Fiscal Year | Investment | Total Deposit | Ratio (\%) | Trend Ratio |
| :---: | :---: | :---: | :---: | :---: |
| $2011 / 2012$ | 5836 | 14119 | 41.33 | 36.66 |
| $2012 / 2013$ | 4267 | 14587 | 29.25 | 35.53 |
| $2013 / 2014$ | 6178 | 19347.4 | 31.93 | 34.39 |
| $2014 / 2015$ | 8945 | 23342.3 | 38.32 | 33.27 |
| $2015 / 2016$ | 9940 | 31915 | 31.14 | 32.14 |
| Average Ratio or Mean (M): |  |  |  |  |
| Stander Deviation: (S.D.) |  |  |  | 34.40 |

Source: Appendix 6 \& 16
The above table no 4.6 depicts that the invest to total deposit ratio of Nabil bank was $41.33 \%$ in the year 2011/12 and in the year 2012/13 it decreased and to $29.25 \%$. in the year 2013/14 it increased to $31.93 \%$ in 2014/15 it again increased and stood at $38.32 \%$. It kept its trend going and declined in the year 2015/16 and was $31.14 \%$.

The ratio of Nabil bank is fluctuating. The ratio was highest in the year 2011/12i.e. $41.33 \%$. The ratio is lowest in the year $2012 / 13$ i.e. $29.25 \%$. The average ratio is $34.40 \%$, the ratio is above average in the year 2011/12 and 2014/15, where as below average in the year 2012/13, 2013/14 and 2015/16. The above mention table measures the percentage of total deposit mobilization in investment. On this ground in an average Nabil bank is able to utilize only $34.40 \%$ of their total investment on deposit, which seemed lower than satisfactory.

The figure below shows the Investment to Total Deposit ratio (\%) of Nabil Bank.

Figure 4.11
Investment to Total Deposit Ratio(\%)


The figure below shows the trend of Investment to Total Deposit ratio (\%) of Nabil Bank

Figure 4.12
Trend of Investment to Total Deposit Ratio (\%)


The above table shows that the variability in investment to total deposit ratio during the period from $2011 / 12$ to $2015 / 16$ is $13.43 \%$ and the trend of investment to total deposit ratio is decreasing by 1.131 . So this indicates that the ratio seems to decrease in the future. It shows that as compared to total deposit investment is not increasing. Since profit depends on investment, if investment does not rise as compared to total
deposit it may also hamper the firm's profit.

### 4.3.3 Return on Net Worth (\%)

The word net worth concerns with the owner claims in the assets of banks. It can be found out by subtracting the total external liabilities from total assets.

Table 4.7

## Return on Net Worth (\%)

(Rs. in million)

| Fiscal Year | Net Profit After Tax and Interest | Net Worth | Ratio (\%) | Trend Ratio |
| :---: | :---: | :---: | :---: | :---: |
| 2011/12 | 455 | 1482 | 30.70 | 31.59 |
| 2012/13 | 519 | 1658 | 31.30 | 31.72 |
| 2013/14 | 635 | 1875 | 33.87 | 31.85 |
| 2014/15 | 674 | 2057 | 32.77 | 31.98 |
| 2015/16 | 746 | 2437.2 | 30.62 | 32.11 |
| Average Ratio or Mean (M): |  |  | 31.85 |  |
| Stander Deviation: (S.D.) |  |  | 0.90 |  |
| Coefficient of Variation: (C.V.) |  |  | 2.83 |  |
| $\mathrm{a}=31.46 \quad \mathrm{~b}=0.131$ |  |  |  |  |

Source: Appendix 7 \& 17
The above table no 4.7 shows the percentage of net profit after tax to total owner equity ratio, which is used for measuring the owners' claim in the total assets. Net working capital is sometimes used as a measurement of firm's liquidity, which is basically used to meet its current obligations.

Here in 2011/12 ratio was $30.70 \%$ which inclined in the year 2012/13to $31.30 \%$ in the year 2013/14 it increased and reached $33.87 \%$ and declined in $2014 / 15$ to $32.77 \%$. in the year 2015/16 it decreased and reached $30.62 \%$. the ratio has reached to its lowest point i.e. $30.62 \%$ and in the year 2013/14 is at the highest point i.e. $33.87 \%$. The average return on net worth is $31.85 \%$. In the year 2013/14, and 2014/15 the ratio is above average and in the year 2011/12 and 2012/13 and 2015/16 it is below average
ratio.

The figure below shows the Return on Net worth (\%) of Nabil Bank
Figure 4.13

## Return on Net Worth (\%)



The figure below shows the trend of Return on Net worth (\%) of Nabil Bank

Figure 4.14
Trend of Return on Net worth (\%)


The above table shows that the variability in return on net worth during the period from $2011 / 12$ to $2015 / 16$ is $2.83 \%$ and the trend of the return on net worth is
increasing by 0.131 . So this indicates that the ratio seems to increase in the future. It is a good sign for the company.

### 4.4 Profitability Related to Investment:

### 4.4.1 Return on Assets (\%)

This ratio is useful in measuring the profitability of financial resource invested in the firm's assets. The return on assets or profit to assets ratio is calculated by dividing the amount of net profit by the amount of total assets employed.

Table 4.8

## Return on Assets (\%)

(Rs. in million)

| Fiscal Year | Net Profit After Tax | Total Assets | Ratio (\%) | Trend Ratio |
| :---: | :---: | :---: | :---: | :---: |
| 2011/12 | 455 | 16745 | 2.72 | 3.01 |
| 2012/13 | 519 | 17186 | 3.02 | 2.81 |
| 2013/14 | 635 | 22330 | 2.84 | 2.61 |
| 2014/15 | 674 | 27253.39 | 2.47 | 2.41 |
| 2015/16 | 746 | 37133.76 | 2.00 | 2.21 |
| Average Ratio or Mean (M): |  |  | 2.61 |  |
| Stander Deviation: (S.D.) |  |  | 0.352 |  |
| Coefficient of Variation: (C.V.) |  |  | 13.49 |  |
| $\mathrm{a}=3.21, \quad \mathrm{~b}=-0.199$ |  |  |  |  |

Source: Appendix 8 \& 18
The above table no 8 depicts that the overall profitability ratio i.e. net profit to total assets ratio of Nabil Bank is very low but increasing gradually. In the year 2011/12 it was $2.72 \%$, in the year 2012/13 it increased and was $3.02 \%$, in 2013/14 it decreased to $2.84 \%$, it again decreased in $2014 / 15$ to $2.47 \%$, and also in the year $2015 / 16$ it decreased to $2 \%$. The average ratio of return on assets is $2.61 \%$. In the year, 2011/12, 2012/13 and 2013/14 the ratio is above average and in the year 2014/15 and 2015/16 it is below average ratio.

The ratio is highest in the year 2012/13 i.e. $3.02 \%$ and lowest in 2015/16 i.e. $2 \%$.

The figure below shows the Return on Assets (\%) of Nabil Bank

## Figure 4.15

Return on Assets (\%)


The figure below shows the trend of Return on Assets (\%) of Nabil Bank
Figure 4.16
Trend of Return on Assets (\%)


The above table shows that the variability in return on assets during the period from $2011 / 12$ to $2015 / 16$ is $13.49 \%$ and the trend of the return on assets is decreasing by 0 . 199. So this indicates that the ratio seems to decrease in the future. It is a negative
sign for the company.

