CHAPTER-I

INTRODUCTION

1.1 Background

The developed countries in regarded as a developed due to industrialization development and non-industrialization due to lack of industries in existence. This being the fact, industrialization plays an important role in the rapid economic development of the country. Development of the industrial sector is important in reduce the problem of growing un-employment and poverty. Major portion of agriculturally dependent population need to be diverted to non-agricultural sector to solve the problem of unemployment and underemployment but the industrialization of the country depends upon the performance of industry in exist if the industry in the existence can performing better than its expansion and diversification is possible.

Through the government privatized 16 public enterprises in 9th five year plan but their financial performance is not improved because performance of industries depends on the availability of funds on one hand and people utilization and management of funds on the other hands but these enterprise have poor financing policy and they have not enough funds for investment. By choosing suitable financing mix, these companies can improve their financial performance. The relationship between growth of manufacturing industries and management of short-term financing in particular requires strong tie up to achieve the goal of economy development. Short-term resources availability is an urgent need for the uplift the financial performance of company as well as the national economy.

The performance of the organization can be somehow, improve theory proper financial management. Here the financial management means the selection of source of capital, that can be equity capital, debenture, long-term financing, Short-term financing etc and proper utilization of so raised found. Among the various financing and investing instrument short-term financing is

1

one of theory. Short-term credit includes all of a firm's debt obligations that were originally schedule for repayment within a one year (Moyer, McGuibian, and Kretlow, 1981, p.531). If firm borrows for a long-term use than its interest cost will remain relatively stable over affirm and in case of short-term financing if fluctuate widely as time goes on. In the conduct of its business most of the enterprises have used different types of funds such as long-term funds, medium-term fund and short-term funds. These funds are obtains from a variety of sources. Some capital is provided by supplier, creditor and owner, until others funds arise from retain earning etc. Each source of capital has its own benefit as well as defect. The aggressive financing policy called for the greatest used of short-term debt. Short-term finance is analyses of decision that affect current asset and current liabilities and will frequently have an impact on the firm within a year (Hampton, 1986, p.426).

Most of companies short-term financing is the principle means by when asset are funded. There are various types ranging from spontaneous credit in the form of account payable and accruals to negotiate interest bearing debt (Horne, 1986, p.451).

There are two types of sources of short-term financing, Secured and un secured. In case of secured short-term debt, the borrowing firm pledges certain, specific assets, and it the situation of insolvency or bankruptcy lender has claim on firm's pledging assets. While in unsecured short-term debt a firm borrows credit from the lender without pledging any specific assets. Here the lender has little chances of recovering all the debt in case of insolvency or bankruptcy of borrowing firm. In general, firms prefer to borrow funds on an unsecured basis, since the added administration costs involved in pledging assets raise the cost of loan to the borrower. In secured borrowing agreements can restrict the firm's future borrowing. But it is not easy to get unsecured short-term loan for all the organization and it's paying capacity before landing short-term loan.

All most organization, all the organization practice the short-term financing but amount can differ from one another. The cause behind the wide use of short-term financing is its advantages such as flexibility, availability, cost advantage, tax saving etc. short-term financing is more flexible than long-term financing most enterprises have a constantly varying amount of total aspects, which means a constantly varying need for funds, represented by the total liabilities and net worth. These fluctuations in total assets are irregular and of varying need for funds, represented by the total liabilities and net worth. These fluctuations in total assets are irregular and of varying duration. The funds necessary to meet daily, weekly, monthly or seasonal variations can usually be most beneficially supplied by short term credit for most firms it is easier to secure short-term funds than long-term funds because creditors advancing funds for a few weeks or months generally assume less risk than on longer loans. short-term financing is too more risky than long-term financing because if a firm borrows on a long-term financing because if a firm borrows on a long-term widely to uses basis its interest cost will be relatively stable overtime but it will fluctuate widely to uses short-term credit, at times going quite high (Brigham and Gapenski, 1988, p.653).

Short-term financing provides both the higher and lowest cost funds in the firm capital structure. Some forms of short-term financing are more costly than medium or long-term funds and some are at no cost or less costly to the firm at all (Hampton, 1986, p.503). Short-term financing in many cases may be obtained at lower cost than long-term financing. By cost is meant the interest cost plus any service charge or other costs on an annual basis paid by the borrower in connection with the credit (Hampton, 1986, p.503).

The financial performance of manufacturing companies in Nepal has been very poor. Most manufacturing companies have not been able to earn desirable volume of profit. In this situation there is necessary to analysis the financial resources of manufacturing company. Among the number of reasons leading to inefficient of manufacturing companies, ineffectiveness utilizing of short-term financing in consider to be are one of the key reasons. In this situation there is necessary to analysis the financial resources of the manufacturing companies but only the resource analysis is not enough if the companies are not using appropriate financing policy.

1.2 Statement of Problem

Different studies on manufacturing companies in Nepal show that they have poor financing performance. In this situation there is necessary to analyze the financial resources of the manufacturing companies but only the resources analyzing is not enough if the companies are not using appropriate financing policy. Thus, the study focuses on the short-term services of financing and its utilization. Followings are the major problems that have been identified for the purpose of this study.

- a. Which type of short-term financing Nepalese manufacturing companies like trade credit, accruals, commercial paper, bank loan etc has mostly used?
- b. What form of short-term financing should be preferred?
- c. Are the manufacturing companies in Nepal have well recognized the importance of proper management of short-term financing?
- d. Are the manufacturing companies more dependent on short-term financing than long-term financing or intermediate term financing?
- e. Are the trends in using the short-term financing positively going?
- f. What form of cash conversion cycle of manufacturing? Is weak or strong?
- g. Are the short-term financing policies in practice or not? Also what form of cost effectiveness of short-term financing?

1.3 Objective of Study

The main objective of this study is to analyze various aspect of short term financing of Nepalese manufacturing company and to measure the effectiveness of short term financing. In order to meet the main objectives the following specific objectives have been purposed.

- a. To analyze the various forms and trend of short-term financing employed by the manufacturing companies.
- b. To analyze the various financial variables and test their relationship to know the impact on short-term financing in manufacturing companies.
- c. To analyze the success or failure Nepalese manufacturing companies.
- d. To analyze cash conversion cycle.
- e. To conduct on opinion survey on various forms of short-term financing.

1.4 Importance of the study

Short-term financing is required or used to support a large portion of the firm's current such as cash, marketable securities, inventories etc. the financial manager should be more careful in taking decision about short-term financing. Without effective and efficient short-term financing management, companies can insure losses. A company cannot benefit its loan unless short-term loans are controlled effectively and allocated efficiently. Proper managing short-term financing manager is very much interested to examine its short-term financing management system. Therefore the financing manager has chosen this company for this study. So the study will be helpful to management to go deep into the matter as why the short term financing of their companies is better worse their competitor. Short-term financial management also includes a number of aspects that make it an important topic for study.

- a. The study will help to aware the shareholder regarding short-term financing i.e. liquidity and profitability of their companies.
- b. Mainly the customer, financing agencies, stock exchange etc can understand where fund is more secured.

- c. Policy makers here refer to the government and Nepal Rastra Bank will be helpful to them while formulating the policy.
- d. The study helps to a financial manager, who is devoted to the day-today internal operation of the firm.

Therefore, considering all these facts the study of short-term financing of the Nepalese manufacturing companies is considerable importance.

1.5 Limitation of the Study

This study is done for the partial fulfillment of MBS. This study attempts to analyze the short-term financing pattern employed by manufacturing enterprises. This study has been conducted with certain limitation. The major limitation of study is as follows:

- a. The whole study is based on secondary data.
- b. This study has been confined to 7 manufacturing enterprises although there are 32 manufacturing companies listed in Nepal stock exchange ltd.
- c. All the time of conducting this study, data are available up to the year 2007 AD. So the period covered by the study is from 2002 to 2007 AD.
- d. Financial tools and statistical tools will be used to analyzing.
- e. The opinion survey is done informally.

1.6 Scheme of the Study

The present study has been divided to five chapters as follow:

Chapter –I: Introduction

Chapter -- II: Review of literature

Chapter –III: Research Methodology

Chapter -IV: Data Presentation and Analysis

Chapter – V: Summary, Conclusion and Recommendation

Besides these chapters, bibliography, appendix and questionnaire are incorporated at the end of the study.

CHAPTER – II

REVIEW OF LITERATURE

This chapter deals with the literature of previous studies on short on shortterm financing and its related studies. It covers those studies that are conducted within and outside country. Some number of studies, on this field has been conducted outside the countries, but no important studies have been conducted in Nepal. This chapter provides some conceptual theory of short-term financing by using reviews from the related finance, various books, studies and articles from various journals, unpublished thesis. This chapter is divided into three parts:

- 1 Conceptual Review
- 2 Review of Related Articles
- 3 Review of Thesis

2.1 Conceptual Review

Companies need funds to finance different types of assets which may be long-term as well as short-term ones. Short-term Financial management is the term now widely used in place of work capital management. Working capital defined to surround all aspects of the management of both-current assets and current liabilities and short-term financing management covers all decisions of an organization involving cash-flows in the short-run with emphasis on the management of investment in current assets and their financing (Weston and Copeland, 2002, p.835-863).

Working capital financing needs short-term funds, short-term funds include a company's entire, debt obligations that originally were scheduled for repayment within one year. Therefore, short-term financial decisions generally involve short lived assets and liabilities. It is the liability of a firm which matures within a year. It can be also defined as the short term obligation that has the maximum maturity period of one year. Short-term financing is the principle mean by which assets are funded. There are numerous types, ranging from spontaneous credit in the form of amount payable and accruals to negotiate, interest bearing debt. The proportion of short-term versus long-term finance is function of a company's funds requirement, seasons versus more permanent as well as of the aggressiveness of management in matching its financing with its fund requirements (Van horn, 1986, p.451).

The firm can use short-term sources to achieve a number of goals, including flexibility, low of cost financing and secure additional funds. A short-term loan can be obtained much faster than long-term loan. Lender will insist on a more through financial examination before extending long-term credit. Therefore if funds are needed in a hurry, the firm should look to the short-term markets (Hamton, 1986, p.42).

The short-term financing is a part of total financing that affects risk and return of the firm. The greater the use of short-term financing, it should be paid immediately in short period. Use of more short-term financing also increase the profit because it is less expensive. Thus a financial manager must analyze the risk and return from the use of short-term financing. Short-term financing and long-term financing are trade off of risk and return. So difference in risk between short and long-term financing must be balanced against difference in interest costs. The longer the maturity schedule of a firm debt, the more costly the financing is likely to be for one thing, the expected cost of long-term financing usually is more than that of short term financing.

There are various sources of short-term financing which can be broadly classified into two major types:-

- a) Secured short-term financing
- b) Unsecured short-term financing



Sources of Short-term Financing



Source: Rabindra Bhattarai, 2006, p.9

2.1.1 Unsecured Short-term Financing

Unsecured short-term financing means a firm borrows funds without having pledge any specific assets and lender depends primarily on cash generating ability of a firm to repay the debt or where collateral is needed or required. They are follows:-

2.1.1.1 Trade Credit/ Account Payable

Trade credit is the most important unsecured, non-interest carrying, spontaneous source of short-term financing which is common to almost all business. Here spontaneous source of financing include all those sources which are available upon demand or which arise naturally as a part of doing business. It is inter firm debt arising through credit sales. Trade credit is also a spontaneous short-term source of financing and common to all businesses.

The purchase of goods can take place in two ways. Cash purchase and credit purchase under cash purchase, cash is paid at the time of purchase or immediately after the delivery of the goods. But under a credit purchase cash is paid some days after the purchase of goods under certain terms and conditions. This payable amount is known as trade credit. It is also known as account payable. If the firm pays its bill a certain number of days after the date of invoice, trade credit becomes a built-in source of financing. The amount of financing varies with the production cycle. As the firm increases its production and corresponding purchases, accounts payable increase and provide part of funds needed to finance the increase in production.

Type of Trade Credit

In credit sales, there may be various types of contracts and different types of credit instrument can be used:

1. Open Account

The most common type is the open account arrangement. They include all transactions in which merchandise is purchased but no formal works is signed evidencing the purchaser's liability to the sellers.

2. Notes Payable or Promissory Note

The buyers sign a note that evidences a debt to the seller. The note itself calls for the payment of obligation at some specific future date.

3. Trade Acceptance (Bills of Exchange/Commercial Drafts)

A trade acceptance is another arrangement by which the seller gets clear commitment by the buyer. Under this arrangement, the seller draws a draft on behalf of buyer, ordering the buyer to pay the draft at some dates in the future. The seller will not release the goods until the buyer accepts the time draft.

4. Bankers' Acceptance

Under this arrangement the seller may ask the customer to arrange for his or her bank to accept the time draft, in this case, the bank guarantees the customer's date. Once accepted by the bank, the draft becomes a bankers' acceptance, which the supplier can sell. The owner of the bankers' acceptance presents the drafts for collections at the guarantee bank on the specified data. These bank acceptances are often used in overseas trade.

Credit Term

Credit terms are the conditions under which the supplier sells on credit to the buyer, and the buyer is required to repay the credit. The credit term specifies the length of time over which the credit is extended to a customer and the discount, if any given for early payment.

Credit term may create the cost. The following are some of the credit terms:-

COD	:	Cash on delivery
CBD	:	Cash before delivery
Net 30	:	Payment should be made with in 30 days
2/10, net 30	:	2% discount is allowed if payment is made
		within 10 days, no discount after 10 days but
		payment should be made within 30 days.

If discount terms are offered by the seller, it may create the cost. If discount are taken, there is no cost of trade credit but if the discount is foregone the lost discount is the cost of trade credit, so it is an opportunity cost.

Advantages of Trade Credit

Trade credit is a flexible, informal and relatively easy to obtain. It is an attractive source of financing for virtually all firms, specially new and smaller firms. It doesn't need any property. When the buyer doesn't have any alternative form of financing available, trade credit is important source of financing.

Disadvantages of Trade Credit

The major disadvantage of trade credit is forgoing of discount offered by the supplier or seller. If in case inability to pay credit decreases the creditworthiness and credit rating.

2.1.1.2 Accrual Financing

Accruals are interest less, spontaneous source of short-term financing. Accruals are properly known as outstanding expenses in an organization. Accrued expenses, for example, accrued wages, salaries, taxes, interest etc; represent liability for services rendered to the firm that has not yet been paid by the firm.

The most common accruals accounts are for wages and taxes. When payments of wage or taxes are deferred, a firm can use that amount of wages and taxes for its operation or for investment. It increases the benefit. Accruals are those unpaid wages and taxes. The amount of accruals depends on payment period. If payment period decreases benefits of the firm are also decrease which is considered as the cost of accruals. But if payment period increases, the accruals provide additional benefits.

The longer the payment period of the wages the more cost and the less fund can be generated but because of the possibility of shifting of employees and pressure of the labor unions, the company can not easily lengthen it. Also the government provides strict rules and procedure for the payment of with-

12

holding and social taxes so that the accruals of taxes can not be readily manipulated. It is however, possible to change the frequency of payable to increase or decrease the amount of financing through wage accrual.

Advantages of Accruals Financing:

One of the advantages of this source is that the source of financing costs. Nothing and also the fund can internally be raised instead of going from the company.

Disadvantages of Accruals Financing:

Postponement of the payment of the wages can lead to absenteeism in the employees, the efficiency may be reduced, and the skilled employees can seek employment elsewhere. These all will increase the cost of the company. Therefore, accruals are a discretionary source of financing only within a very narrow range.

2.1.1.3 Commercial Paper

Commercial paper consists of short-term, unsecured promising notes issued by firms that have a high credit rating. There is no need of collateral or property and no restriction by the lender. However, it can not be issued by small and newly established firm; only quite large reputed firms with the greatest financial strength qualify to issue commercial paper. Commercial paper is an important money market instrument in advanced countries like USA to raise short-term funds. The commercial paper market in the USA is a blue-chip market where financially sound and highest rated where financially sound and highest rated companies are able to issue commercial papers. The buyer of commercial paper includes banks, insurance companies, units, trusts and firms with surplus funds to invest for a short-term with minimum of risk.

The interest paid by issuer of commercial paper is determined by the size of the discount and the length of time to maturity. It is sold at a discover from its part of face value and actual interest earned is determined value and actual interest earned is determined as face value \mathbf{x} 360/maturity period.

13

The interest rate of commercial paper is generally lower than prime rate so it is cheaper than by borrowing from a commercial bank. This is because many supplies of short term funds of not having the option of making low risk, business loan at the price rate, they can invest only in marketable security such as treasury bills and commercial paper. Commercial paper is directly placed within investors by the issuer or sold by commercial paper dealers for performing the marketing function; the commercial paper dealer is paid a fee.

Advantages:

- It allows financially sound companies to meet their short-term financing needs at lower rates than could be obtained by borrowing directly from bank.
- ii). It does not carry any tangible security as well as no compensating balance is required to issue commercial paper as bank loan.
- iii). Interest rates are generally lower than rates on bank loans and comparable sources of short-term financing.

Disadvantages:

- i). It is high risky source of financing and low credit ranking companies can not use this source for financing.
- ii). It can not be redeemed until maturity. Thus if a firm no more needs the fund is can not repay until maturity and will have to incur interest costs.
- iii). This source of financing is less reliable source of credit than bank loans.

2.1.1.4 Bank Loans:

The most common commercial bank borrowing for a firm is the unsecured self liquidating short-term loan. Self liquidating means that the bank is providing funds for a seasonal or cyclic business peak and the money will be used to finance an activity that will generate cash to pay off the loan. An example of a self-liquidating loan is money borrowed to finance inventory just before the peak seasonal sales period. The inventories that are being financed by the bank loan will be concerted first to receivable, then into cash, which will be used to pay off the loan (Hampton, 1986, p.430).

Short-term loans are generally tied into the prime rate, which is defined as a reported level of interest charged on business loans. The prime rate fluctuates with supply and demand for short-term funds. The rate on any individual bank loan is a combination of a prime rate which a borrower has to operating or financial risk greater than the bank's strongest customers. The premium generally runs from 0 to 2%. Firm possessing higher levels of firms generally do not qualify for unsecured short-term financing.

Types of Unsecured Short-Term Bank Loans

1. Line of Credit:

Line of Credit is an agreement between a commercial bank and its customer that allows the customer to take the loan not exceeding in the agreed amount at any time during the agreement period. It is usually negotiated for a one-year period and permits the firm to borrow funds up to a predetermined limit at any time during the life of the agreement. In determining the size of a credit line, a bank loan considers a company's creditworthiness, along with its projected financing needs. As part of the application for a line of credit, the company is normally required to provide the bank with a cash budget for the next year, along with the current and projected income statements and balance sheets. The interest rate on a line of credit is usually determined by adding to the prime rate a premium based on the borrower's creditworthiness. Because the prime rate normally fluctuates over time, the interest rate charged varies during the life of the agreement.

2. Revolving Credit Agreement

Revolving credit agreement is a guaranteed line of credit. It is a legal commitment by a bank to extend credit up to the maximum amount. So the bank should grant the loan to any cost to its customer. It is backed by law therefore it is legally forceful. It is guaranteed in the sense that the commercial bank making the arrangement assures the borrower that a specified amount of funds will be made available regardless of the scarcity of money. For the guarantee provided, the bank charges a commission fee on the revolving credit agreement. It is charged on the average unused amount of the agreement.

3. Transaction Loan:-

Borrowing under the line of credit or under a revolving credit arrangement is not appropriation when the firm need short-term fund for only one purpose. A contractor may borrow from a bank in order to complete a job. When the contractor receives a payment for the job, the loan is paid. For this type of loan, a bank evaluates each requested by the borrower as a separate transaction. In this evaluation the cash flow ability of the borrowed paramount importance.

2.1.1.5 Secured Short-Term Financing

A secured loan occurs when the borrower pledges a specific asset, called collateral to bank a loan. The collateral may be security, receivable a physical assets. A secured loan in a loan for which a lender requires collateral such as receivable, inventory and other assets with security, lenders have two sources of loan payment. The cash flow ability of the firm to service the debt and the collateral value of the security. The sources we discussed in the previous section are unsecured sources where no collateral is required to borrow funds. But many firms can not obtain credit on an unsecured basis, either because they are news and unproven or because bankers do not highly regard the firm's ability to service debt or whose credit ratings are not sufficiently high.

2.1.1.6 Account Receivable Financing

Accounts receivable are among the most commonly used form of collateral for secured short-term borrowing. They are also believed to be one of the most liquid assets of the firm. They make desirable security for a land. Two techniques of secured short-term financing are commonly employed with account receivable as a collateral by either pledging their factoring the receivables.

1. Pledging accounts receivable

Pledging is a kind of bank loan where account receivable is pledged as collateral to get the loan from financial institution. Under this arrangement the borrower simply pledges accounts receivable as collateral for a loan obtained from either a commercial banks or a financial company. Generally a lender advances between 50% of 80% of their face value; limit of advance amount depends on the quality of the receivable.

A receivable can be on either a non-notification or a notification basis. Under the non-notification basis customers of the firm are not notified that their accounts have been pledged to the lender, when the firms receive payment on an account if forward the payment to the lender with a notification basis the account is notified of the assignment and remittance are made directly to the lender. This arrangement is safer from the point of view of the lender.

2. Factoring accounts receivable

Factoring means sales of the receivable. A factor is a financial institution that a purchase accounts receivable from business. The factoring process begins with an agreement that specifies the procedures for factoring the receivables and the terms under which the factors advance funds to the firm. The maximum advance a firm can obtain from the factor is limited to the factored receivables less the

factoring commission, interest expense and reserve that the factor withholds to cover any returns or allowances by customers. Most factoring of receivables is done on a non-recourse basis and the buyer of the goods is notified of the transfer and makes payment directly to the lender.

Advantages

- i). Receivable financing is an additional source of funds that can be caused upon as needed. If it also a rising source of financing as the firm grants since higher levels of sales produce more receivable to sell or pledge.
- ii). Receivable financing gives outside help to the firm in analyzing customer that desire credit. Firm receives assistant in credit decision.
- iii). In the factoring agreement the company can save the collection costs as well as the possible bad debt losses.

Disadvantages

- i). Receivable financing is a costly source of financing
- ii). Many creditors and customers view receivables financing as a sign of weakness.

2.1.1.7 Inventory Financing

Inventory loans are important source of short-term secured credit from financial institutions. Loan is provided as a certain percentage of inventory value. A company may have three different types of inventories in the warehouse. These are raw materials, work-in-progress and finished goods. Normally, raw materials and finished goods are considered acceptable as security for the loan. But the amounts of the loan that can be obtained depend on marketability and perish ability of the inventory.

There are a number of different ways a lender can obtain a secured interest in inventorial. They are as follows:-

a) Floating lien loan:

Under floating lien agreement the borrower gives the lender a lien against all the inventories. This may include both present and future inventory. The borrowing firm maintains full control of the inventories and is allowed to use or sell the inventory collateral. Under this agreement, specific items of inventories are not identified. Thus a floating lien does not offer the lender much protection against losses from fraud or bankruptcy. As a result, most lenders will not advance a very high percentage of funds against the book value of the borrower's inventory.

b) Chattel Mortgage loan:

Under a Chattel mortgage, inventories are identified specifically by serial number of or by some other means while the borrower had title to the goods. The lender has a lien on inventory. This inventory can not be sold unless the lender consents. Because of the rigors identification requirement Chattel mortgages are ill suited for inventory with rapid turnover or inventory that is not easily identified because of size or other reasons chattel mortgages are well suited for certain capital assets, such as machine tools, equipments etc.

c) Trust Receipt Loan

A trust receipt loan is secured by specific and easily identified collateral that remains in the control or physical possession of the borrower pledges of inventories or receivable is common. All inventory items under a trust receipt arrangement must be readily identified by a serial number or an inventory code number. The lender makes periodic, unannounced inspections of the inventory to make sure that the firm has the collateral and has not withheld payment for inventory that has been sold. This type of loan is used in automobile, equipment dealers etc.

d) Warehouse Receipt Loan:

A warehouse receipt loan is a form of short-term financing that is secured by pledge of inventory controlled by the lender. The lender, which may be a commercial bank or financial company, selects the inventory that is acceptable as collateral for the loan. There are ways of warehousing arrangement are in practice.

i) Field Warehouse Receipt Loan:

Under this arrangement, the inventory is separated from the firm's other inventory and stored on its premises under the control of a third party (a field warehouse company). The field warehouse company issues a warehouse receipt, and the lender advances funds to the borrowing firm. The field warehouse releases the inventory to the firm only when authorized to do so by the lender.

ii) Terminal Warehouse Receipt Loan:

Terminal warehouse involves transporting the inventories pledged as collateral to a public or terminal warehouse that is physically removed from the borrower's premises. The warehouse company issues a warehouse receipt, which evidences title to specified goods that are located in the warehouse. It is normally used by the lender when the inventory is easily and inexpensively transportable.

2.1.2 Multiple Discriminate Analyses

The studies referred above provide for looking at a number of separate ratios to sickness or failure. It world is more a single measure of the probability of sickness or failure. The technique of multiple discriminate analyses can be used to classify as measured by financial ratio, into the group those which are likely to fail and those not likely to fail (Horne, 1986, p.777).

The Z score model was the following:

 $Z = 1.2x_1 + 1.4x_2 + 3.3x_3 + 0.6x_4 + 1.0x_5$

Where as,

 X_1 = working capital to total asset

X₂= Circulative retains earning to total assets

 X_3 = Earning before interest and taxes to total assets.

X₄= Market value of equity to book value of total liabilities

 X_5 = Sales to total assets.

Altars established a guideline z score that can be used to classify firm as either financially sound a score above 2.675 ore headed toward bankruptcy a score below 2.675. Lower the score, the greater the likelihood of bankruptcy and vice versa.

2.3 Hedging Approach of Financing Mix:

If the firm adopt a hedging approach of financing each asset would be offset with a financing instrument of some approximate maturity. A firm incurs short-term debt to finance short-term debt or equity to finance the permanent current assets.



Hedging Approach

Figure: 2.2

Source: I.M. Pandey, 2002, p-828

Current assets flustered with time, only permanent current assets finance through the long-term debt and seasonal current cost finance through the shortterm debt/financing. Short-term borrowing would be paid off with surplus cash, as the firm moved to period of seasonal fund need, if would borrow on a shortterm basic again paying off the borrowing as surplus cash was generated.

2.4 Review of related articles

Article, Journal, bulletins, and related thesis are of great significance for thesis writing. So various published article, Journal thesis relating to short-term financing management have been review. The study is only related to short-term financing but short-term financing is a part of working capital. Thus working capital is also considered while in reviewing. There are some articles published on journals about short terms financing and related studies:

John J. Hamton states that Working capital is the resources of the firm that are used to conduct operations to do day-to-day work that makes the business successful. Without cash, bills cannot be paid, without receivables, the firm cannot allow timing difference between delivering goods or services and collecting the money to pay for them, without inventories the firm cannot engage in production nor can it stock goods to provide immediate deliveries. As a result of the critical nature of current assets the management of working capital is one of the most important areas in determining whether the firm will be successful. The term working capital refers to the current assets of the firm those items that can be converted into cash within the year. Net working capital is defined as the difference between current assets and current liabilities (Hamton, 2002, p.430).

Douglas W. Diamond states that if firm assets can be underable liquidated sufficiently quickly to repay debt, then the same argument applies to firms. The threat of a run will commit firms to repay debt rather than renegotiate the claim. This describes economy-wide crises, where depositors believe that no large investors or groups of investors will lend to the bank. By the way his articles are links between short-term debt, runs on firms, and the problem of lender passively. No doubt every industry or enterprises need sufficient amount of capital to run its activities smoothly. In absence of sufficient capital, industrial enterprises are compelled to hold up many of their profit propensities. In view of different industrial enterprise capital, they have different status regarding production, employment, wages and even the profit, large industrial enterprises with few capital and small enterprises with huge capital both are the single boat on ocean (Diamond, 2004, vol.4).

The investment pattern in Nepalese manufacturing company does not seen to be based upon proper financial analysis. There are no specific studies have been made with regard to short-term financing, however, some studies have been made regarding the capital structure of some government owned enterprises.

Pradhan and Koirala had jointly published an article on "Some reflection on working capital management in Nepalese corporation". The article basically aims to find out the difficulty, importance and problem of current assets and management and also aims to find out the motive for holding cash and inventory. They have sampled five manufacturing and six non manufacturing public enterprises. This study is concentrated in the size of investment, trend of investment and need to control the investment in current assets. After analyzing the collected data the major finding of the study were as follows:

- a) To provide a reserve for routine net outflows of cash is the major motive for holding cash in Nepalese corporations.
- b) Management of working capital was more difficult than that of fixed capital. They found the high level of inventory in manufacturing ones.

23

- c) The major reason for holding inventories is to facilitate smooth operation of production and sales.
- d) Investment in total assets had declined over a period of time in manufacturing and non- manufacturing corporations. However, the manufacturing corporations had consistently more investment in cash and receivable as compared to non- manufacturing corporations. (Pradhan and Koirala, 1983, vol.-3).

Dr. Radhe S. Pradhan in an article "The demand for working capital by Nepalese corporations" has selected nine manufacturing public corporations with the twelve years data from 1973 to 1984. Regression equation has been adopted for the analysis. The earlier studies concerning above the demand for cash and inventories by business firms did not report on unanimous findings. A lot of controversies exist with respect to the presence of economic of scale, role of capital, cost, capacity utilization rates and the seed with which actual cash and inventories respectively. The pooled regression result shows the presence of economics scale with respect to the demand for working capital and its various components. The regression result suggests strongly that the demand for working capital and its components is a function of both sales and their capital cost.

He focused that the earlier emphasis of financial management was mostly on long-term financial accession making which led to the development of theories concerning long-term capital and long-term assets. Later on when many enterprises failed or their growth restricted either due to storage or mismanagement assumed a greater significant. This study covers nine major public enterprises in manufacturing sector of Nepal. Major finding of this study are as follows:

- a) Most of the selected enterprises have been achieving a trade off between risks and return there by following neither on aggressive nor a conservative approach.
- b) Almost all the selected have a positive net working capital.
- c) When quick asset are compared with current liabilities it is revealed that the former are insufficient to cover current liabilities on many occasions.
- d) The Nepalese manufacturing public enterprise have on average half of their total asset in the form of current asset (Pradhan, 1988, p. 53-60).

Dr. Manohar K. Shrestha on "Receivable management in selected PES", he found that receivable turnover calculated varied, from lowest record of 0.09 times 1 to the highest level of 25.7 times and was less than favorable in selected PE's of Nepal. And these revealing favorable turnovers have still faced problem of managing account receivable. He pointed that PE's did not record or head fullness credit policy to improve collection that would have helped a lot in raising the receivable turnover. The average collection period recorded a variation from minimum 14 days to the maximum of 4207 days. In the same way the aging schedule of PE's has uniform patterns and the outstanding receivable in many instance were very old even exceeding 10 years or so forth. It was grouped under 3 years old receivable.

In the selected enterprises the ratio of receivable to current assets varied from a minimum of 0.15 times1 to maximum 0.9 times 1. He also found that the most of the PES has larger share of receivable to current assets. In most of them, extension of additional relaxed credit was a usual phenomenon and they did not have larger amount of receivable outstanding. They had not taken seriously the task to speed up the collection of long outstanding by devising suitable credit monitoring policy. The study thus, concluded that determining the desired investment in account receivable was least considered in most of the PES which was supported by lax account of receivable management in such PES (Shrestha, 1987, vol.-8).

Dr. K. Acharya, which is based on the findings and conclusion of his D. Philthesis. He has focused working capital management of Nepal Tea Development Corporation for eight year from 1975 to 1983. In this study he focused that the net working capital of NIDC was negative due to increase in current liabilities. Inventory holds the longest portion and it was accumulating in the corporation. The size of receivable of NIDC had also been increasing trend where as cash balance hold by the corporation were insufficient to meet the routine work of the corporation. At the same time, the liquidity position was very poor since current assets were less than the current liabilities. The turnover inventory receivable and current assets were below average. The break even analysis revealed that the NIDC had been selling mostly below the break even point. Even variable cost was higher than selling price.

He gives some suggestions, regarding this were proper planning of production and sales, new credit policy action against the fraud dealers, obtaining loans from any individual or financing institutions (Acharya, 1988, vol.-10).

The above all studies stated that the majority of Nepalese corporation was facing the problem of formulation & implementing the suitable policy as to working capital management. Inventory management is of great significant of manufacturing companies & the management of cash & receivable one of great significance to non Manufacturing Companies. The major factors to be the liberal credit policy followed by Nepalese manufacturing companies. The major reason for holding inventories in Nepalese corporation was to facilities smooth operation of production & sales but not take advantages of prices increases. In Nepalese context, it is not known to what extent short-term financial has been used and what are their different forms. Hence this study attempts to finds out the use of short-term financing in Nepalese context.

2.5 Review of Thesis

Besides review of available books and research studies a number of studies have been made by student of MBA/MBS, relating to working capital management in Manufacturing Companies of Nepal. Under this section on effort are few of research outcomes performed under the heading of Short-term financing management. Hence, this section will receive some of thesis.

Rachna Thapa, "A study on working capital management of selected manufacturing companies in NEPSE", Master Degree Thesis, T.U., 2005.

The main objectives of her study were:

- a) To study the impact of working capital on profitability.
- b) To analyze the current assets and current liabilities policy of manufacturing companies.
- c) To examine the relationship between liquidity and profitability of manufacturing companies.

The major findings of her study are:

- a) The ratio of cash to current asset is widely varied among the manufacturing companies during the study period.
- b) Most of the companies have negative networking capital.
- c) Liquidity position of manufacturing companies is not similar among different companies.
- d) The study shows that is wide variation of the current asset and within individual companies.

To conduct the study, she had used for period of 5 years, 1998 to 2003 of 5 manufacturing companies. He had used correlation coefficient analysis

between net working capital and sales are highly positive result of regression analysis has showed that there is positive relationship except net profit and net working capital. Finally suggestions for improvement of working capital management, also there should be proper relation and interaction among production, marketing and sales department during the planning of sales, which help to meet targeted sales.

Om Bikram Gurung, "*A Study on WC Management of Nepal Lever ltd.* (*NCL*)", Master Degree Thesis, T.U., 2002.

The specific objective of that study one to analyze the specific objective of that study one to analyze the liquidity composition of WC assets utilization & profitability of WC to analyze financing pattern & to examine the relation between liquidity & profitability of NCL.

The study covered 5 years period & analyze secondary data by using financial & statistical models. He has found that major components of current assets one inventories receivables & prepaid expense. Among them inventories holds major portion of current assets were fluctuating during study period. It indicated that company did not have any clear vision about the investment of working capital and current assets investment policy of NCL has been sifting towards the moderate policy. The current ratio of the company was satisfactory. The current ratio contains more inventory & receivables & there was in significance relationship in between current assets and current liabilities. This mgmt had not proper policy of maintain the liquidity position & its liquidity position was not sound.

Dikpal Subedi, "Working capital management of manufacturing companies listed in NEPSE", Master Degree Thesis, T.U., 2003.

His main objective is to present overall picture of working capital of selected manufacturing companies. The major findings of the study are:

- a. The current assets to total assets selected manufacturing companies are in fluctuating trend.
- b. The investment assets to total assets are both of the selected manufacturing companies with respect to its total assets & net fixed assets.
- c. Cash & bank balance holds the largest portion followed by inventory whereas cash & bank balance holds the least and inventory holds the higher portion.
- d. The turnover positions of the selected manufacturing companies are in fluting trend.

Ramesh Giri "Working Capital Management of Nepalese manufacturing companies listed in NEPSE", Master Degree Thesis, T.U., 2007.

To conduct his study, he had covered five fixed years 2058/59 to 2062/63. He has analyzed the level of current assets, current liabilities and net profit. Similarly, he has analyzed the liquidity position as well as profitability portion of the companies. He found the inventory has held the major share of current assets followed by cash & receivables respectively. There was not good in liquidity position &low level of working capital turnover of manufacturing companies. There was no functional relationship between total assets & current assets & receivables. There was no proper relationship between current assets & share of inventory. The study is based on secondary data and has used ratio analysis a financial tools and coefficient of correlation and regression analysis between current assets and current liabilities, current assets and sales receivables and sales, inventory and sales, net profit and net working capital.

Rajendra Sapkota, "Measuring the effectiveness of short-term financing", Master Degree Thesis, T.U., 1998.

The main objectives of his study were:

- a) To highlight about the manufacturing companies chosen for the study regarding their growth, function, management plan and policy.
- b) To analyze the quantified variables concern in short-term financing.

The major findings of his study are:

- a) The maximum usage as source of short-term financing by Nepalese manufacturing companies, Bank loan and sundry creditors as compared to the other source of financing.
- b) The liquidity position of Nepalese manufacturing companies is not good.
- c) Working capital of Nepalese manufacturing companies have too lower and most of the companies have negative working capital.
- d) The account receivable or debtor is in increasing trend during the study period due to poor collection policy of Nepalese manufacturing companies. Also bank loan is in increasing trend due to unpaid the loan in time period.
- e) Nepalese manufacturing companies have commonly usage the account payable in financing but they have not effective utilize the account payable.
- f) Most of the manufacturing companies sick and weak financial performance.

The study was stated for period of 7 years, 1987-1994 of 15 manufacturing companies. During his studies he point out many issues like managerial weakness act of specific government policy, problem of skilled manpower are the cause of poor financial performance. He has recommended for better performance, like Nepalese manufacturing company should adopt financing policy, should improve the liquid position, should ensure effective utilization of bank loan etc.

30

Santosh Karkee, "Short-term financing management of selected Nepalese manufacturing Companies", Master Degree Thesis, T.U., 2002.

The main objectives of his study were:

- a) To examine the trend of short-term financing used by manufacturing companies.
- b) To analyze the relations between return on equity and short-term financing.
- c) To analyze the success/failure of Nepalese manufacturing companies.

The main findings of his study are:

- a) All the manufacturing companies have not followed the increasing trend of short-term financing.
- b) The bank loan is in increasing trend of Nepalese companies due to unpaid of the loan in time.
- c) Current liabilities meeting of the manufacturing companies without depending upon inventory is quite doubtful.
- d) The account receivable is in increasing trend during the study period due to poor collection policy of Nepalese manufacturing companies.
- e) Most of the enterprises have not formulated the policy regarding the selection of bank for taking the loan.

To conduct the study, he had used for period of 5 years, 1995 to 1999 of 7 manufacturing companies. He had used the various financial variables and tests their relationship to know the impact on short-term financing in manufacturing companies.

After reviewing the above thesis and above mentioned research work, it is clear that only few researches have been done on the topic of short-term financing of manufacturing companies. The past study on short-term financing covers the period up to 1999. After this period many companies are liquidated, many manufacturing public enterprises were privatized during the 9th plan and

many had already seemed established. The past study shows that except one researcher, remaining all had not used statistical tool to compare current liabilities with other financial variables. Researcher have highlights the short-term financing pattern in Nepalese manufacturing companies and also making effort to highlight the under financial performance problem. So this study on short-term financing of listed manufacturing companies in Nepal is quite different from previous research work which include data after the period 2002 to 2007 and different statistical tools also has been used. This study may be an important effort to inform the financial and manufacturing companies regarding the short-term financing trends in Nepal.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

The main objective of this study is to analyze the various forms of shortterm financing employed by manufacturing companies. To achieve this objective, the study needs to follow an appropriate methodology. Research methodology is the process of arriving at the solution of problem through a planned and systematic dealing with the collection analysis and interpretation of the facts and figures.