### 4.4.2 Return on Capital Employed (\%)

The above-mentioned ratio measures return of total capital employed, which includes shareholders equity or net worth and long-term borrowing. The return on capital employed indicates how well management has used the funds supplied by creditors and owners. Higher the ratio, the more efficient the firm in using funds entrusted to it.

Table 4.9

## Return on Capital Employed (\%)

(Rs. in million)

| Fiscal Year | Net profit after tax | Total Capital Employed | Ratio (\%) | Trend <br> Ratio |
| :---: | :---: | :---: | :---: | :---: |
| 2011/12 | 455 | 1711 | 26.59 | 30.63 |
| 2012/13 | 519 | 1675 | 31 | 28.44 |
| 2013/14 | 635 | 2048 | 31 | 26.25 |
| 2014/15 | 674 | 2939 | 22.93 | 24.06 |
| 2015/16 | 746 | 3797 | 19.64 | 21.87 |
| Average Ratio or Mean (M): |  |  | 26.25 |  |
| Stander Deviation: (S.D.) |  |  | 4.46 |  |
| Coefficient of Variation: (C.V.) |  |  | 16.99 |  |
| $\mathrm{a}=32.82, \mathrm{~b}=-2.19$ |  |  |  |  |

Source: Appendix 9 \& 19
The above table 4.9 depicts that net profit after tax are increasing during the study period as well as total capital employed is increasing. In the year 2011/12 it was $26.59 \%$, in 2012/13 it increased to $31 \%$, in 2013/14 it remains constant at $31 \%$ in the year 2014/15 it decreased and was $22.93 \%$, in the year 2015/16 it again decreased to 19.64\%.

In the year 2012/13 and 2013/14 ratio is highest i.e. $31 \%$ where as it is lowest in the year 2015/16 i.e. $19.64 \%$. The average ratio is $26.25 \%$. In the year 2012/13, and

2013/14 the ratio is above average and in the year 2014/15 and 2015/16 it is below average ratio.

The figure below shows the Return on capital employed (\%) of Nabil Bank
Figure 4.17
Return on Capital Employed (\%)


The figure below shows the trend of Return on Capital Employed (\%) of Nabil Bank

Figure 4.18

Trend of Return on Capital Employed (\%)


The above table shows that the variability in return on capital employed during the period from $2011 / 12$ to $2015 / 16$ is $16.99 \%$ and the trend of the return on capital employed is decreasing by 2.19 . So this indicates that the ratio seems to decrease in
the future. It is not a good sign for the company. Which ultimately effect in good will as well as the profit of the company.

### 4.4.3 Return on Shareholders Equity (\%)

A return on shareholder's equity is calculated to see the profitableness of the owner's investment. It is the most vital tools judge whether a concern has earned satisfactory return to its owner or not the shareholders equity will include common share of capital, share premium, reserves and surplus less accumulated losses

Table 4.10

## Return on Shareholders Equity (\%)

(Rs. in million)

| Fiscal Year | Net Profit After Tax | Shareholder's <br> Equity | Ratio (\%) | Trend <br> Ratio |
| :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 455 | 1482 | 30.70 | 31.59 |
| $2012 / 13$ | 519 | 1658 | 31.30 | 31.72 |
| $2013 / 14$ | 635 | 1875 | 33.87 | 31.85 |
| $2014 / 15$ | 674 | 2057 | 32.76 | 31.98 |
| $2015 / 16$ | 746 | 2437 | 30.61 | 32.11 |
| Average Ratio or Mean (M): |  | 31.85 |  |  |
| Stander Deviation: (S.D.) |  | 0.90 |  |  |
| Coefficient of Variation: (C.V.) |  | 2.83 |  |  |

Source: Appendix 10 \& 20

The above table no 4.10 depicts that retu rn on share holder's equity is steady. In the year 2011/12 it was $30.70 \%$, in the year 2012/13 it increased and was $31.30 \%$, in 2013/14 it increased and reached to $33.87 \%$, it decreased in 2014/15 and reached $32.76 \%$, and decreased in the final year 2015/16 to $30.61 \%$.

It reached at the maximum point in 2013/14 i.e. $33.87 \%$. Its average ratio is $31.85 \%$. In the year, 2013/14 and 2014/15 the ratio is above average and in the year 2011/12, 2012/13 and 2015/16 it is below average ratio.

The figure below shows the Return on Shareholders Equity (\%) of Nabil Bank

Figure 4.19
Return on Shareholders Equity (\%)


The figure below shows the trend of Return on Shareholders Equity (\%) Nabil Bank
Figure 4.20

Trend of Return on Shareholders Equity (\%)


The above table shows that the variability in return on shareholder's equity during the period from 2011/12 to 2015/16 is $2.83 \%$ and the trend of return shareholder's equity is increasing by 0.131 . So this indicates that the ratio seems to increase in the future in a slow motion. It also shows that shareholders are getting as they expect and seems to continue in the future. Anyway this is a good sign for the company.

### 4.5 Major Findings

The major findings of this study during the period of five years of Nabil bank from the analysis are summarized below.