For the purpose of achieving the objectives, the following research methodology has been proposed to follow which includes research design, and source of data population and sample data gathering instruments and procedure, data tabulation and processing and methods of analysis.

3.2 Research Design

Research design is the plan structure and strategy for investigation of the facts in order to arrive at conclusion. It is also the main part of the thesis on any research work to achieve the general objectives of the research. The research has collected data and information relating to short-term financing of Nepalese manufacturing company on the basis of financial statement and other available data. In this respect, the study has followed descriptive as well as analytical research design. The research design is also based on opinion survey of respondents.

3.3 Source of Data

Information is lifeblood of any research. Both primary and secondary data have been used in this study:

i) Primary Data

Primary data is based on informal interview as well as unstructured dialogues and discussion with the official of Nepalese manufacturing company. Questionnaires are distributed under convenient sampling.

ii) Secondary Data

Secondary data are collected from published and unpublished documents, annual reports, prospectus and bulletin of Security Board of Nepal (SEBO/N), Nepal stock exchange (NEPSE) and other related companies. Newspaper, Magazine, Books and other reports are useful sources of secondary data. It's published financial statement of listed company and other type of information taken from the Security Board of Nepal (SEBO/N), Nepal stock exchange (NEPSE) and other related companies. Some other related and important information has been collected from website.

3.4 Population and Sample

Population mean wholly or totality of observation that have selected for study. Sample is a part of population, which represents population with regard to the study. There are 32 manufacturing company listed in Nepal stock exchange and data for 7 companies for six years collected and analysis as per need and objective of study.

The selected of samples is done by judgment sampling. The manufacturing company of Nepal is grouped in different industry group. There are 15 industries group according to type of industries. The sample are so selected that they are represent different group. Two selected industry represent beverage manufacturing, another two are manufacturing of oil, one is manufacturing of tire, appliance one is under manufacturing of textile and the other are under manufacturing of chemical product. Besides this other thing are also taken is consideration, as all manufacturing companies does not provide, the information because some them are established just few year now, some are operating just while established in many years ago and many listed companies

34

are already liquidated. And those companies are selected which provides six year regular data and quantitative information available in Nepal stock exchange.

Seven sample manufacturing companies are selected which are as follows:

- 1. Nepal Banaspati Ghee Udyog Ltd.
- 2. Gorkha Rubber Udyog Ltd.
- 3. Bottlers Nepal Ltd. (Balaju)
- 4. Bottlers Nepal Ltd. (Terai)
- 5. Jyoti Spinning Mills Ltd.
- 6. Nepal Lube Oil Ltd.
- 7. Nepal Khadhya Udhyog Ltd.

3.5 Data Tabulation and Processing

After collection of data, they are complied, tabulated and processed as per need and objectives of the study.

3.6 Methods of Analysis

Various statistical and analytical tools are used in the study. They are categorized into two aspects, which are Quantitative methods and Qualitative method, applied for analysis the short term financing.

3.6.1 Quantitative Method of Analysis:

Under this method, financial and statistical tools are used to analyze the effectiveness of short term financing. These are as follows:

3.6.1.1 Financial Method

Various financial methods used to analysis the effectiveness of short-term financing of manufacturing company. Ratio analysis, cash conversion cycle, financial approach and predicting power of ratio of Failure Company have been used as financial method.

A. Ratio Analysis

In order to make decisions in keeping with the objectives of the company and its financial viability an analysis is undertaken by every interested party such as creditors, investors and also by the company itself. Such analysis varies according to the specific interests of party involved. In short, this analysis is called financial analysis.

Finally, it is defined as the relationship between two accounting figures expressed mathematically. The significance of financial ratio, analysis may be viewed in different ways. For example: a trade creditor is interested in the liquidity of the firm because his claim is short-term, and the ability of a firm to pay the claim is best judge by means of a through analysis of its liquidity. Similarly, a shareholder might concentrate this analysis on the profitability of the firm because he is concerned principally with the earnings of the firm and its stability about a trend. Management also employs financial analysis for purpose of internal control.

Under the ratio analysis following ratio are calculated.

(i) **Liquidity Ratio**

Liquidity ratio measure the firm's ability to meet its maturing short-term obligation. In other words, liquidity ratio measures the ability of a firm to meet its short-term obligations and reflect the short-term financial strength of a firm. Liquidity ratio can be divide into two parts, they are:

Current ratio: Current ratio is calculated by dividing current assets by current liabilities.

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

Current assets include cash, and those assets which can be converted into cash within a year, such as debtor, receivable, cash and Bank balance, prepaid expenses inventory etc.
Current liabilities mean all obligations maturing with in a year. Under the current liabilities include secondary creditor, provision for taxation, Bank loan, miscellaneous current liabilities and provision.

Quick ratio: Quick ratio is calculated by dividing quick assets by current liabilities.

 $Quick ratio = \frac{Quick Asset}{Short term Financing}$

Quick assets include the all of current assets except inventory or stock. Inventory can not be converted into cash immediately.

Thus liquid ratio is a measure of the firm's short term liability.

(ii) Debtors to Short term financing:

Debtors to short term financing ratio is calculated by dividing debtors by short term financing.

Debtors to STF Ratio = $\frac{\text{Debtors}}{\text{Short term Financing}}$

Debtors are quick assets. Account receivable or debtor is the amount due from debtors (customers) to whom goods or services have been sold on credit. These amounts are generally realizable into cash within the accounting period. The ratio debtor to short term financing shows the relation between the debtors and short term financing and it also indicated that how much portion of short term financing recovered by debtors. It also indicates or measures the liquidity position of firm.

(iii) Cash to Short term financing

Among all the financial tools cash to short term financing is an important tool cash to short term financing ratio is calculated by dividing cash by short term financing..

Cash to STF Ratio =	Cash
Cash to STF Ratio =	Short term Financing

Cash itself is liquid asset. Current assets except cash, converted into cash within a year or less. Thus cash to short term financing ratio shows the relation between cash to short term financing and how much portion of short term financing could receipt immediately.

(iv) Inventory to Short term financing

Among the entire financial tools inventory to short term financing is one of the major tools. This ratio is calculated by dividing the inventory by short term financing.

Inventory to STF = Short term Financing

Inventory includes raw material, work in process and finished good in case of manufacturing firm.

(v) Account Payable to Short term Financing

Among all the financial tools account payable to short term financing is one of the major tools for the analysis of the short term debt. This ratio is calculated by dividing the account payable by short term debt.

Account Payable to $STF = \frac{Account Payable}{Short term Financing}$

Account payable is spontaneous source of short term financing. It arises from normal business operations. There is not clear cost attached to the account payable. This ratio shows how much portion of account payable usage in short term financing by the Nepalese manufacturing companies. Account payable has vital role in the financing of short term debt of manufacturing companies.

(vi) Bank Loan to Short term Financing

Bank loan to short term financing is one of the major financial tools for the analysis of short term financing. This ratio calculated dividing the bank loan by short term financing.

Bank Loan to $STF = \frac{Bank Loan}{Short-term Financing}$

Bank loan is also a major component of short term financing. This ratio shows how the manufacturing companies have utilize the bank loan and how much portion of Bank loan usage in short term financing.

(vii) Short term Debt to Total Financing

It is also one of the major financial tools for the analysis of the short term debt. In the manufacturing companies short term debt covers 40 to 45 percentage of total financing. This ratio is calculated by dividing the short term financing by total financing.

STF to Total Financing = $\frac{\text{Short term Financing}}{\text{Total Financing}}$

(viii) Sales to Short term Financing

Sales to short term financing is also an important financial tool of the analysis of short term financing. This ratio shows the turnover of sales to short term financing. This ratio calculated by dividing sales by short term financing. Otherwise it can be paid.

Sales to
$$STF = \frac{Sales}{Short term Financing}$$
 Short

Term Financing

Net profit to short term financing is one of the major financial tools for the measurement of profitability of the firm. This ratio is calculated by dividing net profit by short term financing.

Net Profit to $STF = \frac{\text{Net Profit}}{\text{Short term Financing}}$

(x) **Return on Equity**

Return on equity is calculated by dividing net income or net profit by common equity. It measures the rate of return on common stockholders' investment. Increasing ratio is favorable for a company which shows that the net profit is increasing.

Return on Equity (ROE) = $\frac{\text{Net Profit}}{\text{Equity}}$

:. Equity = Total Asset - Total Liabilities

B. Cash Conversion Cycle

Cash conversion cycle is one of the major financial tools. This cycle shows how much of time the cash generally collected by the firm does. Cash conversion cycle is calculated by the following formula.

Cash conversion cycle = [Inventory conversion period + receivable conversion period] – Payable conversion period.

(i) Inventory Conversion Period

This period indicates the efficiency of the firm is selling its product. Inventory management is calculated by dividing the cost of goods sold by average inventory and inventory conversion period is calculated by dividing the number of days in a year (Say 365) by inventory turnover.

> Inventory Turnover = $\frac{\text{Cost of goods sold}}{\text{Average Inventory}}$ Inventory Conversion Period = $\frac{365}{\text{Inventory Turnover}}$

Otherwise it can be calculated by dividing the average inventory by cost of goods sold and multiply by number of days in year (Say 365)

Thus the formula,

Inventory Conversion Period = $\frac{\text{Average Inventory}}{\text{Cost of goods sold}} X 365$

(ii) Receivable Conversion Period

Receivable conversion period indicates the number of day's debtor turnover cash year. It analyses in determining the collectibles of debtors and thus, the efficiency of collection effects and analysis in determing the firms' comparative strength and advantage relative to its credit policy. Receivable turnover can be calculated by dividing total sales the year-ended balance of debtor and receivable conversion period is calculated by dividing the number of day in year (Say 365) by receivable turnover. Receivable Turnover =

Sales Debtors

Receivable Conversion Period = $\frac{365}{2}$

Receivable Turnover

It can be calculated by dividing the ended-balance of debtor or receivable by total sales and multiply by the number of day in year (Say 365)

Receivable Conversion Period = $\frac{\text{Receivable}}{\text{Sales}}$ X 365

(iii) Payable Conversion Period

Payable conversion period indicated the number of day creditor's turnover each year. Payable conversion period is calculated by dividing the sum of account payable and outstanding expenses by the sum of cost of goods and general expenses and multiply by the number of day in year (Say 365)



Amount payable + out standing expenses

C. Predicting Power of Ratio of Success/Failure

Edward Altman was the first person to apply discriminate analysis in finance for studying bankruptcy. Zeta Model is one of the important financial

tools for the analysis of success/failure companies. I have derived the following discriminate function.

Z= $1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$ Where as, Z= discriminate function of score of a firm X_1 = working capital to total asset X_2 = Current assets to total Liabilities X_3 = Net profit to total assets X_4 = Net profit to sales X_5 = Sales to total assets

Financial ratio shows the transparency figure of the firm, by the help or combination of different type of ratio into a single measure of the probability of the sickness or failure.

3.6.1.2 Statistical Tools

The relationship between different variables related to study on the measuring the effectiveness of short term financing in Nepalese manufacturing companies (listed in Nepal Stock Exchange Ltd) will be drawn out listing statistical tools. Regression and Correlation technique are used to product the relation between return on equity and current liabilities. The tools to be used are as follows.

1. Correlation Co-efficient (*r*):

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to another. The coefficient of correlation measures the direction of relationship between two sets of figures. It is the square root of the coefficient of determination. Correlation can either be negative or it can be positive. If both variables are changing in the same direction, then correlation is said to be positive but when the variations in the two variables take place in opposite direction the correlation is termed as

negative. In the study, coefficient of correlation is calculated between return on equity and current liabilities.

The strength of correlation between the variables can be quantified. This is achieved by calculating the correlation coefficient. The correlation coefficient varies between +1 and -1; with +1 representing perfect positive correlation and -1 representing perfect negative correlation. Following figure shows how the correlation coefficient scale works.

2. Coefficient of Determination (r^2)

The coefficient of determination is a measure of the degree (extent or strength) of linear association or correlation between two variables. One of which happens to be independent and other being dependent variable (s). In other words, r^2 measure the percentage total variation in dependent variable explained by independent variables. The coefficient of determination can have value ranging from zero to one. If r^2 is equal to 0.85 which shows that the independent variables used in regression model explain 85% of the total variation in the dependent variable. A value of one occur only if the unexplained variation is zero which simply means that all the points in the disease diagram fall exactly on the regression line.

3. Regression Analysis:

Regression is the measure of the average relationship between two or more variable in term of the original unites of the data. In simple linear regression a single variable used to predict another variable on the assumption of linear relationship between the given variable. The variable to be predicted is called the dependent variable one the variable on which the prediction is based is called the independent variable.

The regression equation of Y on X is:

Y = a + bX(1)

Where,

Y= Dependent Variable

X= Independent Variable

a= Y- intercept

b= Slope of the line

The following two normal equation are solved simultaneously to find out the value of a and b.

Where, N = Number of pairs of observations.

Solving the two normal equation (a) and (b), we will get the value of a and b. Now substituting the value of 'a' and 'b' in equation we get required regression equation of Y on X.

3. Standard Error:

Standard error of estimate is measure developed by statistic for measuring the reliabilities of the estimated equation. It measure the variability are disperse of the observed values of Y around the regression line standard error estimate is work out as under.

$$S.E. = \frac{1 - r^2}{\sqrt{n}}$$

4. Probable Error (P.E.):

Probable error of the correlation coefficient applicable for the measurement of reliability of the computer value of the correlation coefficient,

The probable error (P.E.) is defined by:

P.E. = 0.6745 x S.E. or 0.6745 x
$$\frac{1-r^2}{\sqrt{n}}$$

- If r< P.E., the value of r is not significant i.e. there is no evidence of correlation between the variable.
- If r>6P.E, the value of r is significant i.e. correlation is significant.

The upper and lower units within which the correlation coefficient in the population in expected to lie are (r + P.E.) and (r - P.E.) respectively.

3.6.2 Qualitative Method of Analysis:

Whenever qualitative method is insufficient, opinion survey method will be used to make study more qualitative.

A list of question will be asked to fill out in paper to the selected persons of the sample companies on the basis of their response analysis can be made. Personal interview will be taken with the key person of sample companies to draw out their reactions for improvements.

CHAPTER – IV

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The main objective of the study is analysis and presentation empirical data with the help of various financial and statistical tools. This chapter deals with the presentation analysis and interpretation of data, collected through primary and secondary sources in order to fulfill the objectives of the study. These researchers have already mentioned that this study is heavily based on secondary data. Secondary sources include publication of SEBON and NEPSE, issue prospectus and annual reports of respective compare. Primary sources include the response of questionnaires and personal discussion. To obtain the best result the data have been analyzed according to the research methodology as mentioned in the third Chapter.

4.2 Short-term Financing Management Policy:

Short-term financing includes all firms' debt obligation that was originally schedule for repayment within a one year. There are two types of sources of short-term financing, secured and insecured. Every firm can adopt or choose different short-term debt according to the financial manager's attitude; flexibility and availability towards the risk return trade off. One of the most important decisions of financial manager is how much short-term debt should be used to finance current assets. Here, the researcher is going to analyze on the basis of various variables and ratio of the manufacturing companies taking six years data to indicate short-term financing policy followed by selected listed manufacturing companies.

4.2.1 Analysis of Short-term Financing:

Till the data there are 135 listed companies in the SEBON and NEPSE, out of them 32 companies are listed manufacturing companies (SEBON report 2006/07). This study deals with the analysis and interpretation of short-term financing for 7 listed manufacturing companies for 6 years starting from year 2002 to 2007.

The table No. 1 shows the short-term financing during the study period. All the manufacturing companies' does not has followed the increasing trend of short-term financing. BN Ltd. Balaju, NBGU Ltd. and GRU Ltd. have followed increasing trend and remaining have followed increasing then decreasing or decreasing then increasing trend. The increasing is highest for NKU Ltd (9.54 times) and lowest for JSM Ltd. (0.28 times).

The highest amount of current liabilities during the study period was Rs. 339.97 million of GRU Ltd. in 2005 and lowest amount of current liabilities was Rs.797 million for NKU Ltd. in year 2002.

Table No. 1

Company Average of Short-term financing

Rs. in Million			
S.N	Company	STF	
1	NLO Ltd.	46.6	
2	BN Ltd. (Balaju)	256.15	
3	BN Ltd. (Terai)	225.43	
4	NBGU Ltd.	353.12	
5	JSM Ltd.	227.55	
6	NKU Ltd.	24.49	
7	GRU Ltd.	339.97	

Group	STF	Company
А	Less than 100	2
В	100 to 200	-
С	More than 200	5

Source: Appendix-1

The above table shows average STF of selected companies for the study period 2002 to 2007. The highest average STF is Rs.353.12 for NBGU Ltd. and

lowest STF is Rs.24.49 for NKU Ltd. 2 companies had lower than 100 million debt and 5 companies has higher than 200 million.

After analyzing and assessing the size of short-term financing, an effort is made to determine the major source of short-term financing. The various source of short-term financing have been grouped into four categories:

- a) Loans and Advance (Bank loan)
- b) Sundry creditors (Account Payables)
- c) Provision for taxation
- d) Miscellaneous current liabilities & provision.

4.2.2 Analysis of Loans & Advances to Short-term Financing

Loan and Advance to short-term financing is an important tool that measures how manufacturing companies have been able to utilize the bank loan effectively. More over the firm is unknowing what the leader like Commercial Bank says about the capabilities of manufacturing companies to repay the loan in time as well as need the interest obligation, which is schedule to be paid according to agreement.

NKU Ltd. after year 2002 has not used Loan and Advance during the study period. The highest average loan and advance in Rs.26.42 million of JSM Ltd. The average of manufacturing company's loan and advances is in increasing trend during study period Rs4.69 million in year 2006 and Rs.49.32 million in years 2002.

S.N Company		Ratio
1	NLO Ltd.	0.02
2	BN Ltd. (Balaju)	0.003
3	BN Ltd. (Terai)	0.001
4	NBGU Ltd.	0.003
5 JSM Ltd.		0.15
6	NKU Ltd.	0
7	GRU Ltd.	0.01
Company Average Ratio		0.028

Company Average of Loan and Advance to Short-term financing

Group	Ratio	Company
А	Less than 0	1
В	0 to 0.0031	3
С	More than .0031	3

Source: Appendix-2

The above table shows the ratio of company average of loan to short-term financing. The overall ratio of sample companies is 0.28 times, this raw indicate 2.8% of short-term financing in finance through loan & advance. The highest ratio in 0.15 time of JSM Ltd. and NKU Ltd. have nil, and remaining all manufacturing companies have the ratio lower than the average ratio of some mfg company JSM Ltd. has greater. This ratio shows that Nepalese manufacturing companies have common practical to bank loan in financing.

Table No. 3

Yearly Average of Loan and Advance to Short-term financing

S.N	Year	Ratio
1	2002	0.021
2	2003	0.017
3	2004	0.023
4	2005	0.03
5	2006	0.055
6	2007	0.019
Company Average Ratio		0.028

Source: Appendix-2

The above table shows the yearly average ratio of loan and advance to STF during the study period 2002 to 2007 is 6.028 times. The calculated ratio is

fluctuating during the study period. The highest row is 0.055 times in year 2006. The calculated ratio shows that the yearly average ratio is around the average and it is not widely harried.

On the basis of above analysis is in conclude that the most of the mfg companies commonly practices loan & advances in financing. Thus the management of companies is conscious about taking the loan. Mainly NKU Ltd. and GRU Ltd. must practice bank loan and advances in the financing their current assets.

The trend of the companies of Nepal is borrowed loan out they did not practice to repay thus the loan in increasing for must companies during the study period.

4.2.3 Analysis of Account payable to Short-term Financing.

Short-term financing is analysis and interpret with the ratio Account pay able on creditor. This ratio shows the position of account payable and as percentage of short-term financing. Account payable is a spontaneous source of financing in the sense that in Aries from ordinary business transaction. Trade credit is in more flexible means of financing which refined in chapter 2.

The average account payable for the study period of overall company is Rs.16.22 million. The highest average amount is Rs.31.92 million of NLO Ltd and lowest in Rs.3.32 million of NRU Ltd. The trend of using the Account Payable in most of the companies is increasing.

S.N	Company	Ratio
1	NLO Ltd.	0.72
2	BN Ltd. (Balaju)	0.14
3	BN Ltd. (Terai)	0.07
4	NBGU Ltd.	0.03
5	JSM Ltd.	0.03
6	NKU Ltd.	0.23
7	GRU Ltd.	0.04
Company Average Ratio		0.18

Company Average of Account Payable to Short-term financing

GroupRatioCompanyALess than 0.014B0.10 to 0.201CMore than2

Source: Appendix-3

The above table shows the company average of account payable to shortterm financing of the sample company. The company Average in 18% (over all average). It means that the manufacturing company less the Account payable 18% of short-term debt. NLO Ltd is highly depended on account payable that is 72% but its account payable has decrease compare to earlier year. The lowest uses of A/P are 0.03 times or 3% by NBGU LTD. and JSM Ltd. . The ratio of account payable to short-term financing is widely valued among the selected manufacturing companies NLO Ltd and NKU Ltd. have the ratio greater than the company's average ratio. BN Ltd. (B), BN Ltd (T), NBGU Ltd & GRU Ltd & JSM Ltd the ratio lower than the average ratio. Higher the ratio indicates that maximum or higher the uses of account payable in financing and lower the ratio indicate that lower uses of account payable in financing. Account payable is free cost of source so management must try to most utilization of account payable.

S.N	Year	Ratio	Group	Ratio	Company
1	2002	0.24	А	Less than 0.21	4
2	2003	0.14	В	More than 0.21	2
3	2004	0.21			
4	2005	0.18			
5	2006	0.11			
6	2007	0.20			
Compa	ny Average Ratio	0.18	1		

Yearly Average of Account Payable to Short-term financing

Source: Appendix- 3

The above table shows the ratio of yearly average of account payable of short-term financing. The average ratio for over all study period is 0.18 times. The higher is 0.24 for year 2002 and lower is 0.11 for year 2006. The ratio is decreasing during the study period.

4.2.4 Analysis of Working Capital and Operation

Short-term financing is a part of working capital so measurement of shortterm financing of manufacturing company with the help of working capital. Working capital is the different between current assets to current liabilities. It also show the liquidity position of the firm that the greater the margin by when a firm's current assets convent its short-term obligation the between able it liens be to pay its bills as they come sown. Here I am going to analyze and interpret the working capital by taking relevant data of 6 year of selected manufacturing companies.

S.N	Company	WC	
1	NLO Ltd.	81.29	
2	BN Ltd. (Balaju)	213.8	
3	BN Ltd. (Terai)	202.27	
4	NBGU Ltd.	-219.33	
5	JSM Ltd.	54.87	
6	NKU Ltd.	29.61	
7	GRU Ltd.	-83.72	
Company Average Ratio		39.83	
Source: Appendix_1			

Company Average of Working Capital Rs. in Million

Source: Appendix- 4

The above table shows the company average working capital. The company average of working capital of selected company for year 2002 to 2007 is Rs.39.83 million. The average is positive because most of selected companies have positive WC. It means they have greater current Assets than current liabilities. NBGU Ltd & GRU Ltd. has negative working capital and other 6 companies have positive.

Working capital also measures the liquidity position of the firm. The higher the working capital is preferable than lower working capital. The highest working is Rs.213.80 million for BN Ltd (Balaju) and lowest is Rs. (219.33) for NBGU Ltd.

Table No. 7

Yearly Average of Working Capital Rs in Million

S.N	Year	WC	
1	2002	35.40	
2	2003	42.82	
3	2004	53.95	
4	2005	26.26	
5	2006	7.28	
6	2007	71.96	
Company Average Ratio		39.83	

Source: Appendix-4

The above table shows yearly average of working capital is time during the study period. All the period WC is positive, highest is 71.96 in year 2007.

This based on the above analysis it is concluded that the current asset is greater than current liabilities for most selected companies NBGU Ltd & GRU Ltd. Thus current liabilities meeting capacity of the most of the selected companies is quite good.

4.2.5 Analysis of Current Ratio and Quick Ratio

Current Ratio

The current ratio shows the ability of payment of short-term debt from current assets. It measures the liquidity position of the company. The current ratio is the ratio of total current asset to total current liabilities. The current assets of the company represent those assets, which can be in the ordinary course of business, converted into cash with a short span of time, normally not succeeding one year. The current liabilities is defined as liabilities which are short-term obligation to meet as originally with in a year.

This ratio shows the liquidity position of the factory. An increasing ratio indicates decreasing risk because it indicates the good liquidity position of the company. Decreasing ratio indicate the increasing the risk and poor liquidity position creditor prefer higher current ratio. Management who is conversion attitude prefers higher current ratio and does not want to bear risk but the management who is risk taker perform the lower current ratio.

55

S.N	Company	Ratio
1	NLO Ltd.	2.85
2	BN Ltd. (Balaju)	1.97
3	BN Ltd. (Terai)	1.90
4	NBGU Ltd.	0.38
5	JSM Ltd.	1.64
6	NKU Ltd.	4.33
7	GRU Ltd.	0.78
Company Average Ratio		1.98

Company	Average of	Current	Asset to	Short-term	financing	g
J						0

GroupRatioCompanyALess than 12B1 to 23CMore than 22

Source: Appendix- 5

The above table shows the average current ratio of selected manufacturing companies, which is widely fluctuating. The company average ratio is 1.98, NBGU Ltd and GRU Ltd have ratio less than 1 which shows that the company current asset less than current liabilities, BN Ltd (Balaju), B.N. Ltd (Terai) and JSM Ltd. lies in between 1 to 2 and NLO Ltd and NKU Ltd lies more than 2 ratio which shows the current asset were greater than current liabilities. Except NBGU Ltd and GRU Ltd. all companies have ratio more than 1, which means BN Ltd. B.N. Ltd (Terai) and NKU Ltd, JSM Ltd and NLO Ltd. has strong liquidity position. The lender test the ratio before providing loan because they have to return loan and interest in time the standard ratio is 2:1 but it is not favorable in all the condition or it depends on nature and size of the firm.

S.N	Year	Ratio
1	2002	2.82
2	2003	1.31
3	2004	1.82
4	2005	1.62
5	2006	1.67
6	2007	2.61
Company Average Ratio		1.98

Yearly Average of Current Asset to Short-term financing

Source: Appendix- 5

The above table shows yearly average of current ratio. The yearly average is 1.98. The yearly average is also widely fluctuated. The standard ratio is 2 to 1 or more may be suitable to the manufacturing concern and the yearly average meet the standard ratio. But this principle may not be followed by most of the manufacturing concern.

The cause behind the decrease in current ratio is due to increase in bank loan, Account payable miscellaneous current liabilities and provisions. The cause behind the increase in current ratio is due to increase in inventory, sundry debtors. As increasing in these assets, the current asset also increases. Due to increase in current asset, current ratio also increases.

Based on the above analysis it is concluded that the current liabilities capacity of these companies are quite good, because most of the firm current ratio meet the standard ratio. Therefore it indicates that the management is very caution on matching the current asset with current liabilities.

Quick Ratio

Quick ratio is relation between quick assets and current liabilities. This ratio is designed to over come the defect of current ratio. It is measurement of factory ability to convert its current assets quickly into cash in order to meet its current obligation higher is the ratio, better in the ability to honor current liabilities. Generally a quick ratio of 1:1 is considered to represent a satisfactory current financial condition.

Table No. 10

S.N	Company	Ratio
1	NLO Ltd.	2.16
2	BN Ltd. (Balaju)	1.17
3	BN Ltd. (Terai)	1.38
4	NBGU Ltd.	0.19
5	JSM Ltd.	1.06
6	NKU Ltd.	2.67
7	GRU Ltd.	0.27
Company Average Ratio		1.27

Group	Ratio	Company
A	Less than 1	2
В	1 to 2	3
С	More than 2	2

Source: Appendix- 6

The above table shows the company average of quick ratio. The average ratio is 1.27. The standard ratio is quick applicable to the manufacturing concern but most of the Nepalese manufacturing concerns are not following this principle. The 2 companies, NBGU Ltd and GRU Ltd have ratio less than 1 and 5 companies have more than 1.

The companies' lies in group A have poor liquidity position. The companies lie in group B and C has strong liquidity position. Quick ratio measures the factory's ability to convert its current asset quickly into cash in order to meet its current liabilities. The companies lie in Group A could not meet its current obligation quick because they have poor liquidity position but the company in group B and C have strong liquidity position and they can easily meet their current obligation because they have higher quick asset that current

obligation. But also excessive investment in quick asset means blockage of cash in low return assets. Higher the liquidity lowers the return and vice versa. The investor performs the higher liquidity position to provide the loan because of more changes of return interest and principle to return than lower liquidity.

Table No. 11

S.N	Year	Ratio	Group	Ratio	Company
1	2002	1.84	А	Less than 1	2
2	2003	0.82	В	More than 1	5
3	2004	1.23			
4	2005	0.99			
5	2006	1.38			
6	2007	1.38			
Compa	ny Average Ratio	1.27			

Yearly Average of Quick Ratio

The above table shows the yearly average of quick ratio. The quick ratio during the study period is fluctuated. The highest ratio is 1.84 in year 2002. The quick ratio lower than the average yearly ratio is in 3 year period.

The cause behind the decrease in quick ratio is due to increase in sundry creditors, bank loan, and excessive investment in inventory. High investment in inventory means that lowers the quick assets, lower the quick ratio. Most of the manufacturing company depends on the short-term financing even fixed assets and current assets are finance through the current liabilities. As increase in current liabilities the quick ratio would decrease and vice versa.

From the above analysis it is concluded that the current liabilities meeting of the manufacturing companies without depending upon inventory is quite doubtful or quick ratio could not meet the standard ratio. The selected companies have poor liquidity position according to yearly analysis. Thus management must match the quick assets with current liabilities.

4.2.6 Analysis of Cash to Short-term Financing

Source: Appendix- 6

Cash to short-term financing is an important tool that measures how manufacturing have been able to utilize the short-term financing. Cash to shortterm financing ratio indicate the liquidity position of enterprises. This ratio shows how the enterprises have been able to graph the opportunities in short span of time. This ratio helps to analyze and interpret the measurement the effectiveness of short-term financing of Nepalese manufacturing company.

To analyze and interpret the ratio first the absolute amount of cash interprets the ratio. The overall average cash is in Rs. 12.39 million of the selected manufacturing company for the study period. The cash is in increasing during the study period of manufacturing company. The highest average cash is Rs. 30.79 million of BN Ltd (Terai) and lowest cash balance is Rs. 2.04 of NLO Ltd. NLO Ltd., NBGU Ltd., JSM Ltd. and NKU Ltd has cash balance lower than Average cash balance.

Table No. 12

S.N	Company	Ratio	
1	NLO Ltd.	0.04	
2	BN Ltd. (Balaju)	0.06	
3	BN Ltd. (Terai)	0.14	
4	NBGU Ltd.	0.01	
5	JSM Ltd.	0.03	
6	NKU Ltd.	0.20	
7	GRU Ltd.	0.09	
Comp	Company Average Ratio 0.08		
C			

Company Average of Cash to Short-term financing

Source: Appendix-7

The above table shows the ratio of company average cash to short-term financing is 0.08 times. This ratio indicates that only 8% of short-term financing is covered by cash. In other word 8% of short-term financing could repay by cash. The highest ratio is 0.20 times of NKU Ltd. and lowest ratio is 0.01 times of NBGU Ltd. Higher the cash balance higher the ratio and lower the cash balance lower the ratio of cash to short-term financing.

S.N	Year	Ratio	
1	2002	015	
2	2003	0.04	
3	2004	0.08	
4	2005	0.04	
5	2006	0.06	
6	2007	0.12	
Compa	ny Average Ratio	0.08	
C			

Yearly Average of Cash to Short-term financing

Source: Appendix-7

The above table shows the yearly average of cash to short-term financing is 0.08. The yearly average ratio of cash to short-term financing is fluctuated during the study period due to fluctuate of cash in latter period of time. The highest ratio is 0.15 times in year 2002 and lowest ratio is 0.04 in year 2003 and 2005.

On the basis of above analysis, the cause behind the decrease in the ratio of cash to short-term financing is due to decrease in the cash balance. Higher the cash balance higher the ratio and is preferable to creditors. Creditor or investor sees the liquidity position of the company. If the liquidity position of the company is faceable they allow the loan, if it is not favorable they do not allow the loan. Thus management must be better utilization of funds in their capital structure. Every firm must need cash for smooth running for the firm but excessive holding cash means less return and minimum hold of cash may be delay to pay the short-term debt, which could force the firm bankrupt. Thus firm cash must be invested in quick assets such as marketable security, which could be converted into cash immediately.

Although it is concluded that the cash to short-term debt ratio is lower. It can be removed by holding more cash than low and excessive cash should be invested in marketable security in off-season.

61

4.2.7 Analysis of Inventory to Short-term Financing Ratio.

Inventory to short-term financing measure how the manufacturing companies have been able to manage inventory efficiently. An undertaking neglecting the management of inventory while be jeopardizing its long run probability and may fail ultimately the reduction in excessive inventory carries a favorable impact on company profitability.

This ratio also helps to analyze the effectiveness of short-term financing of manufacturing company. Inventories are least liquid asset. Inventory increase the current asset but could not be converted into cash quickly whenever shortterm debt and other from the long-term debt. The average amount of inventory during the study period of the sample companies is 110.55 million. The highest amount of average inventory is Rs. 190.15 million of BN Ltd and lowest is Rs. 22.89 million of NKU Ltd. The inventory is widely varies during the study period.

S.N	Company	Ratio	
1	NLO Ltd.	0.69	
2	BN Ltd. (Balaju)	0.80	
3	BN Ltd. (Terai)	0.61	
4	NBGU Ltd.	0.19	
5	JSM Ltd.	0.94	
6	NKU Ltd.	1.66	
7	GRU Ltd.	0.51	
Company Average Ratio		0.77	
Source: Appendix_ 8			

Company Average of Inventory to Short-term financing

Source: Appendix- 8

The above table shows the company of inventory to short-term financing. The ratio of company average is 0.77 which indicate inventory is 77% of shortterm financing but this does not indicate that inventory is fully financed by short-term debt, long term debt is also used to finance inventory. The ratio is widely varies among the sample companies. The highest ratio is 1.66 of NKU Ltd. and lowest is 0.19 of NBGU Ltd.

Table No. 15

S.N	Year	Ratio
1	2002	0.98
2	2003	0.50
3	2004	0.60
4	2005	0.63
5	2006	0.68
6	2007	1.23
Compa	ny Average Ratio	0.77

Yearly Average of Inventory to Short-term financing

Source: Appendix- 8

The above shows yearly average of inventory to short-term financing is 0.77. The ratio is widely varies during the study period. The highest ratio is 1.23 times in year 2007 and lowest 0.50 in year 2003.

On the basis of above analysis, it is concluded that manufacturing companies hold maximum level of inventory but the sales has not been increase. Thus the management should avoid excessive and in educated level of inventory and maintain sufficient inventory for the smooth production and sales operation.

4.2.8 Analysis of Debtors to Short-term Financing Ratio

This ratio also measures how the manufacturing companies have been able to utilize the debtor effectively.

The higher average of amount of debtor is Rs. 108.49 million of BN Ltd. (Terai) and lowest amount is Rs. 18.02 million of NKU Ltd. The average amount of debtor for the study period of sample manufacturing company Rs. 53.62 million, which is more than cash balance.

Table No. 16

S.N	Company	Ratio
1	NLO Ltd.	1.40
2	BN Ltd. (Balaju)	0.40
3	BN Ltd. (Terai)	0.48
4	NBGU Ltd.	0.09
5	JSM Ltd.	0.10
6	NKU Ltd.	1.60
7	GRU Ltd.	0.12
Comp	oany Average Ratio	0.60

Company Average of Debtor to Short-term financing

The above table shows the ratio of company average of debtors to shortterm financing of sample manufacturing companies is 0.60 times. As compare to average ratio of cash and inventory, greater than cash and lower than inventory ratio. The ratio is widely fluctuated among the companies. The higher ratio is

Source: Appendix-9

1.60 of NKU Ltd. and lower is 0.09 of NBGU Ltd. NLO Ltd, and NKU Ltd. has ratio more than average ratio and other have lower than average. The higher ratio shows that higher credit sales and lower ratio shows that lower credit sales and higher cash sales.

Table No. 17

S.N	Year	Ratio
1	2002	1.14
2	2003	0.37
3	2004	0.65
4	2005	0.42
5	2006	0.35
6	2007	0.67
Company Average Ratio		0.60
Source: Appendix- 9		

Yearly Average of Debtor to Short-term financing

The above table shows the ratio of yearly average of debtor to short-term financing is 0.60 times. The highest ratio is 1.14 in year 2002 and lowest 0.35 in year 2006. The calculated ratio is increasing during the study period. The increasing is due to increasing in debtors.

4.2.9 Analysis of Short term Financing to total Financing

Short-term financing plays an important role in manufacturing concern. Generally in an average 45% of total financing is covered by short-term financing. Thus ratio shows how much percentage of short term financing appears in total financing and it also shows that whether the manufacturing enterprises are more dependent on short term financing or not. Increase in the ratio also indicates increase in the risk. Short term financing has a direct impact on total assets. Effectiveness of short term financing is assumed to encourage the proper and substantial growth of the assets manufacturing company.

S.N	Company	Ratio
1	NLO Ltd.	0.31
2	BN Ltd. (Balaju)	0.26
3	BN Ltd. (Terai)	0.37
4	NBGU Ltd.	2.34
5	JSM Ltd.	0.29
6	NKU Ltd.	0.23
7	GRU Ltd.	0.50
Company Average Ratio		0.61

Company A	Average of S	Short-term	financing	to	Total	Asset
<u> </u>				•••		

GroupRatioCompanyALess than 0.33BMore than 0.34

Source: Appendix-11

The above table shows that ratio of company average of short term financing to total financing. The company average ratio for the study is 0.61 times. BN Ltd. (Balaju), JSM Ltd. and NKU Ltd. have the ratio less than 0.30. The highest ratio is 2.34 of NBGU Ltd., which means 234% of assets is financed by short-term debt. The lowest ratio is 0.23 of NKU Ltd., which means NKU Ltd. has less finance its assets through short-term debt.

Table No. 19

Yearly Average of Short-term financing to Total Asset

S.N	Year	Ratio
1	2002	0.50
2	2003	0.61
3	2004	0.65
4	2005	0.69
5	2006	0.77
6	2007	0.47
Compar	ny Average Ratio	0.61

Source: Appendix-11

The above table shows the ratio of yearly average of short-term financing to total assets. The yearly average ratio is 61%. The ratio is in increasing trend. This calculated ratio is near the average ratio.

The causes behind the decrease in the short-term debt ton total assets in due to decrease in current liabilities or minimum ratio of short-term debt to total assets in due to negative Net Worth.