1. The major components of current assets of Nabil bank are cash and bank balance, loan and advance, government securities and other assets. The liquidity position of Nabil bank reviles that the current ratio of the bank is below the normal standard i.e. 2:1, which indicates unsatisfactory liquidity position. In other words form the working capital point of view Nabil bank is following an aggressive working capital policy. The current ratio of Nabil bank is ranging between 1.62 to 1.39 ; it is able to maintain its current ratio of 1.51 in an average. It shows the increase in current ratio for the first year, decreases in the second and increases form third, forth and fifth year. The current ratio trend value of Nabil bank is positive, it has a rising trend which indicates that it will rise in the future as well.
2. The major components of quick assets of Nabil bank are cash and bank balance, government securities. The liquidity position of Nabil bank reviles that the quick ratio of the bank is below the normal standard i.e. 1:1, which indicates unsatisfactory liquidity position. Quick ratio is the ratio between quick assets and the current liabilities, which should be equal. In other words form the working capital point of view Nabil bank is following an aggressive working capital policy. The bank is trying to reduce its idle cash and bank balance for the investment. The quick ratio of Nabil bank is ranging between 0.55 to 0.35 ; it is able to maintain its current ratio of 0.45 in an average. It shows the increase in quick ratio for the first year, decreases in the second and increases in third and again increases in forth and finally in the fifth year. The current ratio trend value if Nabil bank is negative, it has a falling trend which indicates that it will fall in the future as well.
3. Cash and bank balance to total deposit ratio of the Nabil bank is ranging in between $8.37 \%$ to $3.26 \%$ with an average of $5.67 \%$. It in an average indicates that only $5.67 \%$ of the total deposit can be returned to the customer in case of unexpected demand for the money. Fixed deposit is also taken in this calculation which is not demanded immediately and bank is not responsible for the payment of this deposit until its maturity. The trend of this ratio shows a increasing trend
which indicates a good sign for the company and it will further increase in the future
4. Loan and advance to total deposit ratio of the Nabil bank is ranging in between $58.01 \%$ to $72.57 \%$ with an average of $67.10 \%$. It indicates that in an average Nabil bank has invested more than $50 \%$ of its total deposit on loan and advance. Looking at the average ratio it is not satisfactory but in the third year i.e. $2012 / 13$ its ratio has increased to $72.57 \%$ which reflects it is doing better. The loan and advance to total deposit ratio trend value of Nabil bank is positive, it has a rising trend which indicates that it will rise in the future as well. By the calculation we can say that Nabil bank shows fluctuating trend, which indicates that it has planned different strategies and followed definite policy to increase it loan and advance. Ultimately we can say that more loans and advances mean more profit which is good for the firm.
5. Net profit to total deposit ratio of the Nabil bank is ranging in between $2.34 \%$ to $3.56 \%$ with an average of $3.06 \%$. It indicates that in an average Nabil bank make profit of only $3 \%$ from the total deposit. Looking at the average ratio it is not satisfactory but in the third year i.e. 2012/13 it has increased to $3.56 \%$ which is the highest in the study period. The net profit to total deposit ratio trend value of Nabil bank is negative, it has a falling trend which indicates that it will fall in the future as well.
6. Investment to total deposit ratio of the Nabil bank is ranging in between $29.25 \%$ to $41.33 \%$ with an average of $34.40 \%$. It shows that in an average Nabil bank make investment of only $34 \%$ from the total deposit. Looking at the average ratio it is not satisfactory. Ratio in the fiscal year 2011/12 is $41.33 \%$ and then after deceases to $29.25 \%$ and follows a fluctuating trends. It shows that Nabil bank is not investing its deposit collected from its customer. The investment to total deposit ratio trend value of Nabil bank is negative, it has a falling trend which indicates that it will fall in the future as well.
7. Return on net worth comprises net profit after tax \& interest and net worth. Here the study revels that both net profit and net worth rises but the ratio varies form $30.62 \%$ to $33.87 \%$, the highest is in the fiscal year 2013/14 and lowest is in the year 2015/16. It average ratio is $31.85 \%$. Here the net worth refers to paid up
capital, reserve, surplus and undistributed profit. The net worth ratio trend value of Nabil bank is positive; it has a rising trend which indicates that it will rise in the future as well. It also reflects that less reserve and surplus are kept with the bank for the future as compared to net profit.
8. Return on assets comprises net profit after tax and total assets. It shows the percentage of return that a firm gets from the total assets. It shows how well the firm is doing. Here in the study it shows that return on assets is increasing continuously up to the final year. But the trend shows the negative trend which reflects that it is going to fall in the future, which is not a good sign for the company.
9. The return on capital employed is the ratio of net profit after tax to total capital employed. The ratio ranges between $19.64 \%$ to $31 \%$ and its average ratio is $26.25 \%$. The trend moves in a negative direction which reflects that it will fall in the future as well. Lower ratio is not good for the bank and it shows that the bank is not properly utilizing its total capital.
10. The return on shareholder's equity consists of ratio between net profit after tax and shareholder's equity. The ratio ranges between $30.61 \%$ to $33.87 \%$ and its average ratio is around $31.85 \%$.the ratio has an increasing trend. A return on shareholder's equity is calculated to see the profitability of the owner's investment. Higher ratio shows that profitableness of the owner's investment is increasing. It shows whether a concern firm has earned satisfactory return or not.

## CHAPTER - V

## CONCLUSIONS

### 5.1 Summary

Joint venture banks have been helpful in transferring foreign investment and advance technology from one country to another. The liberal trade and investment policies have facilitated joint venture banks to invest in Nepal. Establishment of joint venture banks is a positive sign in the developing countries like Nepal.

There are various joint venture banks established in the country and Nabil Bank is the first joint venture bank. After the implementation of the open market policy, joint venture bank were open as private banks. In the competitive financial market, performances of the joint venture banks are quite satisfactory.

It is very important to know whether or not the banks are serving an important contribution to development of different sectors of the economy. Liquidity is said to be the general business of fund which due banks ability to meet cash requirement. It is the word that the banker uses to describe its ability to satisfy its customer's demand for cash in exchange of their deposits. In this record the study has been based upon the objective to evaluate the liquidity position of Nabil Bank.

This thesis deals with the study of liquidity position of NABIL Bank. It tries to know whether or not Nabil Bank able to maintain an adequate liquid assets. The study gives emphasis on finding out liquidity position by various financial analyses as required.

The study is based upon the secondary data and only covers study period of five year from 2011/12 to 2015/16.

To come to the conclusion various research method are applied. Research design is less descriptive but more prescriptive. Bank's materials have been processed through various processes like editing, tabulating, calculating and result have been interpreted in the form of ratio percentage for clear view.

The major finding through the study is that it has satisfactory liquidity position. It is in danger only in the case of unexpected demand, and threats are only analyzed which is surely going to help the bank for better performance.

### 5.2 Conclusion

Nepal is a developing country. It needs to strengthen its economic 1bank plays vital role in the economic growth of any country. And in Nepal too, they have been proved as prime mover of the economic development. Numbers of commercial banks and development banks are operating in Nepal. The market seems over crowed and the banks are now finding a tough competition among themselves.

1. The increasing trend of various variables like net profit, loans and advance, net worth etc reflects the overall improving performance of Nabil Bank that indicates towards the better financial performance in coming year.
2. A bank's performance can not be judge solely in term of the profit it has earned by maintaining adequate liquidity and safety, but it should also be evaluated on the ground of the contribution it has made to the community, to the government as well as national economy. It means the bank should come forward with the national priorities like more fund mobilization and service to maximum customer, development skill and expertise in the local staff s, earning satisfactory profit and discharging their accountability toward the government. Commercial bank should have a satisfactory profit goal, but not maximum one.
3. Commercial banks are one financial institution which stimulates saving by mobilizing idle resources in one hand and on other hand, lent the resources to mobilized to those who have investment opportunities. Thus, they have served as one institution of development to enhance and promote industrial and agricultural activities in the country. What ever may be the outcome, the deposit mobilization of the finance companies is going favorable and lending capacity has also gone up to considerable extent.
4. In conclusion, Nabil Bank is highly successful in creating banking habits among the Nepalese people, and also holds the deposits of million people. It has found that the bank has maintained the adequate liquidity to meet the demand of its depositors. The current ratio and quick ratio were found close to the desired standard ratio. Cash and bank balance is also found to be in increasing position. Nowadays, the bank is issuing more loans, which means
more profit to the company, which is a good sign for the company. It has found to be invested in large sector and its net profit after tax is also increasing every year. It has even increased the shareholder's equity during the study period.
5. Obviously, it has been following the NRB guidelines with respect to liquidity up to now. The liquidity of a Nabil Bank mostly meets the standard measure and found to be satisfactory.

Therefore, it could say that Nabil Bank has been serving better and has done the good job. And it will definitely do better in future as well.

### 5.3 Implications

From the summary of the main findings of the analysis of the liquidity position of Nabil bank following recommendations can be advanced to overcome the weakness, inefficiency and to improve present position of Nabil bank.