Based on the above analysis it is concluded that the short-term financing to total financing of all the selected companies shows the satisfactory level of the ratio because the calculated ratio is in the around the standard average ratio 0.45 times.

4.2.10 Analysis of Sales to Short-term Financing

The ratio of sales to short term financing also help to analysis and interpret the effectiveness of short term financing of manufacturing company. Sales to short term financing indicate the number of times short term turn over energy year. Generally, the highest short term financing turn over is indicative of good short term financing.

The average amount of sales of selected manufacturing companies for the study period was Rs. 354.778 million. The highest average amount of sales is Rs. 725 million of JSN Ltd. and lowest average amount of sales is Rs. 83.52 million of NKU Ltd. The sales were fluctuating during the study period.

S.N	Company	Ratio		
1	NLO Ltd.	2.51		
2	BN Ltd. (Balaju)	2.43		
3	BN Ltd. (Terai)	2.03		
4	NBGU Ltd.	0.48		
5	JSM Ltd.	4.21		
6	NKU Ltd.	6.98		
7	GRU Ltd.	1.14		
Company Average Ratio 2.83				
Source: Appendix- 12				

Company Average of Sales to Short-term financing

The above table shows the ratio of company average of sales to short-term financing. The average ratio is 2.83 times. The highest ratio is 6.98 time of NKU Ltd. and lowest 0.48 times of NBGU Ltd. have ratio lower than average ratio. The ratio is fluctuated during the study period. Higher ratio of sales to short term financing is preferable higher the ratio highest the sales and lower the short term financing. The ratio decrease due to decrease in sales and increase in short-term debt.

Tab	le	No	э.	21
			••	

Yearly Average of Sales to Short-term financing

S.N	Year	Ratio
1	2002	4.68
2	2003	1.63
3	2004	2.45
4	2005	2.01
5	2006	2.57
6	2007	3.61
Compa	ny Average Ratio	2.83

Source: Appendix-12

The above table shows the ratio of yearly average of sale to short term financing. The yearly average ratio during the study period is 2.83. The highest ratio is 4.68 during year 2002 and lowest ratio is 1.63 in year 2003. The ratio is in increasing trend during the study period 4 year has ratio lower than the average of sales to short term financing.

Based on above analysis it is concluded that most of the company sales to short term financing decreasing became of low sales. Nepalese manufacturing companied have not practice of sale forecast for the years. The sale of all selected companies is increasing during the study period but the proportion is not increasing as the increasing in short term financing thus the management of Nepalese manufacturing enterprises have to prepare sales forecast.

4.2.11 Analysis of Net Profit to Short term Financing

Net profit to short term financing is one of the major financial tools of measurement of short term financing. Profit is different between revenue and expenses over a period of time profit is the ultimate output of a company and will have no future if it fails to make sufficient profit. Therefore, the financial manager should continuously evaluate the efficiency of its company in term of profit.

The ratio indicates the firm's capacity to withstand adverse condition and with high net profit to short term financing ratio would be in an advantageous position to survive ion the face of falling sales price, rising costs of production.

S.N	Company	Ratio		
1	NLO Ltd.	0.05		
2	BN Ltd. (Balaju)	0.15		
3	BN Ltd. (Terai)	0.07		
4	NBGU Ltd.	-0.09		
5	JSM Ltd.	-0.10		
6	NKU Ltd.	0.09		
7	GRU Ltd.	-0.23		
Company Average Ratio -0.01				
Source: Appendix- 13				

Company Average of Net Profit to Short-term financing

The above table shows the company average of net profit to short term financing of selected Nepalese manufacturing companies is -0.01. During the study period 3 companies suffering losses. Lowest ratio -0.23 times of GRU Ltd. and the highest ratio is 0.15 times of BN Ltd. (Balaju).

Table No. 23

Yearly Average of Net Profit to Short-term financing

S.N	Year	Ratio
1	2002	0.03
2	2003	-0.02
3	2004	0.12
4	2005	0.01
5	2006	-0.15
6	2007	-0.04
Compar	ny Average Ratio	-0.01

Source: Appendix-13

The above table shows the yearly average net profit to short term financing. The over all ratios are -0.01. The highest ratio is 0.12 in year 2004. The yearly average is fluctuated during the study period.

To summaries from above analysis the ratio of net profit to short term financing is not positive also low negative ratio of 3 companies. The ratio is not satisfactory so it should be improve by effective utilization of the shirt term financing by curtailment of operating expenses. Gross profit may decline due to fall in sales price or increase in the cost of production. As a consequence net profit margin will decline unless operating expenses decreases significantly.

4.2.12 Analysis of Short term Financing to Total Liabilities

This ratio shows how much percentage of short term financing appears in total liabilities and it also shows that whether the manufacturing enterprises are more dependent on short-term debt or long term loans. Total liabilities include long term loans, deferred liabilities etc. Increase in the ratio also indicates increase in risk.

The study shows the most of the companies are more dependent on short term debt than long term loan NBGU Ltd. during the study period 2002, 2006 and 2007 has not used long term loan. Most of companies BN Ltd. (Balaju & Terai), NBGU Ltd. and NKU Ltd. are more dependent on short-term loan than long term loan.

1 able 110. 24	Tabl	e	No.	24
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S.N	Company	Ratio		
1	NLO Ltd.	0.52		
2	BN Ltd. (Balaju)	0.90		
3	BN Ltd. (Terai)	0.93		
4	NBGU Ltd.	0.99		
5	JSM Ltd.	0.27		
6	NKU Ltd.	0.64		
7	GRU Ltd.	0.39		
Company Average Ratio		0.66		
Source: Appendix 10				

Company Average of Short-term financing to Total Liabilities

Source: Appendix- 10

The above table shows the company average of short term financing to total liabilities is 0.66. These ratios indicate that 66% of total liabilities is

covered by short-term debt. This means short term financing is more than longterm debt. The highest ratio is 0.99 times of NBGU Ltd. & lower ratio is 0.27 times of JSM Ltd. The ratio of short-term debt to total liabilities is fluctuated during the study period.

Table No. 25

S.N	Year	Ratio		
1	2002	0.60		
2	2003	0.73		
3	2004	0.68		
4	2005	0.69		
5	2006	0.68		
6	2007	0.60		
Compa	ny Average Ratio	0.66		
Source: Appendix- 10				

Yearly Average of Short-term financing to Total Liabilities

The above table shows the yearly average of short-term debt to total liabilities. The overall company ratio is 0.66. During the study period the ratio is closed to overall ratio. The ratio is in increasing trend during the study period.

On the basis of above analysis it can be concluded that 66% of total liabilities is cover by short-term debt which means shot term debt is more than long term debt. This studies shows most of Nepalese companies are using short term financing than long term financing. The higher usage of short term financing is called aggressive approach and lower usage of short term financing is called conservative approach. The greater usage of short term debt is risky because of fixed assets are finance through the short term financing, fixed asset could not generate cash with short span of time, if firm could not able to repay the short term loan and interest with a years time period it could force the firm into bankrupt. Thus Nepalese companies should use financial mix comprising both short term financing and long term financing as per required.
4.2.13 Analysis of Short term Financing to Total Capital

The term total capital comprises long-term debt capital stock and reserve and surplus. The ratio of short-term debt to total capital is computed by dividing short-term fund by total capital. No hard and fast rule can be set down as to what a proper relationship should be earning power of a company may satisfy a higher percentage. It is however necessary to not that a too heavy debt burden reduces the margin of safety for lenders, increase fixed charge upon earning decrease earning available for distribution to shareholder and in profits may invite insolvency and force reorganization.

Table No. 26

S.N	Company	Ratio
1	NLO Ltd.	1.17
2	BN Ltd. (Balaju)	0.36
3	BN Ltd. (Terai)	0.62
4	NBGU Ltd.	4.83
5	JSM Ltd.	1.18
6	NKU Ltd.	0.45
7	GRU Ltd.	0.78
Comp	oany Average Ratio	1.34
	C 1 1	1.4

Company Average of Short-term financing to Total Capital

Source: Appendix-14

The above table shows the company average of short term financing to total capital. The overall company ratio is 1.34. The highest ratio is 4.83 times for NBGU Ltd. and lowest 0.36 times of. BN Ltd. (Balaju). BN Ltd. (Balaju & Terai), NLO Ltd, JSM Ltd, NKU Ltd., and GRU Ltd. has ratio lower than the overall company ratio and NBGU Ltd has ratio more average ratio.

The ratio of short term financing to total capital is more than one is due to negative net worth or the current liabilities is more than total capital. Earning power of a company may justify a higher percentage but it is however necessary to note than a too heavy debt burden reduces margin of safety for lender decrease available for distribution to share holder.

Tabl	le No.	. 27

Yearly Average of Short-term financing to Total Capital

S.N	Year	Ratio
1	2002	1.37
2	2003	1.58
3	2004	1.20
4	2005	1.22
5	2006	1.32
6	2007	1.37
Compa	1.34	

Source: Appendix-14

The above table shows company yearly average of short term financing to total capital. The overall ratio is 1.34, the highest ratio is 1.58 in year 2003 and lowest ratio is 1.20 in year 2004. The ratio is in increasing trend during the study period. The increase in ratio is due to higher uses of short term financing and decreases in net worth or negative net worth.

Based on the above analysis it is concluded that NBGU Ltd. and JSM Ltd. have negative net worth and short term financing is more than long-term loan and total capital in certain year. The ratio shows that these companies have adopted aggressive policy. Lower the short term debts lower the risk, higher the short term debt higher the risk, thus this companies adopting highly risk. Most of the companies should lower the short-term debt and use higher long-term debt.

4.2.14 Analysis of ROE with Current Liability to Total Liability

Return on equity in analysis and interpret with the ratio of current liability to total liability. Regression and correlation analysis are the technique of studying how the variation in one series are related to variation on another series. So with the help of regression and correlation the relation between these variable is analysis.

Among all financial tools the relation between return on equity and ratio of current liability to total liability is an important tool that measure how Nepalese manufacturing companies are able to utilize short-term financing effectively or not in general when current liability increase return on equity also increase and to see if these happens in Nepalese Manufacturing companies, regression and correlation analysis help to product this relationship. The definition about correlation, regression and probable error (P.E) is defined in research methodology chapter.

1 able 110. 20	Tabl	le	No.	28
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Regression and Correlation between ROE and Ratio of CL/TL	

S.N	Company	r	\mathbf{r}^2	a	b	P.E.	6 P.E.
1	NLO Ltd.	0.0002	0.00000004	0.52	0.0000022	0.275	1.652
2	BN Ltd. (Balaju)	0.57	0.32	0.75	0.03	0.188	1.128
3	BN Ltd. (Terai)	0.91	0.83	0.92	0.0034	0.047	0.282
4	NBGU Ltd.	-0.007	0.00005	0.99	-0.00008	0.275	1.65
5	JSM Ltd.	0.42	0.18	0.27	0.0005	0.226	1.356
6	NKU Ltd.	-0.037	0.0014	0.65	-0.0011	0.275	1.65
7	GRU Ltd.	-0.49	0.24	10.89	-0.011	0.209	1.254
	Average	0.20	0.22	2.14	0.0031	0.214	1.282

Source: Appendix-27

From the above table the return on equity is taken as dependent variable (Y) and ratio of current liability to total liabilities is taken as independent variable (X). So that the simple regression equation between return on equity and ratio of current liabilities to total liabilities is Y=a + bX.

The overall company regression equation between return on equity and ratio of current liabilities to total liability is y=2.14 + 0.0031x. This equation helps to predict dependent variable return on equity based on independent variable current liabilities percentage on total liabilities. The slope of the line 'b' represents change in y variable for a unit change in variable. From the overall

company equation slope of line 'b' is 0.0031, which shows that 1 percent change in current liabilities in total liabilities will change return on equity by 0.31%. The highest slope of line is 0.03 of BN Ltd. (Balaju), which shows change in return on equity for change in current liabilities percentage in total liabilities is highest for BN Ltd (Balaju). NBGU Ltd., NKU Ltd., and GRU Ltd. have negative slope of line. Negative slope of line indicate that if x variable increase y variable decrease. So for NBGU Ltd., NKU Ltd., and GRU Ltd. increase in current liabilities percent in total liabilities will decrease their return on equity. The y intercept denoted by 'a' is highest of GRU Ltd. is 10.89. This shows when x of GRU Ltd. is zero y remain positive equal to y intercept 10.89 absence of current liabilities in GRU Ltd. will not make return on equity negative 'a' negative shows that for zero current liabilities of companies, the return on equity is negative. During the study period no one selected companies have 'a' negative.

Probable error measure the reliability of the computed value of correlation coefficient. Above the selected companies only NLO Ltd., NBGU Ltd., NKU Ltd. and GRU Ltd. are less then P.E. which shows that these companies computed 'r' is not significant. BN Ltd. (Balaju) and BN Ltd. (Terai) 'r' is greater than 6 P.E. so computed value of 'r' of these companies is significant. The value of 'r' is expected to lie at $R \pm P.E$.

Correlation between ROE and CL / TL

The correlation between the two variables of the selected companies shows all companies have positive correlation except NBGU Ltd., NKU Ltd., and GRU Ltd. Have negative correlation. Positive correlations indicate that increase of current liabilities percentage in total liabilities will increase return on equity of those company, and vice versa. Negative correlations indicate that increase of current liabilities percentage in total liabilities will decrease the return on equity and vice versa. The highest correlation is 0.91 of BN Ltd. (Terai) and lowest -0.49 of GRU Ltd.

The coefficient of determination ' r^2 ' value lies between 0 and 1 indicated the goodness of fit. The highest ' r^2 ' is 0.82 is 0.83 of BN Ltd. (Terai) and it has positive that 83% of return on equity is depended on current liabilities percentage on total liabilities and remaining dependent on other variable. In other word the variation of independent variable ratio of current liabilities to total liabilities could explain 72.4% of the variation of the dependent variable return on equity of BN Ltd. (Terai). The lowest ' r^2 ' is 0.000004% of NLO Ltd.

The overall company average correlation between two variables is position 0.253 which shows that increase of current liabilities percentage in total liabilities will increase return on equity of Nepalese manufacturing companies. The overall company ' r^2 ' is 22%, which shows that variation of current liabilities percentage in total liabilities, explain 22% variation of return on equity.

To summaries the above analysis the highest coefficient of determination 'r2' is 83% of BN Ltd. (Terai), NBGU Ltd., NKU Ltd. and GRU Ltd. have negative correlation between return on equity and current liabilities percentage on total liabilities so these company should decrease their current liabilities percentage in total liabilities to increase their return on equity and remaining companies should increase their current liabilities percentage on total liabilities.

4.2.15 Analysis of Return on Equity with Current Liabilities to Total Capital

Return on equity is analyze and interpret with current liabilities percentage on total capital lies the relation between return on equity and current liabilities percentage on total capital is also important tool that measure how Nepalese manufacturing are able to utilize short-term financing effectively or not.

77

Table No. 29

S.N	Company	r	\mathbf{r}^2	a	b	P.E.	6 P.E .
1	NLO Ltd.	0.0004	0.00000016	1.17	-0.000022	0.275	1.652
2	BN Ltd. (Balaju)	0.12	0.014	1.92	0.009	0.271	1.626
3	BN Ltd. (Terai)	0.67	0.45	3.39	0.01	0.151	0.906
4	NBGU Ltd.	0.005	0.00003	4.83	0.00008	0.275	1.65
5	JSM Ltd.	0.38	0.14	1.08	0.0026	0.238	1.428
6	NKU Ltd.	-0.37	0.14	2.69	0.0023	0.237	1.422
7	GRU Ltd.	-0.23	0.05	11.2	-0.011	0.262	1.572
	Average	0.08	0.11	3.75	0.0019	0.244	1.465

Regression and Correlation between ROE and Ratio of CL/TC

Source: Appendix- 28

The above table shows coefficient of correlation 'r' coefficient of determination 'r²', slope of line (b) and y intercept (a). The overall company regression equation is Y=3.75 + 0.0019X. Where Y is dependent variable return on equity and X is independent variable current liabilities percentage in total capital. From the overall company regression equation the slope of line 'b' is 0.0019, which indicate that 1 percentage change in 'x' (current liabilities percentage in total capital) while change in 'y' (return on equity) by 0.19 percentage. The highest slope of line 'b' is 0.01 of BN Ltd. (Terai). All the selected companies have positive slope of line except NLO Ltd and GRU Ltd. Negative slope of line indicate that the increase in current liabilities percentage on total capital will decrease it return on equity. The highest y-intercept is 11.20 of GRU Ltd. negative y intercept indicate that at zero current liabilities, the return on equity is negative for these company. Since all companies have positive y intercepts. For these companies zero current liabilities will not make return on equity negative.

Probable error measures the reliabilities of the computed value of correlation coefficient. Probable error of all selected companies is less than computed value of 'r' except BN Ltd (Terai), which shows that BN Ltd. (Terai) 'r' is not significant. If computed value 'r' is greater than 6 P.E which indicate

significant of 'r' i.e. correlation is certain of these companies. But during the study no one companies is significant. The value of R is expected to lie at R \pm P.E.

Correlation between ROE and CL / TC

The correlation between the two variables of the selected companies shows all companies have position correlation except NKU Ltd. and GRU Ltd. Except these two companies all have positive correlation which shows that for these companies increase in current liabilities percentage in total capital will increase their return on equity are vice versa. The highest correlation is 0.67 of BN Ltd. (Terai) and lowest -0.37 of NKU Ltd.

The highest coefficient of determination ' r^2 ' is 0.45 of BN Ltd. (Terai), which indicate that the variation of independent variable current liabilities in total capital would explain 45% of the variation of the dependent variable return on equity of NL Ltd. The lowest ' r^2 ' is 0.000016% NLO Ltd. The overall company correlation is 0.08 and coefficient of determinant is 0.11. The coefficient of determinate among the company is widely varied.

4.3 Analysis of Cash Conversion Cycle

To analysis of cash conversation cycle first of all inventory conversion period, payable conversion period and receivable conversion period is need to analyze.

a) Inventory Conversion Period:

The inventory conversion period shows how rapidly the inventory in turning into receivable through sale. It is one of the important financial tools for the measure of the cash conversion cycle.

Table No. 30

S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg
1	NLO Ltd.	52	94	136	112	94	146	106
2	BN Ltd. (Balaju)	126	136	77	133	104	126	117
3	BN Ltd. (Terai)	141	105	97	108	112	103	111
4	NBGU Ltd.	107	122	65	189	166	209	143
5	JSM Ltd.	77	71	78	79	83	101	82
6	NKU Ltd.	64	161	19	222	264	121	142
7	GRU Ltd.	198	132	161	167	142	168	161
	Average	109	117	90	144	138	139	123

Inventory Conversion Period

Source: Appendix- 20 to 26

The above table shows the inventory conversion period of related Nepalese manufactures companies for the study period. The conversion period among the manufacturing companies in the study period is widely varied. The highest conversion period is 264 days of NKU Ltd. in 2006 and lowest in 19 days of NKU in year 2004. The conversion period is in increasing trend. JSM Ltd. and NKU Ltd. further analysis have been done by cross section analysis.

The above table shows the company average of receivable conversion period of the selected companies. The company average for the study is 123 days. The highest inventory conversion period is 161 days of GRU Ltd. and the lowest is 82 days of JSM Ltd. The inventory period is widely viewed among the selected Nepalese manufacturing companies. The receivable conversion period is widely varied among the selected Nepalese manufacturing companies. NLO Ltd., NB Ltd. (Balaju & Terai) and JSM Ltd. have ratio less than the over all average ratio. Higher the inventory conversion period indicated that is take longer time to convert the inventory into receivable through sales.

Table No. 31

S.N	Year	Ratio
1	2002	109
2	2003	117
3	2004	90
4	2005	144
5	2006	138
6	2007	139
Compar	ny Average Ratio	123

Yearly Average Inventory Conversion Period

Source: Appendix- 20 to 26

The above table shows the yearly average of inventory conversion period from 2002 to 2007. The yearly average period is 123 days for the study period. The conversion period is in increasing trend with highest days of 144 in year 2005 and lowest in year 2004 is 90 days.

To summaries the above analysis of the inventory conversion period the company average of inventory conversion period in widely varied and the yearly average is not too much varied but in increasing trend.

The inventory turnover period shows how rapidly the inventory is turning into receivable through sales. Generally a high turnover period implies increasing inventory levels than wanted by production and sale activities on a show moving or absolute inventory and lower conversion period is indicative of good inventory management. A high level of sluggish inventory amount to unnecessary the up of funds, reduced profit and increasing cost. A lower inventory conversion period may be reuse of a very low lever of inventory which result is frequent store out, the firm may be living from hand to mouth. Thus too high and too low inventory conversion period should be investing further.

b) Analysis of Receivable Conversion Period:

Receivable conversion period is also one of the important financial tools for the measurement of the cash conversion cycle. The receivable collection period is a measure of the average period of time between the days of scale and the data payment are received. The activity measure of receivable could be expressed as a turnover on as a percentage of scale. Generally the lower the collection period, the more efficient in the more demand of the credit.

Table No. 32

Receivables Conversion Period

S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg
1	NLO Ltd.	182	231	236	187	172	246	209
2	BN Ltd. (Balaju)	78	53	72	48	37	71	60
3	BN Ltd. (Terai)	100	111	155	52	17	86	87
4	NBGU Ltd.	26	60	100	9	14	44	42
5	JSM Ltd.	15	12	15	1	6	24	12
6	NKU Ltd.	84	45	75	114	154	57	88
7	GRU Ltd.	54	51	42	28	24	31	38
	Average	77	80	99	63	61	80	77

Source: Appendix- 20 to 26

The above table shows the receivable conversion period of selected Nepalese manufacturing companies. The collection period for the manufacturing companies have been widely varied during the study. The overall receivable conversion period during the study period of these companies is 77 days. The highest collection period is 246 of NLO Ltd. in year 2001 and lowest is 1 days of JSM Ltd. in year 2005. The collection period is widely varied during the study period for most of the selected companies but companies like NKU Ltd., NLU Ltd. have increasing trend further analysis have been done by the cross section analysis.

The above table shows the company average of receivable collection period of selected Nepalese manufacturing companies. The overall average collection period is 37 days. The highest collection period in 209 days of NLO Ltd. and lowest is 1 days of JSM Ltd. All the companies except NLO Ltd. BN Ltd. (Terai), and NKU Ltd. have collection period lower than the overall average collection period.

Table No. 33

S.N	Year	Ratio
1	2002	77
2	2003	80
3	2004	99
4	2005	63
5	2006	61
6	2007	80
Compar	ny Average Ratio	77

Yearly Average Receivables Conversion Period

Source: Appendix- 20 to 26

The above table shows the yearly average of receivable collection period since 2002 to 2007. The overall ratio is 77 days. The collection period is around the overall ratio during the study period. The highest period is 99 days in year 2004 and lowest is 61 in year 2006.

To summarize the above analysis it is calculated that receivable collection period is unduly among the selected Nepalese manufacturing companies during the study period. NLO Ltd. has too high collection period of 209 days, which indicate inefficient credit, and collection performance and JSM Ltd. has low collection period indicate better quality of debtor. BN Ltd. (Balaju), BN Ltd. (Terai), GRU Ltd., NBGU Ltd. also has lower collection period.

The average collection period measure the qualities of debtor since it indicates the speed of this conversion. The shorter the average conversion period, the better the quality of debtor as a show collection period implies prompt payment by debtor. An excessively long collection period implies a very liberal and inefficient credit and collection performance. This certainty delays the collection of cash and import the firm liquidity. The chance of bad debt lower are also increased on the other hand to low a collection period is not necessary favorable is may indicate a very in credit and collection policy to exchange the sales level and improve profitability. A Nepalese manufacturing company has longer calculation period except few companies. This indicate in efficient credit and collection performance it is mostly delay the calculation of cash and effect the firms liquidity thus these manufacturing shows reduce the collection period.

c) Analysis of Payable Conversion Period:

Payable conversion period indicate the speed of creditor payment. A huge payable conversion period in favorable for the company but too much higher period, hampers the credit cashiers of the company. A lower payable conversion period show the firm repayment capacity and it increase the credit worthiness of the company.

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S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg
1	NLO Ltd.	113	177	191	117	81	146	138
2	BN Ltd. (Balaju)	77	61	40	74	47	98	66
3	BN Ltd. (Terai)	82	83	47	65	40	79	66
4	NBGU Ltd.	19	30	33	286	263	29	110
5	JSM Ltd.	8	9	7	7	8	7	8
6	NKU Ltd.	11	23	14	233	252	16	92
7	GRU Ltd.	69	46	63	79	81	65	67
Average		54	61	56	123	110	63	78

Payable Conversion Period

Source: Appendix- 20 to 26

The above table shows the payable conversion period of reelected Nepalese manufacturing companies for the study period. The payable conversion period widely varied during the study period. The overall average of the payable conversion period is 18 days. The highest period is 286 days in 2005 of NBGU Ltd. and lowest period is 7 period, JSM Ltd. and NKU Ltd. has increasing trend. GRU Ltd. has period around the overall average period and rest have valued payable conversion period. The further analysis is done by cross section analysis.

The above table shows, the company average of payable conversion period of receive Nepalese manufacturing companies for the study period. The average period of these companies is 18 days. The highest period is 137 days of NLO Ltd. and lowest period is 8 days of JSM Ltd., NLO Ltd., NBGU Ltd., NKU Ltd. has period above the overall period and remaining companies have period below the overall period.

Table INC. 5.

S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg
1	NLO Ltd.	113	177	191	117	81	146	138
2	BN Ltd. (Balaju)	77	61	40	74	47	98	66
3	BN Ltd. (Terai)	82	83	47	65	40	79	66
4	NBGU Ltd.	19	30	33	286	263	29	110
5	JSM Ltd.	8	9	7	7	8	7	8
6	NKU Ltd.	11	23	14	233	252	16	92
7	GRU Ltd.	69	46	63	79	81	65	67
	Average		61	56	123	110	63	78
	0	~						

Payable Conversion Period

Source: Appendix- 20 to 26

The above table shows the yearly average of payable conversion period for the study period is 78 days. The yearly average payable period is widely varied and in increasing trend. The highest overall average is 123 days in year 2005 and lowest is 54 days in year 2002.

To conclude the above analysis payable conversion period among the selected manufacturing companies has been widely varied and has higher conversion period higher time to pay its obligation which lapis the credit worthiness of the company. The management of the company must be attaint on to repay the obligation in that time period, which does not hamper the credit worthiness of the company but increase the strong position of credit worthiness that helps the company for the borrowing and to get loan.

Analysis of cash conversion cycle

Cash conversion cycle is an important tool. Cash conversion cycle shows how many time is taken to convert the receivable into cash, inventory turnover into the cash and how much time it take to repay it's obligation.

Table No. 36

S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg
1	NLO Ltd.	121	148	181	183	185	247	178
2	BN Ltd. (Balaju)	128	128	109	107	94	98	111
3	BN Ltd. (Terai)	159	134	205	95	88	110	132
4	NBGU Ltd.	114	152	132	-88	-83	225	75
5	JSM Ltd.	85	75	86	72	81	117	86
6	NKU Ltd.	137	183	80	103	106	161	128
7	GRU Ltd.	182	137	140	116	86	134	133
	Average	132	137	133	84	80	156	120

Cash Conversion Cycle

Source: Appendix- 20 to 26

The above table shows the cash conversion on period of selected Nepalese manufacturing companies for the study period. The cash conversion period among the selected manufacturing companies is unduly varied. The overall cash conversion of the selected Nepalese manufacturing company for the study period is 122 days/ the higher conversion period is 247 days of NLO Ltd. and lowest cash conversion period is -88 days, for NBGU Ltd. NBGU Ltd. have negative period in 2005 and 2006. BN Ltd. (Balaju) have cash conversion period in increasing trend.

The above table shows the cash conversion period of selected manufacturing companies. The cash conversion period is widely varied among the manufacturing companies. The highest conversion period is 178 days of NLO Ltd. and lowest is 75 days of NBGU Ltd. The overall average cash conversion cycle is 120 days. Except BN Ltd. (Balaju), NBGU Ltd. and JSM Ltd. all the selected companies have period above the overall cycle.

Table No. 37

S.N	Year	Ratio
1	2002	132
2	2003	137
3	2004	133
4	2005	84
5	2006	80
6	2007	156
Compar	ny Average Ratio	120
Course	· Annondia 2	0 to 26

Yearly Average Inventory Conversion Period

Source: Appendix- 20 to 26

The above table shows the yearly average of cash conversion period from 2002 to 2007. The yearly average period is 120 days for the study period highest period is 156 days in year 2007 and lowest 80 days in year 2006. The yearly average is in decreasing trend.

To summaries the above analysis of the cash conversion period, the company's average of the selected manufacturing company's conversion cycle varied too much but yearly conversion did not varied too much. The cash conversion period of individual is too much varied and too much high or long period due to long period of collection of receivable and inventory converted into cash. These companies have taken long period to pay their obligation, thus the cash conversion period seem to lower. Longer cash conversion period and negative cash conversion period both is worse to the company in long life. Longer cash conversion period means even the strong liquidity position of firm, firm could not pay the obligation and for the daily operation of firm. Negative cash conversion period is seem to be good for short period but it worse the credit worthiness of the firm. To lower the cash conversion receivable have to collect as mush as quick inventory should bopped in the time period of credit. The credit worthiness of the company is to be improved by paying obligation in time.

4.4 Analysis of Financial Mix

Financial mix is also an important financial tool. By the help of hedging approach we can measure the financial mix of the company. A sound financial position is needed for the survival and growth of the company. Thus each and every company used different kind of source to finance their assets. The objective of firm, wealth maximization can be achieved by proper utilization. Of fund, which is possible through effective capital structure and proper assets management only one percentage reduce in case will increase more than 10% if the profit. A firm can finance its asset by quite capital alone but it is generally not followed in practices more firm finance their asset by a conversion of equity capital long debtor short term debt. The combination may be also equity capital and long-term debtor or equity capital and short-term debt. Each source of financial has their own benefits and defects. The higher usage of short term financing is called aggressive approach and lower usage of short-term financing is called conservative approach. The greater usage of short term debt is risky because if fixed assets one financed through short term financing, fixed asset could not generate cash with in short span of time, if firm could not able to repay the short term loan and interest with in a year time period it could force the firm into bankrupt. In the conservation approach all assets are financed through the long term debt (long maturity period) even seasonal requirement is finance through long term debt because of lower risk. The long-term debt is lower risky than short-term debt. In this approach the finance remain ideal whenever in off-season.

The company average ratio of short-term debt to total liabilities is 66%. This shows the short-term debt of most companies is most than long-term debt and the ratio of short-term debt to total capital also shows high use of short-term debt. The average company average ratio is 1.34. This indicated that Nepalese manufacturing companies is following aggressive approach of financing higher

88

usage of short term financing. These companies have not followed the financing mix or hedging approach. The greater use of short term financing is risky.

4.5 Analysis of Success / Failure Companies

Edward Actman development the discriminate analysis in finance for studying bankrupt higher the combined ratio indicate the strong financial position of the company and there is less changes of bankrupt in near future and lower the combined ratio indicates the weak financial position of the firm and there is chances of bankrupt in near future. The analysis of success/failure of Nepalese manufacturing companies has been done below.

Table No. 38

S.N	Company/Year	WC/TA	CA/CL	NP/TA	NP/SALE	SALE/TA	Ζ			
1	NLO Ltd.	0.56	2.85	0.01	0.01	0.77	5.47			
2	BN Ltd. (Balaju)	0.22	1.97	0.04	0.06	0.58	3.83			
3	BN Ltd. (Terai)	0.33	1.9	0.03	0.04	0.74	3.87			
4	NBGU Ltd.	-1.56	0.38	-0.19	-8.64	0.85	-0.53			
5	JSM Ltd.	0.07	1.64	-0.02	-0.02	0.93	3.19			
6	NKU Ltd.	0.26	4.33	0.01	-1.08	0.66	7.18			
7	GRU Ltd.	-0.13	0.78	-0.11	-0.2	0.55	1.75			
Average										

Analysis of Success/Failure Companies

Source: Appendix- 15, 5, 16, 17, 18

Group	Ratio	Company
Α	Less than 2.675	2
В	More than 2.675	5

The calculated average combination of ratio is 3.54. Edward Actman established a guideline Z score which can be used to classify firms as either financially sound a score above 2.675 or headed toward bankrupt a score below 2.2675. Except JSM Ltd. all the selected manufacturing has score more than 2.675, which show these companies strong financing position.

The highest Z score is 7.18 of NKU Ltd. and lowest score is -0.53 of NBGU Ltd. which shows that NBGU Ltd. financial position is not in strong

financial position. Companies, which have lower than the standard Z score are financially weak companies and headed toward bankrupt. Those companies have to improve their financial condition otherwise they could be bankrupt near future.

This calculation shows the over all analysis of the success and failure of Nepalese manufacturing companies. The calculated Z score shows variation among these companies. Only Z company among the selected companies have lower Z score but only 2 companies NLO Ltd. and NKU Ltd. have good score remaining companies score is around the standard score 2.675. This shows the chance of bankrupt in near future if it is remain the same condition. The management must improve the financial position of these companies, which dose not has good Z score. The Z score can be improving by the improvement of the management companies.

4.6 An Analysis of Opinion Survey on Short-term Financing

This analysis deals with the study of the opinions of respondents with respect to the major aspects of short term financing. The study is based on questionnaire survey of all the opinions of 30 respondents. These aspects include assessing the capital structure decision of an enterprises, use of short term funds, Process of obtaining a trade credit, term of purchase, effort of payment beyond due date, secured financing, inventory financing, selecting the back of taking the loan and identification of significance of short term financing. The perform of structural questionnaire is Appendix 29.

The response to each choice in that question where choices are to be ranked is weighted by the value of the rank assigned to it by the respondents and the weighted arithmetic mean was calculated to find the overall rank for all respondents.

a) Capital Structure Decisions:

With respect to the capital structure decision, the majority of the respondents (60 percent) feels that the decisions on short term debt versus long term debt on total capital structure is more important in capital structure decision making. The 30 percent of respondent's opinions that debt versus is an important capital structure decision-making. Only one respondent is in favour of using the secured versus unsecured debt. It can, therefore be started that the opinions of all the 10 respondents are different with respect to capital structure decision making.

b) Use of Short-term Funds:

Regarding the use of short-term funds, the majority of the respondents are of the view that only current assets should be financed from short-term funds. In this connection, 85 percent of the respondents are in favour of this. While 15 percent of the respondents have opined that the only seasonal variation in current assets should be financed by short-term funds and enterprise.

91

c) Process of Obtaining a Trade Credit:

With respect to process of obtaining a trade credit, the majority of the respondents (60 percent) does not signs any formal note. Only 29 percent of respondents sign a formal debt instrument. Only 1 percent has used the promissory note for obtaining a trade credit.

d) Term of Purchase:

Issue relating to the term of purchase includes

- Term of purchase of raw materials by enterprise.
- Receiving days of trade credit by supplier and
- Discount provided by supplier.

With respect to term of purchase, the majority of respondents (65 percent) purchase raw materials on cash on delivery basis, whereas 35 percent of respondents have purchase raw materials on cash before delivery basis. The minority of respondents (30 percent) received the trade credit for 1 to 15 days and rest 70 percent received the trade credit for 15 to 30 days. Lastly, 60 percent of respondents have not got the any discount by the supplier for making an early payment while 40 percent of respondents have got 5 to 10 percent discount, if payment is made within 1 to 15 days.

e) Effect of Payment Beyond Due Date:

With respect to payment period, the majority of respondents (73 percent) have not made payment beyond due date and 27 percent of respondents have paid beyond due date. Those respondents who made payment beyond due date, they have paid after 7 to 15 days of due date.

Regarding delaying the payment, 66 percent or respondents have informed their supplier when paid intently and 34 percent of respondents have not given any notice.

With respect to effort of delaying payment of credit ratings, the majority of (70 percent) of respondents feels that late payment has not affected credit rating. Only 30 percent of respondents feel that their credit rate is affected. With

respect to stretching accounts payable, the majority of the respondents (92 percent) is of the vies that the suppliers have allowed to stretch accounts payable and only two percent feels that suppliers has not allowed to stretch it.

f) Secured Financing:

Regarding the pledging collateral to obtain the short-term loan, the majority of respondents (80 percent) have pledged the collateral and 20 percent of respondents have not pledged collateral to obtain short-term.

Again, the majority of the respondents (68 percent) have pledged the fixed assets of enterprise to obtain secured short-term loan. Similarly, 32 percent of respondents have pledged the inventories. None of the respondents have used the receivables and assets of shareholder for pledging.

g) Inventory Financing:

With respect to inventory financing, the majority of respondents (65 percent) have not used the inventory loan and 35 percent of respondents have used inventory loan. The majority of respondents (60 percent) have used the terminal receipt loan and the other 40 percent of respondents have used the field warehouse loan under the inventory loan. None of the respondent has arranged other sources of inventory loan. It indicates that the majority of respondents have not used inventory loan and those who used the inventory loan the majority is in favour of terminal receipt loan and field warehouse loan.

h) Selecting the Bank for Taking Loan:

Regarding the choice of a bank for taking the loan, the majority of respondents (70 percent) have no criteria about this. The enterprise does not considers any factor selecting the bank because all of the commercial banks have followed similar type of policy. The 30 percent of respondents have considered the some factor before choosing the bank, these are:

- i) Relationship in between enterprises.
- ii) Duration of credit period granted by bank.
- iii) Past records of the company or enterprises.

i) Priority for Different Sources of Unsecured Short-term Finance:

In their overall ranks for banking the various sources of unsecured short term financing in manufacturing public sector enterprises in Nepal, the majority of the second priority to short-term bank loan: the third priority to accruals and the fourth priority to commercial paper. The fourth priority is less known in Nepal for obtaining the fund.

j) Identification of Significance of Short-term Financing:

At the end of the questionnaire, the respondents were provided with a list of questions on different aspects of short term financing. Most respondents also agree that short-term bank loans represents largest from of short term financing. They however seem to be undecided with the problem statement that interest on short term loan fluctuate more widely.

The respondents seem to disagree with the statements that enterprises are indifferent towards debt, equity ratio and short term versus long-term funds and that long-term interest rate is higher than short-term interest rates.

4.7 Major Findings of the Study

The major findings of this study are presented in following headings, correspondence of the study objectives:

a) In total financing of listed manufacturing companies in Nepal, all the manufacturing companies' does not have followed the increasing trend of short-term financing. GRU Ltd., BN Ltd. (Balaju) and NBGU Ltd. have followed increasing trend and remaining selected companies' short term financing is widely fluctuated. The increasing is highest amount for NKU Ltd. (9.54 times) and lowest for JSM Ltd. (0.28 times). The highest amount of short-term financing is Rs. 353.12 million for NBGU Ltd. and lowest amount is Rs. 24.49 for NKU Ltd. After the analysis of short-term financing it is concluded that if the size of business is large then the current liability is also high. Most of manufacturing companies have

commonly used the short-term financing source as (i) Bank loan (ii) Sundry Creditors (iii) Provision for taxation (iv) Miscellaneous current liabilities and provisions. The maximum usage as source of short-term financing by Nepalese manufacturing companies which is Bank loan and Sundry Creditors as compare the other source of financing.