1. Nabil bank mostly focuses on the quality of current assets and current liabilities to develop their own standard current ratio. The fluctuation of ratio must be stabilized under proper diagnosis of the quality, saving and investment situations. Through liquidity position of Nabil bank is favorable in many cases it seems excessive. The proposed recommendation of these banks is to reduce its excessive non-performing assets (cash and bank balance) and invest on the income generating current assets (treasury bills).
2. It is recommended for excessive use of debt capital enhance the rate of return on its shareholder's fund. High leverage cost of capital can be considered as positive development if the increased debt can be invested on income generating performing assets. Failure of advancing loan and advances, this high cost bearing debt may lead ultimately to liquidity or bankruptcy. Therefore, it is recommended to increase their equity capital by issuing of shares, expanding general reserves and retaining more earning.
3. It is recommended that Nabil bank has been providing more loans so, it is utilizing its deposit loan and advance for generating the profit.
4. In order to mobilize the deposits in the productive sector, it has to act according
to the plans and policy of the government. They should come forward to generate new service ideas to run income-generating programmes, to bring women development programmes, to take part in the priority sector development programmes and -poverty alleviation programmes.
5. Nabil bank is using high cost bearing deposit therefore, they must try to decrease them and increase not interest bearing deposit for the reduction of its operational expenses. Without planning and control mechanism, such types of expenses are increasing every year. So, it is recommended to control and reduce various costs in order to boost up profit. Moreover, cost control measures should also be effectively implemented in Nabil bank. It should fond out the loopholes in their operations, and eliminates the unnecessary cost.
6. In Nepal, no different treatment has been extended to the domestic and joint venture banks (JVBs), at least from the government's side, so, the JVBs should look forward to show what they can contribute for the development of the country. One of the present national priorities is small entrepreneurs' development. The JVBs are at present concentrating their business with big clients, like big groups in trade and industry, manufacturers, exporters of garments, carpet and pashminas industries and services related to tourism industries, subsidiaries of multinational companies operating in Nepal etc. their depositors are mainly provident fund, insurance companies, individuals, and foreign subsidiaries. The minimum level of bank balance and the amount needed to open an account in these banks are out of the reach of the economically backward and small investors. So, they should come forward to increase the number of clients, develop entrepreneurship, diversify their business with large number of small investors and come forward to meet the national objective of privatization by mobilizing more entrepreneurs.
7. There may be huge losses that the companies are to occur due to the lack of professional management such as delay in the decision making, vision developing to compete in the market, customer service culture rather than the bureaucratic set-up of mind, accountability towards inventors. Thus if the companies add at expert, professionalism in there managerial body, the earning will boost up.
8. Instead of offering very high rate of interest to depositors to solve the problems of cash mismatch, a company with liquidity problems can borrow for short-term from another finance company with surplus liquidity.
9. Capital structure plays an important role in the profitability as well as the longterm solvency of a firm. It is by ensuring a proper balance between the various components of own and debt capital that a commercial bank can stay healthy besides ensuring adequate return to its stakeholders.
10. The efficiency of the market such as development of investment culture, information to investors, simplicity in transitions, non-manipulation, are the basic factors which need to increase through the commercial banks. But government has yet to play a vital role in the context by creating environment to develop such institutions, which may provide consultancy services to the investors for this purpose.
11. Commercial banks are playing with public money that consists of both deposit and investors. As such NRB has to keep a strict watch over their activities to protect the interest of public. For these, regular follow up, as well as regular information must be made mandatory to NRB to have correct evaluation and monitoring of their performance and minimize any irregularities directed in the course of investigation.
12. Most of the commercial banks are concentrated in the city area for resource mobilization, but such concentration in few key areas of the country requires a new shift of focus and strategy to expand regionally to rural areas where scattered public savings can be collected and utilized to formal productive sectors.

## APPENDIX 1

Calculation of Standard deviation and Coefficient of variation of Current Ratio

| Fiscal Year | Observed Data $(x)$ | $(x-\bar{x})$ | $(x-\bar{x})^{2}$ |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1.45 | -0.06 | 0.0036 |
| $2012 / 13$ | 1.39 | -0.12 | 0.0144 |
| $2013 / 14$ | 1.51 | 0 | 0 |
| $2014 / 15$ | 1.56 | 0.05 | 0.0025 |
| $2015 / 16$ | 1.62 | 0.11 | 0.0121 |
|  | $\sum x=7.53$ |  | $\sum(x-\bar{x})^{2}=0.0326$ |

$\bar{x}=\frac{\sum x}{N}=\frac{7.53}{5}=1.51$
S.D. $(\sigma)=\sqrt{\frac{(x-\bar{x})^{2}}{N}}=\sqrt{\frac{0.0326}{5}}=0.080$
C.V. $=\frac{S . D .}{\bar{x}}=\frac{0.08}{1.51} \times 100$

## APPENDIX 2

Calculation of Standard deviation and Coefficient of variation of Quick Ratio

| Fiscal Year | Observed Data $(x)$ | $(x-\bar{x})$ | $(x-\bar{x})^{2}$ |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 0.55 | 0.1 | 0.01 |
| $2012 / 13$ | 0.35 | -0.1 | 0.01 |
| $2013 / 14$ | 0.42 | -0.03 | 0.009 |
| $2014 / 15$ | 0.45 | 0 | 0 |
| $2015 / 16$ | 0.48 | 0.03 | 0.009 |

$\bar{x}=\frac{\sum x}{N}=\frac{2.25}{5}=0.45$
S.D. $=\sqrt{\frac{(x-\bar{x})^{2}}{N}}=\sqrt{\frac{0.038}{5}}=0.087$
$\mathrm{C} . \mathrm{V}=\frac{S . D .}{\bar{x}}=\frac{0.087}{0.45} \times 100=19.33 \%$

## APPENDIX 3

Calculation of Standard Deviation and Coefficient of Variation of Cash and Bank Balance to Total Deposit Ratio

| Fiscal Year | Observed Data $(x)$ | $(x-\bar{x})$ | $(x-\bar{x})^{2}$ |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 6.87 | 1.2 | 1.44 |
| $2012 / 13$ | 3.83 | -1.84 | 3.39 |
| $2013 / 14$ | 3.26 | -2.41 | 5.81 |
| $2014 / 15$ | 6 | 0.33 | 0.109 |
| $2015 / 16$ | 8.37 | 2.7 | 7.29 |
|  | $\sum x=28.33$ |  | $\sum(x-\bar{x})^{2}=18.04$ |

$\bar{x}=\frac{\sum x}{N}=\frac{28.33}{5}=5.67$
S.D. $=\sqrt{\frac{(x-\bar{x})^{2}}{N}}=\sqrt{\frac{18.04}{5}}=1.90$
C.V $=\frac{S . D .}{\bar{x}}=\frac{1.9}{5.67} \times 100=33.51 \%$

## APPENDIX 4

Calculation of Standard Deviation and Coefficient of Variation of Loan and Advance to Total Deposit Ratio

| Fiscal Year | Observed Data $(x)$ | $(x-\bar{x})$ | $(x-\bar{x})^{2}$ |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 58.01 | -9.09 | 82.63 |
| $2012 / 13$ | 72.57 | 5.47 | 29.92 |
| $2013 / 14$ | 68.63 | 1.53 | 2.34 |
| $2014 / 15$ | 68.13 | 1.03 | 1.06 |
| $2015 / 16$ | 68.18 | 1.08 | 1.17 |
|  | $\sum x=335.52$ |  | $\sum(x-\bar{x})^{2}=117.12$ |

$\bar{x}=\frac{\sum x}{N}=\frac{335.52}{5}=67.10$
S.D. $=\sqrt{\frac{(x-\bar{x})^{2}}{N}}=\sqrt{\frac{117.12}{5}}=4.83$
C.V. $=\frac{S . D .}{\bar{x}}=\frac{4.83}{67.10} \times 100=7.19 \%$

## APPENDIX 5

Calculation of Standard Deviation and Coefficient of Variation of Net Profit to Total Deposit Ratio

| Fiscal Year | Observed Data $(x)$ | $(x-\bar{x})$ | $(x-\bar{x})^{2}$ |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 3.22 | 0.10 | 0.03 |
| $2012 / 13$ | 3.56 | 0.5 | 0.25 |
| $2013 / 14$ | 3.28 | 0.22 | 0.05 |
| $2014 / 15$ | 2.89 | -0.17 | 0.03 |
| $2015 / 16$ | 2.34 | -0.72 | 0.52 |

$\bar{x}=\frac{\sum x}{N}=\frac{15.29}{5}=3.06$
S.D. $=\sqrt{\frac{(x-\bar{x})^{2}}{N}}=\sqrt{\frac{0.88}{5}}=0.42$
C.V. $=\frac{S . D .}{\bar{x}}=\frac{0.42}{3.06} \times 100=13.73 \%$

## APPENDIX 6

## Calculation of Standard Deviation and Coefficient of Variation of Investment to

 Total Deposit Ratio| Fiscal Year | Observed Data $(x)$ | $(x-\bar{x})$ | $(x-\bar{x})^{2}$ |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 41.33 | 6.93 | 48.02 |
| $2012 / 13$ | 29.25 | -5.15 | 26.52 |
| $2013 / 14$ | 31.93 | -2.47 | 6.10 |
| $2014 / 15$ | 38.32 | 3.92 | 15.36 |
| $2015 / 16$ | 31.14 | -3.26 | 10.63 |

$\bar{x}=\frac{\sum x}{N}=\frac{171.97}{5}=34.40$
S.D. $=\sqrt{\frac{(x-\bar{x})^{2}}{N}}=\sqrt{\frac{106.63}{5}}=4.62$
C.V. $=\frac{S . D .}{\bar{x}}=\frac{4.62}{34.40} \times 100=13.43 \%$

## APPENDIX 7

Calculation of Standard Deviation and Coefficient of Variation of Return on Net Worth

| Fiscal Year | Observed Data $(x)$ | $(x-\bar{x})$ | $(x-\bar{x})^{2}$ |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 30.7 | -1.15 | 1.32 |
| $2012 / 13$ | 31.30 | -0.55 | 0.30 |
| $2013 / 14$ | 33.87 | 2.02 | 4.08 |
| $2014 / 15$ | 32.77 | 0.92 | 0.85 |
| $2015 / 16$ | 30.62 | -1.23 | 1.51 |

$\bar{x}=\frac{\sum x}{N}=\frac{159.26}{5}=31.85$
S.D. $=\sqrt{\frac{(x-\bar{x})^{2}}{N}}=\sqrt{\frac{4.06}{5}}=0.90$
C.V. $=\frac{S . D .}{\bar{x}}=\frac{0.90}{31.85} \times 100=2.83 \%$

## APPENDIX 8

## Calculation of Standard Deviation and Coefficient of Variation of

## Return on Assets

| Fiscal Year | Observed Data $(x)$ | $(x-\bar{x})$ | $(x-\bar{x})^{2}$ |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 2.72 | 0.11 | 0.01 |
| $2012 / 13$ | 3.02 | 0.41 | 0.17 |
| $2013 / 14$ | 2.84 | 0.23 | 0.05 |
| $2014 / 15$ | 2.47 | -0.14 | 0.02 |
| $2015 / 16$ | 2.00 | -0.61 | 0.37 |
|  | $\sum x=13.05$ |  | $\sum(x-\bar{x})^{2}=0.62$ |

$\bar{x}=\frac{\sum x}{N}=\frac{13.05}{5}=2.61$
S.D. $=\sqrt{\frac{(x-\bar{x})^{2}}{N}}=\sqrt{\frac{0.62}{5}}=0.352$
C.V. $=\frac{S . D .}{\bar{x}}=\frac{0.352}{2.61} \times 100=13.49 \%$

## APPENDIX 9

## Calculation of Standard Deviation and Coefficient of Variation of Return on

Capital Employed

| Fiscal Year | Observed Data $(x)$ | $(x-\bar{x})$ | $(x-\bar{x})^{2}$ |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 26.59 | 0.34 | 0.12 |
| $2012 / 13$ | 31 | 4.75 | 22.56 |
| $2013 / 14$ | 31 | 4.75 | 22.56 |
| $2014 / 15$ | 23 | -3.25 | 10.56 |
| $2015 / 16$ | 19.64 | -6.61 | 43.69 |
|  | $\sum x=131.23$ |  | $\sum(x-\bar{x})^{2}=99.49$ |

$\bar{x}=\frac{\sum x}{N}=\frac{131.23}{5}=26.25$
S.D. $=\sqrt{\frac{(x-\bar{x})^{2}}{N}}=\sqrt{\frac{99.49}{5}}=4.46$
C.V. $=\frac{S . D .}{\bar{x}}=\frac{4.46}{26.25} \times 100=16.99 \%$

## APPENDIX 10

## Calculation of Standard deviation and Coefficient of variation of Return on

 Shareholder's Equity| Fiscal Year | Observed Data $(x)$ | $(x-\bar{x})$ | $(x-\bar{x})^{2}$ |
| :---: | :---: | :---: | :---: |
| $2011 / 12$ | 30.70 | -1.15 | 1.32 |
| $2012 / 13$ | 31.30 | -0.55 | 0.30 |
| $2013 / 14$ | 33.87 | 2.02 | 4.08 |
| $2014 / 15$ | 32.77 | 0.92 | 0.85 |
| $2015 / 16$ | 30.62 | -1.23 | 1.51 |

$\bar{x}=\frac{\sum x}{N}=\frac{159.26}{5}=31.85$
S.D. $=\sqrt{\frac{(x-\bar{x})^{2}}{N}}=\sqrt{\frac{4.06}{5}}=0.90$
C.V. $=\frac{S . D .}{\bar{x}}=\frac{0.90}{31.85} \times 100=2.83 \%$

## APPENDIX 11

## Calculation of Current Ratio Trend Analysis with Least Square Method

| Fiscal Year | Year(x) | Observed Current <br> ratio (y) | $\mathrm{x}^{2}$ | xy | Trend of <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 1.45 | 1 | 1.45 | 1.40 |
| $2012 / 13$ | 2 | 1.39 | 4 | 2.78 | 1.45 |
| $2013 / 14$ | 3 | 1.51 | 9 | 4.53 | 1.50 |
| $2014 / 15$ | 4 | 1.56 | 16 | 6.24 | 1.55 |
| $2015 / 16$ | 5 | 1.62 | 25 | 8.10 | 1.60 |
| Total | $\Sigma \mathrm{x}=15$ | $\Sigma \mathrm{y}=7.53$ | $\Sigma \mathrm{x}^{2}=55$ | $\Sigma \mathrm{xy}=23.1$ |  |