- **b**) All the selected manufacturing companies have lower short-term financing than total asset. This is due to positive net worth. The overall ratio of short-term financing to total asset is 0.61. The ratio is varied among the selected companies most of the company's ratio is near the standard ratio 0.45. This shows that most of the Nepalese manufacturing company's short-term debt to total asset is at satisfactory level.
- c) In fiscal year 2040/41 the major sources of short-term financing has been noticed to be account payable. It is then followed by miscellaneous current liability, provisions and loans and advances. Similarly the major sources of short-term financing are fiscal year 2044/45 is noticed to provisions. It is then followed by accounts payable and miscellaneous current liabilities and then loans and advances. In these days most of manufacturing companies are widely used bank loan. Thus, the major sources of short-term financing for manufacturing companies have account payable and bank loans.
- d) The bank loan is in increasing trend of Nepalese manufacturing companies due to unpaid or delaying loan. NKU Ltd. has not used loan and advances during the study period. JSM Ltd., GRU Ltd. and NBGU Ltd. have maximum use of bank loan in their financing. The overall average of loan to short-term debt is 0.028 or 2.8%. The highest is 15% of JSM Ltd. and lowest is zero of NKU Ltd. Then ratio of overall and yearly average is in decreasing trend.
- e) Account payable is commonly used as sources of financing by most of the manufacturing companies but have not effective utilize the account

payable. The overall average of account payable to short-term financing is 0.18 times. The maximum usage by NLO Ltd. is 72 % and lowest by NBGU Ltd. and JSM Ltd. is 3%. But in term of absolute and the total average account payable in highest of NLO Ltd. and lowest is of NKU Ltd. The yearly and overall average ratio of account payable to short-term financing is in decreasing trend. It indicates that accounts payable vary with financial position of an enterprise. But it can't say that profit making companies have less used the accounts payable than loss making companies. The use of accounts payable is depends on the financial policy followed by enterprises.

- f) From the study, the liquidity position of selected manufacturing companies is quite good except NBGU Ltd. and GRU Ltd. The average current ratio of the selected companies is 1.98 times which indicate management of Nepalese manufacturing companies is very caution on matching the current asset with current liabilities. Generally a current ratio of 2:1 is considered satisfactory. The standard quick ratio is 1:1 and most of the companies has lower ratio as compare to standard ratio, overall ratio is 1.27 times which not meet the standard ratio. The yearly average ratio is in fluctuating and also does not meet the standard ratio.
- g) Cash to short-term financing is widely varied among the manufacturing companies during the study period. The overall ratio of cash to short-term debt is Rs. 0.08 times i.e. only 8% of short-term financing is covered by cash; the ratio is varied among the selected manufacturing companied. During the study, highest cash balance is Rs. 30.79 million of BN Ltd. (Terai) and lowest amount is Rs. 20.04 million of NLO Ltd. The overall average cash balance is Rs. 12.39 million of selected manufacturing companies.

- h) The holding of inventory is high in most of the manufacturing companies. In term of absolute amount, the highest average amount of the inventory is Rs. 190.15 million of BN Ltd. (Balaju) and lowest average amount is Rs. 220.89 million of NKU Ltd. The ratio of inventory to short-term debt is widely varied among selected manufacturing companies. The highest is 1.66 times of NKU Ltd. and lowest 0.19 of NBGU Ltd. The overall average is 0.77 times during the study period.
- The account receivable is in increasing trend during the study period due to poor collection policy of Nepalese manufacturing companies. The overall average of debtor to short-term financing is 0.60 times or 60%. The highest is 1.60 times of NKU Ltd. and lowest 0.09 times of NBGU Ltd. The ration is in decreasing in the yearly and overall average.
- j) The ratios of sales to short-term financing also help to analysis and interpret the effectiveness of short-term financing of manufacturing company. Sales to short-term financing indicate the number of times short-term debts turn over energy year. The ratio of sales to short-term debt is widely varied among the manufacturing companies. The ratio is quite good in most of the companies. The highest ratio is 6.98 times of NKU Ltd. and lowest 0.48 times of NBGU Ltd. The overall average ratio is 2.83 times.
- k) The ratio of net profit to short-term debt is positive for all selected company except NBGU Ltd., JSM Ltd. and GRU Ltd. but the ratio is very low. This is due to in-effective utilization of short-term debt and high operating expenses, production cost. The overall ratio is -0.01, which is negative and also in decreasing.
- The overall average of manufacturing company's ratio of short-term debt to total liabilities is 0.66 times or 66%. This shows that short term debt of most companies more than long term debt. The highest ratio is 0.99 of

NBGU Ltd. and lowest is 0.27 times of JSM Ltd. The company average ratio is in decreasing trend.

- m) The ratio of short-term debt to total capital also shows high use of short-term debt. The overall company average ratio is 1.34. This analysis shows that Nepalese manufacturing company's dose not follows the financial mix or hedging approach. They have not formulated the financial policy. Thus there is no practice of any short-term strategies and financial mix policy only the temporary current assets financial through the short-term financing.
- n) The average cash conversion cycle of the Nepalese manufacturing Companies are too much varied and too long. This is due to long period of collection of receivable and inventory. Most of companies have taken long period to pay off their obligation. The overall period is 122 days. The longest conversion period is 178 days of NLO Ltd. and shortest period is 75 days of NBGU Ltd. The average cash conversion period is not satisfactory.
- o) The relation between return on equity and current liabilities shows that if current liabilities percentage in total liabilities is in increase, return on equity also increase. During the study, return on equity of most of the selected companies increase or decrease, current liabilities percentage in total liabilities decrease or increasing the highest correlation between return on equity and current liabilities is 0.91 of BN Ltd. (Terai).when slope of line 'b' is negative then correlation is also negative. Increase in current liabilities percentage in total capital also increase return on equity of most selected companies except NKU Ltd. The highest correlation is 0.67 of BN Ltd. (Terai) which shows that change in return on equity due to change incurrent liability. Current liability percentage in total capital is highest for GRU Ltd. which is 8.80. The slope of line 'b' is negative.

- p) The over all analysis of the success and failure of Nepalese manufacturing companies. The calculated Z score shows variation among these companies. Only Z company among the selected companies have lower Z score but only 2 companies NLO Ltd. and NKU Ltd. have good score remaining companies score is around the standard score 2.675. This shows the chance of bankrupt in near future if it is remain the same condition. The management must improve the financial position of these companies, which dose not has good Z score. The Z score can be improving by the improvement of the management companies.
- q) In the last, while looking after the interpretation of field survey based on questionnaire and interview, it is revealed that the majority of enterprises have given more important to short-term debt versus long-term debt on total capital with respect to capital structure decision and most of the enterprises have used the short-term funds in current assets. The majority of enterprises have gave the first priority to accounts payable on source of unsecured short-term financing and under the secured short-term financing fixed assets has gave the first priority of pledging collateral.

Most of the enterprises have not signed anything for obtaining a trade credit and trade credit received in between 1 to 15 days, if purchase on cash after delivery. The majority of enterprises have purchasing the raw material on cash before delivery, cash after delivery and cash on delivery and not get the any discount by the supplier for early payment. The majority of enterprises have informed to supplier when paid lately and this delaying payment does not affects the credit rating of enterprise. Lastly the supplier allows to stretching accounts payable.

Most of the enterprises have not formulated or follow the policy regarding the selection of bank for taking the loan. Some of enterprises have consider the same factor before choosing the bank for loan, which is

99

credit period given by bank, relationship between bank and enterprises the past records of enterprises with respect to choosing the bank.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The first chapter focuses on the brief introduction of the study, industrialization and its role in Nepal. It attempts to introduce selected manufacturing companies of Nepal. Some of the questions have been raised regarding the short-term financing of Nepal manufacturing companies. It has attempts to set the objectives, significance and limitation of the study. Finally it present plan of the study.

The second chapter deals with the review of literature, which includes the conceptual framework, different views of different writers regarding the working capital management, books and journal/articles. Review of literature section has also attempt to review the studies done so far on the same topic on different organizations.

Research methodology is the third chapter. It has included the research design. It presents nature and source of data, data collection and processing techniques and financial and statistical tools used. Financial ratios like current ratio, current assets to fixed assets, cash and bank, inventory, miscellaneous current assets and debtors to current assets, turnover into and profitability ratio have been used. Karl Pearson's coefficient of correlation and probable error and regression have been used to analyzed the trade off between ROE and other variables (CL / TL & CL/TC).

The fourth chapter includes the presentation and analysis of data derived from selected Nepalese manufacturing companies. To analysis various financial tools ratio which belongs to short-term financing are used. It has also analyzed cash conversion cycle of selected manufacturing companies. Finally, the

101

relationship between ROE and other variables (CL / TL and CL / TC).are analyzed with help of coefficient of correlation, probable error and regression.

In the conduct of the business most of the enterprises have to different types of fund and short term funds. These funds are obtained from various sources. Long term financing is costly and rigid then short term financing. The public sector and manufacturing companies in developing countries have lack of capital and they required the capital in seasonally of cylices. In this regard short term financing is appropriate for than. The aggressive financing policy called for the greatest used of short-term debt, short term finance is an analysis of decision that affects current asset and current liabilities and will frequency have an impact on the firm with in a year.

Short term financing is common source of financing. It provide, minimum cost of financing as well as spontaneous financing although it has carious advantages but many manufacturing company does not integrated in it due to higher the short term debt, lower the working capital, lower the liquidity and higher the risk. The short term financing decision is a relatively common problem in practice, many companies financial officers are faced with choosing a source of short funds from a set of financing alternative. If one of the alternatives is clearly superior to all other alternative the short term financing problem is easily resourced by accepting that alternative more frequent, however is the situation where either one alternative is not superior in every respect or where various constraints are placed on the alternatives. In instances the financial decision maker must choose from among the alternative and select a financing package as a solution. In practice approaches to the factors as explicite cost, restrictions, expediency, and reliability or fore costs, cash "buffers" industry practices, etc.

The study is concerned on the various aspect of the short-term financing management with special reference to the selected listed manufacturing companies of Nepal. It covers the period of five year from 2002 to 2007 A.D. It

102

includes the data of seven manufacturing companies listed in Nepal stock exchange Ltd. Kathmandu, Nepal. This study has focused on the liquidity position, short-term financing policy followed by companies, analysis of success/failure of manufacturing companies. Besides this study, has also used statistical techniques and analyzed the collected facts in order to examine their relationship to each other.

This chapter summarized the whole study, draws the major findings, conclusion and forwards the recommendation for efficient short-term financing management of Nepalese manufacturing companies listed in NEPSE.

5.2 Conclusion

Lastly it can be said that Every Nepalese manufacturing companies should analyze the short term financing time to time whether the short term financing is used according to financing policy of enterprise or not. The management of short-term financing cannot be neglected by manufacturing compares; other it can seriously erode their financial liability. Neither higher usage nor lower usage of short term financing should be done only the temporary and seasonal requirement should be financed through short term financing. As most of the Nepalese manufacturing companies suffer hedge losses due to their inappropriate financial mix.

Thus this study on short term financing of selected Nepalese manufacturing companies listed in stock exchange is beneficial to all manufacturing companies to improve their financial policy. But this research study has been main only on the basis of 7 companies for 6 year. So it is necessary to further research, which can help to improve financial position for all types of manufacturing companies.

5.3 Recommendation

On the basis of findings and result derived from the analysis, following recommendation are made for better performance of Nepalese Manufacturing companies:

- There are different sources of short-term financing. The manufacturing companies have used mainly two-source, account payable, and provision. Bank loan has very less used and commercial paper has not in practice. Nepalese manufacturing companies should be effective and maximum utilization of bank loan better negotiation capacity, strong credit worthiness and strong liquidity will have favourable impact on term and condition of operating at business motivates and is a regular customer of the bank loan and gets maximum advantage by the bank.
- Nepalese manufacturing companies should maximum utilize the spontaneous source of financing because there is normally no explicit cost and it is interest free source. So every manufacturing company should utilize spontaneous source to the fullest extent. The analysis of short term financing of Nepalese manufacturing companies shows more use of short term debt during the study period. Higher use of short term debt is more risky so mix approach must be employed.
- The manufacturing companies of Nepal have followed the increasing trend of short term financing but not have followed the financing policy. Every manufacturing company should follow matching approach they raise fund whatever source of fund they get. Thus this company should prepare the work plan and determine the seasonal needs, seasonal requirement could be sub divided in temporary seasonal needs and permanent seasonal needs. Only the temporary seasonal requirement should be finance through the short-term sources and permanents requirement and permanent seasonal requirement through the long term

source. It should also try to maintain always the total debt to total assets ratio.

- The cash collection period of most of the Nepalese manufacturing companies are too long so these firms should speed the collection period. The cash collection policy can be made effective by speeding all receivable conversion period and payable conversion period. Delay in payment can increase cash conversion cycle but hamper the credit worthiness of the firm, so payment should also be done in time.
- Nepalese manufacturing companies should increase the efficiency both at higher and lower level. There is also lacked of skilled manpower. It is universally accepted that skilled manpower decreases the operating cost and higher profitability. Thus training programmer should be held at all level so that skilled manpower is developed.
- The Nepalese manufacturing companies have not formulate the policy regarding the selection of bank for taking loan thus it must be necessary to consider the factor like interest, time period and other facility before choosing the bank.
- Nepalese manufacturing companies should timely interpret the relationship between return on equity and current liabilities with the help of statistical tool correlation and regression. Those company whose return on equity increase by increase in current liabilities should increase their current liabilities and vice-versa. But it should also be noted that higher debt is risky for firm.
- Some of the Nepalese manufacturing companies are incurring losses. One of cause for it is high operating cost of production. The management should give attention towards the minimization of administrative and operating expenses. The unskilled manpower, over staffing, unsystematic purchase of raw materials, unnecessary expenses, misuse of facilities,

heavy expenses on overhead etc. are the major cause for high operating cost.

- Sales directly affect the need of current asset and working capital. As the sales increases, the current asset level will also increase. The manufacturing companies must boost up the sales volume through sales agents. Hence there should be proper relation and interactions among production, marketing and sales department during the planning of sales, which help to met sales target.
- Most of the Nepalese manufacturing companies have not sign a formal debt instrument when obtaining a trade credit by supplier. They must sign a formal debt instrument for evidence.
- If the enterprises need fund in a hurry situation they should obtain the fund from short term sources because under this source the fund is obtained much faster, lower cost as well as less restriction than the longterm sources.

Appendix : 2 Loan and advances to Short-term financing

	Loan and Advances									Current Liabilities						
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	
1	NLO Ltd.	1.61	0.73	0.63	0.86	0.38	1.75	0.99	35.88	63.29	33.75	42.75	61.95	41.95	46.6	
2	BN Ltd. (Balaju)	0.28	1.25	0.79	0.06	1.52	1.35	0.86	322.47	312.31	150.39	205.49	275.48	270.74	256.1	
3	BN Ltd. (Terai)	0.3	1.31	0.06	0.01	0.04	0.45	0.36	295.25	257.22	179.09	218.8	138.29	263.94	225.4	
4	NBGU Ltd.	0.02	2.16	1.52	1.37	1.33	0	1.07	353.27	361.58	332.14	347.92	368.45	355.38	353.1	
5	JSM Ltd.	23.37	26.91	31.01	27.82	26.46	22.96	26.42	339.04	289.67	237.91	153.91	74.72	270.02	227.5	
6	NKU Ltd.	0	0	0	0	0	0	0	7.97	90.56	18.44	12.14	14.34	9.49	25.49	
7	GRU Ltd.	10.33	0	0.25	2.24	6	0	3.14	313.39	292.06	329.77	379.65	442	291.96	341.4	
								4.69							210.8	

Appendix : 3

Account payable to Short-term financing

						Current Liabilities									
S.N	. Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg
1	NLO Ltd.	31.76	46.44	37.19	29.29	26.95	19.87	31.92	35.88	63.29	33.75	42.75	61.95	41.95	46.6
2	BN Ltd. (Balaju)	17	13.29	29.54	72.33	35.34	18.33	30.97	322.47	312.31	150.39	205.49	275.48	270.74	256.1
3	BN Ltd. (Terai)	16.16	16.3	3.17	22.21	12.97	25.25	16.01	295.25	257.22	179.09	218.8	138.29	263.94	225.4
4	NBGU Ltd.	18.53	16.17	7.85	6.19	5.32	16.41	11.75	353.27	361.58	332.14	347.92	368.45	355.38	353.1
5	JSM Ltd.	6.93	6.59	5.1	6.55	5.88	4.92	6	339.04	289.67	237.91	153.91	74.72	270.02	227.5
6	NKU Ltd.	4.73	7.23	1.99	0.09	0.09	5.77	3.32	7.97	90.56	18.44	12.14	14.34	9.49	25.4
7	GRU Ltd.	17.38	3.72	10.64	9.37	11.34	28.65	13.52	313.39	292.06	329.77	379.65	442	291.96	341.4
								16.22	-						210.8

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Appendix : 4

			Working	g Capital												
	Current Asset								Current Liabilities							
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	
1	NLO Ltd.	113.37	145.1	116.85	128.17	146.61	117.19	127.88	35.88	63.29	33.75	42.75	61.95	41.95	46.6	
2	BN Ltd. (Balaju)	393.85	548.39	462.45	468.83	439.75	506.43	469.95	322.47	312.31	150.39	205.49	275.48	270.74	256.15	
3	BN Ltd. (Terai)	561.49	518.69	452.99	317.28	225.61	490.17	427.7	295.25	257.22	179.09	218.8	138.29	263.94	225.43	
4	NBGU Ltd.	193.54	154.21	83.63	82.09	77.46	211.76	133.78	353.27	361.58	332.14	347.92	368.45	355.38	353.12	
5	JSM Ltd.	251	273.82	288.13	301.41	290.57	289.55	282.42	339.04	289.67	237.91	153.91	74.72	270.02	227.55	Ì
6	NKU Ltd.	89.27	84.49	28.3	21.94	21.06	85.51	55.1	7.97	90.56	18.44	12.14	14.34	9.49	25.49	
7	GRU Ltd.	312.58	241.74	226.76	224.74	225.13	306.56	256.25	313.39	292.06	329.77	379.65	442	291.96	341.47	
								16.22							210.83	Ì

Appendix : 5

							Currer	nt Ratio								
Current Asset								Current Liabilities								
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	
1	NLO Ltd.	113.37	145.1	116.85	128.17	146.61	117.19	127.88	35.88	63.29	33.75	42.75	61.95	41.95	46.6	
2	BN Ltd. (Balaju)	393.85	548.39	462.45	468.83	439.75	506.43	469.95	322.47	312.31	150.39	205.49	275.48	270.74	256.15	
3	BN Ltd. (Terai)	561.49	518.69	452.99	317.28	225.61	490.17	427.7	295.25	257.22	179.09	218.8	138.29	263.94	225.43	
4	NBGU Ltd.	193.54	154.21	83.63	82.09	77.46	211.76	133.78	353.27	361.58	332.14	347.92	368.45	355.38	353.12	
5	JSM Ltd.	251	273.82	288.13	301.41	290.57	289.55	282.42	339.04	289.67	237.91	153.91	74.72	270.02	227.55	

6	NKU Ltd.	89.27	84.49	28.3	21.94	21.06	85.51	55.1	7.97	90.56	18.44	12.14	14.34	9.49	25.49	
7	GRU Ltd.	312.58	241.74	226.76	224.74	225.13	306.56	256.25	313.39	292.06	329.77	379.65	442	291.96	341.47	
								16.22							210.83	

r 	Quick Ratio															
Quick Asset									Current Liabilities							
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	
1	NLO Ltd.	94.1	114.53	85.25	91.78	108.35	88.21	97.04	35.88	63.29	33.75	42.75	61.95	41.95	46.6	
2	BN Ltd. (Balaju)	208.51	321.53	277.47	244.76	262.81	363.7	279.8	322.47	312.31	150.39	205.49	275.48	270.74	256.15	
3	BN Ltd. (Terai)	383.75	384.29	338.7	198.01	198.01	339.31	307.02	295.25	257.22	179.09	218.8	138.29	263.94	225.43	
4	NBGU Ltd.	69.51	78.35	63.71	63.26	59.39	70.27	67.42	353.27	361.58	332.14	347.92	368.45	355.38	353.12	
5	JSM Ltd.	114.54	131.86	133.63	116.5	288.96	103.84	148.22	339.04	289.67	237.91	153.91	74.72	270.02	227.55	
6	NKU Ltd.	59.36	33.42	24.78	19.14	19.45	37.08	32.21	7.97	90.56	18.44	12.14	14.34	9.49	25.49	Î
7	GRU Ltd.	105.95	96.92	71.4	68.37	67.97	119.29	88.32	313.39	292.06	329.77	379.65	442	291.96	341.47	Ī
								145.72							210.83	

Appendix	:	7	
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Current Liabilities Cash S.N Company/Year 2002 2003 2004 2005 2006 2007 Avg 2002 2003 2004 2005 2006 2007 Avg 2002 1 0.7 42.75 41.95 0.04 1.32 2.29 2.91 3.18 1.81 2.04 35.88 63.29 33.75 61.95 46.6 1 NLO Ltd. BN Ltd. (Balaju) 29.46 5.34 13.76 1.92 35.92 3.94 15.06 322.47 312.31 150.39 205.49 275.48 270.74 256.15 0.09 2 3 BN Ltd. (Terai) 46.02 22.17 49.48 14.86 21.47 30.74 30.79 295.25 257.22 179.09 218.8 138.29 263.94 225.43 0.16 347.92 4 NBGU Ltd. 1.75 2.06 1.15 3.52 1.1 2.77 2.09 353.27 361.58 332.14 368.45 355.38 353.12 0.00 9.28 9.13 0.94 339.04 237.91 5 JSM Ltd. 2.07 5.29 3.54 5.04 289.67 153.91 74.72 270.02 227.55 0.03 NKU Ltd. 5.02 3.11 0.81 0.21 0.36 3.99 2.25 7.97 18.44 12.14 14.34 9.49 25.49 0.63 6 90.56 7 GRU Ltd. 33.86 32.14 21.35 14.88 9.73 29.48 313.39 292.06 329.77 379.65 442 341.47 0.11 64.9 291.96 12.39 210.83 0.15

Cash to Short-term financing

Appendix : 6
Appendix : 8

								Invent	ory to Sho	rt-term fir	ancing				
			Inver	ntory							Cur	rent Liabi	lities		
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg
1	NLO Ltd.	19.27	30.57	31.6	36.39	38.26	28.98	30.85	35.88	63.29	33.75	42.75	61.95	41.95	46.6
2	BN Ltd. (Balaju)	185.34	226.86	184.98	224.07	176.94	142.73	190.15	322.47	312.31	150.39	205.49	275.48	270.74	256.15
3	BN Ltd. (Terai)	177.74	134.4	114.29	119.27	108.42	150.86	134.16	295.25	257.22	179.09	218.8	138.29	263.94	225.43
4	NBGU Ltd.	124.03	75.86	19.92	18.83	18.07	141.49	66.37	353.27	361.58	332.14	347.92	368.45	355.38	353.12
5	JSM Ltd.	136.46	141.96	154.5	184.91	165.62	185.71	161.53	339.04	289.67	237.91	153.91	74.72	270.02	227.55
6	NKU Ltd.	29.91	51.07	3.52	2.8	1.61	48.43	22.89	7.97	90.56	18.44	12.14	14.34	9.49	25.49
7	GRU Ltd.	206.63	144.82	155.36	156.37	157.16	187.27	167.93	313.39	292.06	329.77	379.65	442	291.96	341.47
								110.55							210.83

Appendix : 9

								Debto	ors to Shor	t-term fin	ancing					
			Deb	otors							Cur	rent Liabi	lities			
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	20
1	NLO Ltd.	67.94	75.49	54.79	60.53	70.25	48.68	62.95	35.88	63.29	33.75	42.75	61.95	41.95	46.6	1.
2	BN Ltd. (Balaju)	115.21	88.04	124.18	80.85	63.66	80.48	92.07	322.47	312.31	150.39	205.49	275.48	270.74	256.15	0.3
3	BN Ltd. (Terai)	126.58	141.23	183.19	57.25	16.41	125.93	108.43	295.25	257.22	179.09	218.8	138.29	263.94	225.43	0.4
4	NBGU Ltd.	30.04	37.19	30.63	29.02	26.83	30.08	30.63	353.27	361.58	332.14	347.92	368.45	355.38	353.12	0.0
5	JSM Ltd.	27.56	23.24	29.03	2.52	12.21	44.05	23.1	339.04	289.67	237.91	153.91	74.72	270.02	227.55	0.0
6	NKU Ltd.	39.37	14.39	13.63	8.52	9.38	22.81	18.02	7.97	90.56	18.44	12.14	14.34	9.49	25.49	4.9
7	GRU Ltd.	55.98	56.58	40.85	25.79	26.4	35.13	40.12	313.39	292.06	329.77	379.65	442	291.96	341.47	0.
	one Lui							53.62							210.83	1.1

Appendix : 10

Short-term financing to total liabilites

		Cu	rent Lial	bilities								Total Lia	bilities				
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	2002	2
1	NLO Ltd.	41.95	35.88	63.29	33.75	42.75	61.95	46.6	63.29	33.75	42.75	61.95	41.95	80.04	46.6	0.48	0.
2	BN Ltd. (Balaju)	270.74	322.5	312.3	150.4	205.5	275.5	256.2	312.31	150.39	205.49	275.48	270.74	285.06	256.15	0.95	0.9
3	BN Ltd. (Terai)	263.94	295.3	257.2	179.1	218.8	138.3	225.4	257.22	179.09	218.8	138.29	263.94	272.07	225.43	0.97	0.9
4	NBGU Ltd.	355.38	353.3	361.6	332.1	347.9	368.5	353.1	361.58	332.14	347.92	368.45	355.38	355.38	353.12	1.00	0.9
5	JSM Ltd.	270.02	339	289.7	237.9	153.9	74.72	227.6	289.67	237.91	153.91	74.72	270.02	893.11	227.55	0.39	0.3
6	NKU Ltd.	9.49	7.97	90.56	18.44	12.14	14.34	25.49	90.56	18.44	12.14	14.34	9.49	86.44	25.49	0.09	0.9
7	GRU Ltd.	291.96	313.4	292.1	329.8	379.7	442	341.5	292.06	329.77	379.65	442	291.96	848.84	341.47	0.36	0.1
								210.83							210.83	0.60	0.'

Appendix : 11

	Short-term	financing	to total	Assets
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			Current	t Liabilitie	s						1	Fotal Asset	t		
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg
1	NLO Ltd.	35.88	63.29	33.75	42.75	61.95	41.95	46.6	131.71	165.35	135.46	145.21	161.93	137	146.11
2	BN Ltd. (Balaju)	322.47	312.31	150.39	205.49	275.48	270.74	256.15	1036.05	1038.41	901.18	990.88	1052.05	951.86	995.07
3	BN Ltd. (Terai)	295.25	257.22	179.09	218.8	138.29	263.94	225.43	687.92	667.8	582.05	637.51	419.23	627.26	603.63
4	NBGU Ltd.	353.27	361.58	332.14	347.92	368.45	355.38	353.12	218.41	193.25	121.2	117.22	110.58	233.91	165.76
5	JSM Ltd.	339.04	289.67	237.91	153.91	74.72	270.02	227.55	799.5	781.86	770.44	757.89	733.8	859.82	783.89
6	NKU Ltd.	7.97	90.56	18.44	12.14	14.34	9.49	25.49	171.17	163.92	69.97	61.78	56.1	112.47	105.9
7	GRU Ltd.	313.39	292.06	329.77	379.65	442	291.96	341.47	812.12	703.15	659.6	622.04	603.95	838.86	706.62
								210.83							501

Appendix : 12

Sales to Short-term financing

			S	ales							Cur	rent Liabi	lities			
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	
1	NLO Ltd.	136	119.15	84.71	118.1	148.75	72.22	113.16	35.88	63.29	33.75	42.75	61.95	41.95	46.6	
2	BN Ltd. (Balaju)	535.49	609.65	632.11	614.74	621.83	414.58	571.4	322.47	312.31	150.39	205.49	275.48	270.74	256.15	
3	BN Ltd. (Terai)	461.49	465.44	431.94	401.32	354.1	532.95	441.2	295.25	257.22	179.09	218.8	138.29	263.94	225.43	
4	NBGU Ltd.	422.52	226.15	111.95	0.77	0.79	246.83	168.17	353.27	361.58	332.14	347.92	368.45	355.38	353.12	Ī
5	JSM Ltd.	646.74	725.04	718.95	855.33	730.88	673.09	725	339.04	289.67	237.91	153.91	74.72	270.02	227.55	
6	NKU Ltd.	170.82	115.89	66.68	0.67	0.71	146.36	83.52	7.97	90.56	18.44	12.14	14.34	9.49	25.49	
7	GRU Ltd.	381.16	400.99	351.62	341.09	403.02	407.81	380.95	313.39	292.06	329.77	379.65	442	291.96	341.47	
			ĺ	ĺ	ĺ		ĺ	354.77	ĺ		ĺ	1		ĺ	210.83	İ

								Net pro	ofit to Sho	rt-term fir	ancing					
			Net	profit							Cur	rent Liabi	lities	<u>.</u>		
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	2
1	NLO Ltd.	6.22	4.24	0.31	3.06	0.17	-2.2	1.97	35.88	63.29	33.75	42.75	61.95	41.95	46.6	0
2	BN Ltd. (Balaju)	48.61	25.67	37.8	34.74	24.96	35.88	34.61	322.47	312.31	150.39	205.49	275.48	270.74	256.15	0
3	BN Ltd. (Terai)	39.14	26.56	19.55	15.63	-26.02	56.26	21.85	295.25	257.22	179.09	218.8	138.29	263.94	225.43	0
4	NBGU Ltd.	-13.39	-42.23	-41.51	-16.26	-23.67	-45.03	-30.35	353.27	361.58	332.14	347.92	368.45	355.38	353.12	-(
5	JSM Ltd.	-50.22	-5.29	8.81	25.36	-40.1	-29.9	-15.22	339.04	289.67	237.91	153.91	74.72	270.02	227.55	-(
6	NKU Ltd.	1.17	-8.79	14.81	-1.78	-2.82	0.19	0.46	7.97	90.56	18.44	12.14	14.34	9.49	25.49	0
7	GRU Ltd.	-72.71	-56.26	-76.36	-70.89	-81.72	-105.76	-77.28	313.39	292.06	329.77	379.65	442	291.96	341.47	-(
								-9.14							210.83	0

Appendix : 13

110

Appendix : 14

Short-with mancing to rotal capital

			Current	Liabilitie	s						Т	otal capit	al			
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	
1	NLO Ltd.	35.88	63.29	33.75	42.75	61.95	41.95	46.6	38.6	39.7	40.76	40.77	40.95	37.14	39.65	
2	BN Ltd. (Balaju)	322.47	312.31	150.39	205.49	275.48	270.74	256.15	695.93	705.56	727.15	761.89	704.57	666.81	710.32	
3	BN Ltd. (Terai)	295.25	257.22	179.09	218.8	138.29	263.94	225.43	382.23	395.49	384.9	401.17	263.24	355.19	363.7	
4	NBGU Ltd.	353.27	361.58	332.14	347.92	368.45	355.38	353.12	73.18	73.18	73.18	73.18	73.18	73.18	73.18	
5	JSM Ltd.	339.04	289.67	237.91	153.91	74.72	270.02	227.55	193.84	193.84	193.84	190.78	190.19	193.84	192.72	
6	NKU Ltd.	7.97	90.56	18.44	12.14	14.34	9.49	25.49	80.31	71.51	49.08	45.64	42.82	26.03	52.57	
7	GRU Ltd.	313.39	292.06	329.77	379.65	442	291.96	341.47	435.82	435.82	435.82	435.82	435.82	435.82	435.82	
								210.83								

Appendix : 15

								Wo	rking capita	al to Total a	isset				
			Worki	ng Capital	l						1	Fotal Asset	t		
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg
1	NLO Ltd.	77.49	81.81	83.1	85.42	84.66	75.24	81.29	131.71	165.35	135.46	145.21	161.93	137	146.1
2	BN Ltd. (Balaiu)	71.38	236.08	312.06	263.34	164.27	235.69	213.8	1036.05	1038.41	901.18	990.88	1052.05	951.86	995.0
3	BN Ltd. (Terai)	266.24	261.47	273.9	98.48	87.32	226.23	202.27	687.92	667.8	582.05	637.51	419.23	627.26	603.6
4	NBGU Ltd.	-159.7	-207.4	-248.5	-265.8	-290.99	-143.6	-219.3	218.41	193.25	121.2	117.22	110.58	233.91	165.70
5	ISM Ltd	-88.04	-15.85	50.22	147.5	215.85	19.53	54.87	799.5	781.86	770.44	757.89	733.8	859.82	783.89
6	NKU Ltd	81.3	-6.07	9.86	9.8	6.72	76.02	29.61	171.17	163.92	69.97	61.78	56.1	112.47	105.9
7	CRU L td	-0.81	-50.32	-103	-154.9	-216.87	14.6	-83.72	812.12	703.15	659.6	622.04	603.95	838.86	706.6
/	GKU Liu.	35.40	42.82	53.95	26.26	7 28	71.96	39.83	012.12	703.15	059.0	022.04	003.95	050.00	501

Appendix : 16

Net Profit to Total asset Net Profit Total Asset S.N Company/Year 2002 2003 2004 2005 2006 2007 2002 2003 2004 2005 2006 2007 Avg Avg 1 NLO Ltd. 6.22 4.24 0.31 3.06 0.17 -2.2 1.97 131.71 165.35 135.46 145.21 161.93 137 146.11 901.18 990.<u>88</u> 95<u>1.86</u> 25.67 1036.05 1038.41 1052.05 995.07 48.61 37.8 34.74 24.96 35.88 34.61 2 BN Ltd. (Balaju) BN Ltd. (Terai) 39.14 26.56 19.55 15.63 -26.02 56.26 21.85 687.92 667.8 582.05 637.51 419.23 627.26 603.63 3 4 NBGU Ltd. -13.39 -42.23 -41.51 -16.26 -23.67 -45.03 -30.35 218.41 193.25 121.2 117.22 110.58 233.91 165.76 5 JSM Ltd. -50.22 -5.29 8.81 25.36 -40.1 -29.9 -15.22 799.5 781.86 770.44 757.89 733.8 859.82 783.89 1.17 -8.79 69.97 105.9 6 NKU Ltd. 14.81 -1.78 -2.82 0.19 0.46 171.17 163.92 61.78 56.1 112.47 7 GRU Ltd. -72.71 -56.26 -76.36 -70.89 -81.72 -105.76 -77.28 812.12 703.15 659.6 622.04 603.95 838.86 706.62 -9.14 501

Appendix : 17 Net Profit to Sale

									1101110	in to bale						
			Net	Profit								Sale				
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	2
1	NLO Ltd.	6.22	4.24	0.31	3.06	0.17	-2.2	1.97	136	119.15	84.71	118.1	148.75	72.22	113.16	0
2	BN Ltd. (Balaju)	48.61	25.67	37.8	34.74	24.96	35.88	34.61	535.49	609.65	632.11	614.74	621.83	414.58	571.4	0
3	BN Ltd. (Terai)	39.14	26.56	19.55	15.63	-26.02	56.26	21.85	461.49	465.44	431.94	401.32	354.1	532.95	441.2	0
4	NBGU Ltd.	-13.39	-42.23	-41.51	-16.26	-23.67	-45.03	-30.35	422.52	226.15	111.95	0.77	0.79	246.83	168.17	-(
5	JSM Ltd.	-50.22	-5.29	8.81	25.36	-40.1	-29.9	-15.22	646.74	725.04	718.95	855.33	730.88	673.09	725	-(
6	NKU Ltd.	1.17	-8.79	14.81	-1.78	-2.82	0.19	0.46	170.82	115.89	66.68	0.67	0.71	146.36	83.52	0
7	GRU Ltd.	-72.71	-56.26	-76.36	-70.89	-81.72	-105.76	-77.28	381.16	400.99	351.62	341.09	403.02	407.81	380.95	-(
								-9.14							354.77	-(

Appendix : 18

Sales to Total asset

			Sa	les							Т	otal Asse	t				
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	2002	
1	NLO Ltd.	136	119.15	84.71	118.1	148.75	72.22	113.2	131.71	165.35	135.46	145.21	161.93	137	146.11	1.03	0
2	BN Ltd. (Balaju)	535.49	609.65	632.11	614.74	621.83	414.58	571.4	1036.05	1038.41	901.18	990.88	1052.05	951.86	995.07	0.52	C
3	BN Ltd. (Terai)	461.49	465.44	431.94	401.32	354.1	532.95	441.2	687.92	667.8	582.05	637.51	419.23	627.26	603.63	0.67	C
4	NBGU Ltd.	422.52	226.15	111.95	0.77	0.79	246.83	168.2	218.41	193.25	121.2	117.22	110.58	233.91	165.76	1.93	1
5	JSM Ltd.	646.74	725.04	718.95	855.33	730.88	673.09	725	799.5	781.86	770.44	757.89	733.8	859.82	783.89	0.81	0
6	NKU Ltd.	170.82	115.89	66.68	0.67	0.71	146.36	83.52	171.17	163.92	69.97	61.78	56.1	112.47	105.9	1.00	0
7	GRU Ltd.	381.16	400.99	351.62	341.09	403.02	407.81	381	812.12	703.15	659.6	622.04	603.95	838.86	706.62	0.47	C
								354.77							501	0.78	C

Appendix: 19																		
REO in %										Current Liabilities/Total Liabilites							C	
S.N	Company/Year	2002	2003	2004	2005	2006	2007	Avg	2002	2003	2004	2005	2006	2007	Avg	2002	2003	
1	NLO Ltd.	10.92	7.70	0.52	5.29	0.30	-4.00	3.46	0.48	0.60	0.44	0.49	0.59	0.52	0.52	0.93	1.59	
2	BN Ltd. (Balaju)	6.98	3.64	5.20	4.56	3.54	5.40	4.89	0.95	0.94	0.86	0.90	0.79	0.95	0.90	0.46	0.44	
3	BN Ltd. (Terai)	10.24	6.72	5.08	3.90	-9.88	15.80	5.31	0.97	0.94	0.91	0.93	0.89	0.97	0.93	0.77	0.65	
4	NBGU Ltd.	9.93	23.85	18.89	6.89	9.12	37.00	17.61	1.00	0.98	0.97	0.99	1.00	1.00	0.99	4.83	4.94	
5	JSM Ltd.	72.77	6.49	-10.75	129.39	-70.72	89.80	36.16	0.39	0.34	0.28	0.21	0.11	0.30	0.27	1.75	1.49	
6	NKU Ltd.	1.46	-12.29	30.18	-3.72	-6.94	1.00	1.62	0.09	0.98	0.88	0.87	0.93	0.11	0.64	0.10	1.27	
7	GRU Ltd.	112.45	46.53	38.71	26.44	23.00	1059.70	217.81	0.36	0.35	0.38	0.43	49.11	0.34	8.50	0.72	0.67	

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