Here, we have
$\Sigma \mathrm{x}=15 \quad \Sigma \mathrm{y}=7.53 \quad \Sigma \mathrm{x}^{2}=55 \quad \Sigma \mathrm{xy}=23.1$
We know that,
$y=a+b x$
$\Sigma y=\mathrm{an}-\mathrm{b} \Sigma \mathrm{x}$
(eq) 2
$\Sigma \mathrm{xy}=\mathrm{a} \Sigma \mathrm{x}-\mathrm{b} \Sigma \mathrm{x}^{2}$
Now substituting the value in equation $2 \& 3$ we get,
$7.53=5 a+15 b$
................(eq) 4
$23.1=15 a+55 b$
(eq) 5

Now solving the equation $4 \& 5$ by multiplying the equation 4 by 3 we get
$15 a+45 b=22.59$
$15 a+55 b=23.1$
$\qquad$

$$
-10 b=-0.51
$$

Therefore, $\mathrm{b}=0.051$

Again, substituting the value of $b$ in equation 4, we get
$7.53=5 \mathrm{a}+15 \times(-0.051)$
$\mathrm{a}=1.353$

Therefore,
$Y=1.353+(-0.051) x$

Calculation of Trend Analysis
$1.35+1 \times 0.05=1.40$
$1.35+2 \times 0.05=1.45$
$1.35+3 \times 0.05=1.50$
$1.35+4 \times 0.05=1.55$
$1.35+5 \times 0.05=1.60$

## APPENDIX 12

## Calculation of Quick Ratio Trend Analysis with Least Square Method

| Fiscal Year | Year(x) | Observed Quick <br> ratio (y) | $\mathrm{x}^{2}$ | xy | Trend of <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 0.55 | 1 | 0.55 | 0.46 |
| $2012 / 13$ | 2 | 0.35 | 4 | 0.70 | 0.45 |
| $2013 / 14$ | 3 | 0.42 | 9 | 1.26 | 0.45 |
| $2014 / 15$ | 4 | 0.45 | 16 | 1.80 | 0.44 |
| $2015 / 16$ | 5 | 0.48 | 25 | 2.40 | 0.44 |
| Total | $\Sigma \mathrm{x}=15$ | $\Sigma \mathrm{y}=2.25$ | $\Sigma \mathrm{x}^{2}=55$ | $\Sigma \mathrm{xy}=6.71$ |  |

Here, we have
$\Sigma \mathrm{x}=15 \quad \Sigma \mathrm{y}=2.25 \quad \Sigma \mathrm{x}^{2}=55 \quad \Sigma \mathrm{xy}=6.71$

We know that,
$y=a+b x$
(eq) 1
$\Sigma y=a n-b \Sigma x$
$\Sigma x y=a \Sigma x-b \Sigma x^{2}$
(eq) 3

Now substituting the value in equation $2 \& 3$ we get,
$2.25=5 a+15 b$
(eq) 4
$6.71=15 a+55 b$ $\qquad$ (eq) 5

By solving the above equation $4 \& 5$, as done in appendix no, we get the value of a and $b$ as follows:
$a=0.462 \quad b=-0.004$

Calculation of Trend Analysis

$$
\begin{aligned}
& 0.46+1 x(-0.004)=0.46 \\
& 0.46+2 x(-0.004)=0.45 \\
& 0.46+3 \times(-0.004)=0.45 \\
& 0.46+4 x(-0.004)=0.44 \\
& 0.46+5 \times(-0.004)=0.44 \\
& 0.46+1 x(-0.004)=0.46
\end{aligned}
$$

## APPENDIX 13

## Calculation of Cash and Bank Balance to Total Deposit Ratio

## Trend Analysis with Least Square Method

| Fiscal Year | Year(x) | Observed Cash \& bank <br> balance to total deposit <br> ratio (y) | $\mathrm{x}^{2}$ | Xy | Trend of <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 6.87 | 1 | 6.87 | 4.64 |
| $2012 / 13$ | 2 | 3.83 | 4 | 7.66 | 5.16 |
| $2013 / 14$ | 3 | 3.26 | 9 | 9.78 | 5.68 |
| $2014 / 15$ | 4 | 6 | 16 | 24 | 6.20 |
| $2015 / 16$ | 5 | 8.37 | 25 | 41.85 | 6.72 |
| Total | $\Sigma \mathrm{x}=15$ | $\Sigma \mathrm{y}=28.33$ | $\Sigma \mathrm{x}^{2}=55$ | $\Sigma \mathrm{xy}=90.16$ |  |

Here, we have
$\Sigma \mathrm{x}=15 \quad \Sigma \mathrm{y}=28.33 \quad \Sigma \mathrm{x}^{2}=55 \quad \Sigma \mathrm{xy}=90.16$

We know that,
$y=a+b x$
(eq) 1
$\Sigma y=a n-b \Sigma x$
$\Sigma x y=a \Sigma x-b \Sigma x^{2}$
(eq) 3

Now substituting the value in equation $2 \& 3$ we get,
$28.33=5 a+15 b$ $\qquad$
$90.16=15 a+55 b$
(eq) 5

By solving the above equation $4 \& 5$, as done in appendix no, we get the value of a and $b$ as follows:
$\mathrm{a}=4.12$
$\mathrm{b}=0.516$

Calculation of Trend Analysis
$4.12+1 \times 0.52=4.64$
$4.12+2 \times 0.52=5.16$
$4.12+3 \times 0.52=5.68$
$4.12+4 \mathrm{x} 0.52=6.20$
$4.12+5 \mathrm{x} 0.52=6.72$

## APPENDIX 14

## Calculation of Loan and Advance to Total Deposit Ratio Trend Analysis with

## Least Square Method

| Fiscal Year | Year(x) |  <br> advance to total <br> deposit ratio (y) | $\mathrm{x}^{2}$ | Xy | Trend of <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 58.01 | 1 | 58.01 | 63.93 |
| $2012 / 13$ | 2 | 72.57 | 4 | 145.14 | 65.52 |
| $2013 / 14$ | 3 | 68.63 | 9 | 205.89 | 67.10 |
| $2014 / 15$ | 4 | 68.13 | 16 | 272.52 | 68.69 |
| $2015 / 16$ | 5 | 68.18 | 25 | 340.9 | 70.27 |
| Total | $\Sigma \mathrm{x}=15$ | $\Sigma \mathrm{y}=335.52$ | $\Sigma \mathrm{x}^{2}=55$ | $\Sigma \mathrm{xy}=1022.46$ |  |

Here, we have
$\Sigma \mathrm{x}=15 \quad \Sigma \mathrm{y}=335.52 \quad \Sigma \mathrm{x}^{2}=55 \quad \Sigma \mathrm{xy}=1022.46$

We know that,
$y=a+b x$
$\Sigma y=\mathrm{an}-\mathrm{b} \Sigma \mathrm{x}$
(eq) 2
$\Sigma x y=a \Sigma x-b \Sigma x^{2}$

Now substituting the value in equation $2 \& 3$ we get,
$335.52=5 \mathrm{a}+15 \mathrm{~b}$ $\qquad$ (eq) 4
$1022.46=15 \mathrm{a}+55 \mathrm{~b}$ $\qquad$ (eq) 5

By solving the above equation $4 \& 5$, as done in appendix no, we get the value of a and $b$ as follows:
$a=62.35 \quad b=1.584$

Calculation of Trend Analysis
$62.35+1 \times 1.58=63.93$
$62.35+2 \times 1.58=65.52$
$62.35+3 \times 1.58=67.10$
$62.35+4 \times 1.58=68.69$
$62.35+5 \times 1.58=70.27$

## APPENDIX 15

## Calculation of Net Profit to Total Deposit Ratio Trend Analysis with Least

Square Method

| Fiscal Year | Year(x) | Observed net <br> profit to total <br> deposit ratio (y) | $\mathrm{x}^{2}$ | xy | Trend of <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 3.22 | 1 | 3.22 | 3.55 |
| $2012 / 13$ | 2 | 3.56 | 4 | 7.12 | 3.30 |
| $2013 / 14$ | 3 | 3.28 | 9 | 9.84 | 3.06 |
| $2014 / 15$ | 4 | 2.89 | 16 | 11.56 | 2.82 |
| $2015 / 16$ | 5 | 2.34 | 25 | 11.7 | 2.58 |
| Total | $\Sigma \mathrm{x}=15$ | $\Sigma \mathrm{y}=15.29$ | $\Sigma \mathrm{x}^{2}=55$ | $\Sigma \mathrm{xy}=43.44$ |  |

Here, we have
$\Sigma \mathrm{x}=15 \quad \Sigma \mathrm{y}=15.29 \quad \Sigma \mathrm{x}^{2}=55 \quad \Sigma \mathrm{xy}=43.44$

We know that,
$y=a+b x$
(eq) 1
$\Sigma \mathrm{y}=\mathrm{an}-\mathrm{b} \Sigma \mathrm{x}$
(eq) 2
$\Sigma \mathrm{xy}=\mathrm{a} \Sigma \mathrm{x}-\mathrm{b} \Sigma \mathrm{x}^{2}$

Now substituting the value in equation $2 \& 3$ we get,
$15.29=5 a+15 b$
(eq) 4
$43.44=15 a+55 b$ $\qquad$ (eq) 5

By solving the above equation $4 \& 5$, as done in appendix no, we get the value of a and $b$ as follows:
$a=3.79 \quad b=-0.243$

Calculation of Trend Analysis
$3.79+1 x(-0.24)=3.55$
$3.79+2 x(-0.24)=3.30$
$3.79+3 \times(-0.24)=3.06$
$3.79+4 x(-0.24)=2.82$
$3.79+5 x(-0.24)=2.58$

## APPENDIX 16

## Calculation of Investment to Total Deposit Ratio Trend Analysis with Least

Square Method

| Fiscal Year | Year(x) | Observed investment to <br> total deposit ratio (y) | $\mathrm{x}^{2}$ | Xy | Trend of <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 41.33 | 1 | 41.33 | 36.66 |
| $2012 / 13$ | 2 | 29.25 | 4 | 58.5 | 35.53 |
| $2013 / 14$ | 3 | 31.93 | 9 | 95.79 | 34.39 |
| $2014 / 15$ | 4 | 38.32 | 16 | 153.28 | 33.27 |
| $2015 / 16$ | 5 | 31.14 | 25 | 155.7 | 32.14 |
| Total | $\Sigma \mathrm{x}=15$ | $\Sigma \mathrm{y}=171.97$ | $\Sigma \mathrm{x}^{2}=55$ | $\Sigma \mathrm{xy}=504.6$ |  |

Here, we have

$$
\Sigma \mathrm{x}=15 \quad \Sigma \mathrm{y}=171.97 \quad \Sigma \mathrm{x}^{2}=55 \quad \Sigma \mathrm{xy}=504.6
$$

We know that,
$y=a+b x$
$\Sigma y=a n-b \Sigma x$
(eq) 2
$\Sigma x y=a \Sigma x-b \Sigma x^{2}$ (eq) 3

Now substituting the value in equation $2 \& 3$ we get,
$171.97=5 \mathrm{a}+15 \mathrm{~b}$ $\qquad$ (eq) 4
$504.6=15 \mathrm{a}+55 \mathrm{~b}$ $\qquad$ (eq) 5

By solving the above equation $4 \& 5$, as done in appendix no, we get the value of a and $b$ as follows:
$a=37.79 \quad b=-1.131$

Calculation of Trend Analysis
$37.79+1 x(-1.13)=36.66$
$37.79+2 x(-1.13)=35.53$
$37.79+3 x(-1.13)=34.39$
$37.79+4 x(-1.13)=33.27$
$37.79+5 \mathrm{x}(-1.13)=32.14$

## APPENDIX 17

## Calculation of Return on Net Worth Ratio Trend Analysis with Least Square

Method

| Fiscal Year | Year(x) | Observed return on <br> net worth ratio (y) | $\mathrm{x}^{2}$ | Xy | Trend of <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 30.70 | 1 | 30.70 | 31.59 |
| $2012 / 13$ | 2 | 31.30 | 4 | 62.60 | 31.72 |
| $2013 / 14$ | 3 | 33.87 | 9 | 101.61 | 31.85 |
| $2014 / 15$ | 4 | 32.77 | 16 | 131.08 | 31.98 |
| $2015 / 16$ | 5 | 30.62 | 25 | 153 | 32.11 |
| Total | $\Sigma \mathrm{x}=15$ | $\Sigma \mathrm{y}=159.26$ | $\Sigma \mathrm{x}^{2}=55$ | $\Sigma \mathrm{xy}=479.09$ |  |

Here, we have
$\Sigma \mathrm{x}=15 \quad \Sigma \mathrm{y}=159.26 \quad \Sigma \mathrm{x}^{2}=55 \quad \Sigma \mathrm{xy}=479.09$

We know that,
$y=a+b x$
(eq) 1
$\Sigma y=a n-b \Sigma x$
(eq) 2
$\Sigma x y=a \Sigma x-b \Sigma x^{2}$
.(eq) 3

Now substituting the value in equation $2 \& 3$ we get,
$159.26=5 a+15 b$ $\qquad$
$479.09=15 a+55 b$
(eq) 5

By solving the above equation $4 \& 5$, as done in appendix no, we get the value of a and $b$ as follows:
$a=31.46$
$b=0.131$

Calculation of Trend Analysis
$31.46+1 \times 0.13=31.59$
$31.46+2 \times 0.13=31.72$
$31.46+3 \times 0.13=31.85$
$31.46+4 \times 0.13=31.98$
$31.46+5 \times 0.13=32.11$

## APPENDIX 18

## Calculation of Return on Assets Ratio Trend Analysis with Least Square Method

| Fiscal Year | Year(x) | Observed return on <br> assets ratio (y) | $\mathrm{x}^{2}$ | Xy | Trend of <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 2.72 | 1 | 2.72 | 3.01 |
| $2012 / 13$ | 2 | 3.02 | 4 | 6.04 | 2.81 |
| $2013 / 14$ | 3 | 2.84 | 9 | 8.52 | 2.61 |
| $2014 / 15$ | 4 | 2.47 | 16 | 9.88 | 2.41 |
| $2015 / 16$ | 5 | 2 | 25 | 10 | 2.21 |
| Total | $\Sigma \mathrm{x}=15$ | $\Sigma \mathrm{y}=13.05$ | $\Sigma \mathrm{x}^{2}=55$ | $\Sigma \mathrm{xy}=37.16$ |  |

Here, we have
$\Sigma \mathrm{x}=15 \quad \Sigma \mathrm{y}=13.05 \quad \Sigma \mathrm{x}^{2}=55 \quad \Sigma \mathrm{xy}=37.16$

We know that,
$y=a+b x$
$\Sigma y=a n-b \Sigma x$
(eq) 2
$\Sigma x y=a \Sigma x-b \Sigma x^{2}$
(eq) 3

Now substituting the value in equation $2 \& 3$ we get,
$13.05=5 a+15 b$
(eq) 4
$37.16=15 a+55 b$
.(eq) 5

By solving the above equation $4 \& 5$, as done in appendix no, we get the value of a and $b$ as follows:
$\mathrm{a}=3.21$
$b=-0.199$

Calculation of Trend Analysis

$$
\begin{aligned}
& 3.21+1 \times(-0.19)=3.01 \\
& 3.21+2 x(-0.19)=2.81
\end{aligned}
$$

$$
3.21+3 x(-0.19)=2.61
$$

$$
3.21+4 x(-0.19)=2.41
$$

$$
3.21+5 x(-0.19)=2.21
$$

## APPENDIX 19

## Calculation of Return on Capital Employed Ratio Trend Analysis with Least

 Square Method| Fiscal Year | Year(x) | Observed return on <br> capital employed <br> ratio (y) | $\mathrm{x}^{2}$ | Xy | Trend of <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 26.59 | 1 | 26.59 | 30.63 |
| $2012 / 13$ | 2 | 31 | 4 | 62 | 28.44 |
| $2013 / 14$ | 3 | 31 | 9 | 93 | 26.25 |
| $2014 / 15$ | 4 | 23 | 16 | 92 | 24.06 |
| $2015 / 16$ | 5 | 19.64 | 25 | 98.2 | 21.87 |
| Total | $\Sigma \mathrm{x}=15$ | $\Sigma \mathrm{y}=131.23$ | $\Sigma \mathrm{x}^{2}=55$ | $\Sigma \mathrm{xy}=371.79$ |  |

Here, we have
$\Sigma \mathrm{x}=15 \quad \Sigma \mathrm{y}=131.23 \quad \Sigma \mathrm{x}^{2}=55 \quad \Sigma \mathrm{xy}=371.79$

We know that,
$y=a+b x$
$\Sigma y=\mathrm{an}-\mathrm{b} \Sigma \mathrm{x}$
(eq) 2
$\Sigma x y=a \Sigma x-b \Sigma x^{2}$

Now substituting the value in equation $2 \& 3$ we get,
$131.23=5 a+15 b$ $\qquad$ (eq) 4
$371.79=15 \mathrm{a}+55 \mathrm{~b}$ $\qquad$ (eq) 5

By solving the above equation $4 \& 5$, as done in appendix no, we get the value of a
and $b$ as follows: $32.82+1 x(-2.19)=30.63$

$$
\mathrm{a}=32.82 \quad \mathrm{~b}=-2.1932 .82+1 \mathrm{x}(-2.19)=30.63
$$

Calculation of Trend Analysis
$32.82+1 \mathrm{x}(-2.19)=30.63$
$32.82+2 \mathrm{x}(-2.19)=28.44$
$32.82+3 \mathrm{x}(-2.19)=26.25$
$32.82+4 \mathrm{x}(-2.19)=24.06$
$32.82+5 \mathrm{x}(-2.19)=21.87$

## APPENDIX 20

## Calculation of Return on Shareholders Equity Ratio Trend Analysis with Least

Square Method

| Fiscal Year | Year(x) | Observed return on <br> shareholder's equity <br> ratio (y) | $\mathrm{x}^{2}$ | Xy | Trend of <br> ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2011 / 12$ | 1 | 30.70 | 1 | 30.70 | 31.59 |
| $2012 / 13$ | 2 | 31.30 | 4 | 62.6 | 31.72 |
| $2013 / 14$ | 3 | 33.87 | 9 | 101.61 | 31.85 |
| $2014 / 15$ | 4 | 32.77 | 16 | 131.08 | 31.98 |
| $2015 / 16$ | 5 | 30.62 | 25 | 153.1 | 32.11 |
| Total | $\Sigma \mathrm{x}=15$ | $\Sigma \mathrm{y}=159.26$ | $\Sigma \mathrm{x}^{2}=55$ | $\Sigma \mathrm{xy}=479.09$ |  |

Here, we have
$\Sigma \mathrm{x}=15 \quad \Sigma \mathrm{y}=159.26 \quad \Sigma \mathrm{x}^{2}=55 \quad \Sigma \mathrm{xy}=479.09$

We know that,
$y=a+b x$
(eq) 1
$\Sigma \mathrm{y}=\mathrm{an}-\mathrm{b} \Sigma \mathrm{x}$
(eq) 2
$\Sigma x y=a \Sigma x-b \Sigma x^{2}$

Now substituting the value in equation $2 \& 3$ we get,
$159.26=5 a+15 b$ $\qquad$ (eq) 4
$479.09=15 \mathrm{a}+55 \mathrm{~b}$ $\qquad$ (eq) 5

By solving the above equation $4 \& 5$, as done in appendix no, we get the value of a and $b$ as follows:
$a=31.46$
$b=0.131$

Calculation of Trend Analysis
$31.46+1 \times 0.13=31.59$
$31.46+2 \times 0.13=31.72$
$31.46+3 \times 0.13=31.85$
$31.46+4 \times 0.13=31.98$
$31.46+5 \times 0.13=32.11$

## BIBLIOGRAPHY

Bajracharya, B.C. (1996) Business Statistics and Mathematics. Kathmandu: M.K. Publisher and Distributors.

Bhandari, (2003). Banking and Insurance. Kathmandu: Aayush Publication.
Bhattacharya, S.K., \& Derdon, John (1980). Account for Management: Text and Cases. New Delhi: Vikash Publication House Private Limited.

Brigharn, F. Eugence (1986). Financial Management: Theory and Practice. The Dryden Press Llions.

Eugene, S. Klise (1972). Money and Banking. ( $5^{\text {th }}$ Edition).New York: Prentice Hall. Gupta, S.P. (1993). Management Accountancy. Agra: Sahitya Bhavan.

Joshi, P.R. (2001). Research Methodology. Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

Pandey, I.M. (1988). Financial Management. New Delhi: Vikash Publishing House Pvt. Ltd.

Radhaswamy, M. \& Vasudevan, S.V. (1994). Text Book of Banking-Law, Practice and Theory of Banking. New Delhi: Prentice Hall of India.

Regmi, (2005). Banking Industry in Nepal. Kathmandu: Eagle Eye Research Institute.

Sharma, (2001). Statistical Methods. Kathmandu: Khanal Books Prakashan.
Vanhorne, James C. (1991). Financial Management and Policy. (8 $8^{\text {th }}$ edition). New Delhi: Prentice Hall of India.

Western, Fred J., \& Brigham, Eugene F. (1968). Essential of Managerial Finance. New York: Holt Rinehart \& Winston.

Business Age. (April 1999) Vol: 1 No:6.

Subedi, S.d. (2005). A Study on Capital Structure of Nabil Bank Ltd. An Unpublished Master's Degree Dissertation, Submitted to Faculty of Management,

Tribhuvan University, Kirtipur

Thapa, D.b. (1991). A Study on Financial Performance of Bhrikuti Paper Mills Limited. An Unpublished Master's Degree Dissertation, Submitted to Faculty of Management, Tribhuvan University, Kirtipur

## Websites

www.mof.gov.np/nepal/privatisation.html
www.nabilbank.com
www.natialmaster.com
www.nrb.org.np
www.nrb.org.np

