

CHAPTER - I

1.1.1. Introduction to Nepal.

We live in Nepal. This is a beautiful country in South Asia. Although, it covers a small area (i.e. 1,47,181 sq km), it deserves various things that are impossible to find in other big countries. If we see in a globe, it extends 26°22' N to 30°27' N Latitude and 80°4' to 88°12' Longitude. The Length of Nepal from the east to the west is 885 km. When we calculate its percentage of land, it covers 0.03% of World and 0.3% area of Asia continent.

Nepal is an underdeveloped land locked and predominately agriculture country on the SAARC region. As the two big countries India and China border Nepal, It is a landlocked country. When we go to the east of Nepal, We find Sikkim and West Bengal, to the south Bihar and Uttar Pradesh and to the West Uttaranchal States of India. Tibet the autonomous state of China borders the north of Nepal. Bangladesh is the third nearest neighboring country that is 27 km far. “Ecologically, Nepal is divided into three regions. They are Himalaya (15%), Mountainous (68%) and Terai (17%).”¹ The geographical disparities and uneven land Topography are major reasons for the imbalanced development of these regions.

From the beginning of the history of our country various attempts have been made to amalgamate the regions for harmonious development. King Mahendra divided Nepal into 14 zones and 75 districts on 1st Baishak 2018. Among 14 zones, 10 are named after rivers, 2 are named after mountains and the rest 2 are named after religious places. Late King Birendra divided Nepal into Four development regions in 2029 B.S., Again divided in 2037 B.S. into Five development regions. They are Eastern Development Region (EDR), Central Development Region (CDR), Western Development Region (WDR), Mid Western Development Region (MWDR) and Far Western Development region (FWDR). All the development Region Jonches the boards of both India and China. According to the report of central Bureau of statistics (CBS) 2058 there are 3915 VDC, 55 Municipalities, 4 sub- Metropolitan cities and 1 Metropolitan city in Nepal.

¹ Social book, Class-9, Kosheli Prakashan

Nepal is agriculture country where about 94.4%. Total economically active population are changed in agriculture and its supports more than 40% of the national economy. Nepal has mixed economy as well as least developed country in the world. “Where per capita income is only (US \$ 270, 2005) It’s neighboring country’s India and China’s PCI is \$720 and \$1740 respectively.”²

The main objectives of creating various VDCS, Municipalities, Districts and Development regions is to eliminate imbalance development. If all these divisions develop equally well, the entire kingdom will reach to the required height of development very soon.

1.1.2 Industrial Revolution

Industrial Revolution is the term applied to describe the major changes in modes of production in agriculture, industry and transport that influenced each of the socio-economic and political aspects of life. With technical and mechanical innovations like James Watt’s steam engine, the key machine, labour based productions were mechanized, that led to the large-scale factory productions. Consequently capitalist countries experienced immense growth in per capita income. Industrial Revolution commenced from Britain in the last quarter of the 18th century and spread outside into continental Europe and as far as the United States and Japan over subsequent times. The revolution started with the mechanization of the cotton and woolen industries in Lancashire, central Scotland and the West Riding of Yorkshire in its first phase and continued to expand with the mechanization of heavier industries (iron and steel) in its second phase, after known as the second industrial Revolution that took place around 1850. Industrial Revolution continues to exist as industrialization in different countries in our times of various levels and modes. In one hand Industrial revolution is essential factor of the modern world on the other hand.

² Social Book, Class 9, Kosheli Prakashan

1.1.3 History about Industry of Nepal

In Europe, industries started and grew rapidly 200 years ago. But are now declining or changing. If we see the history of Nepal, industrialization and banking work is established very lately and very slowly. In the age Nepal has a very sound economy because of flourish of trade and small cottage industry of Nepal. It flourish by the contribution of our Lichhavi King Mandevia and Anshubarma. About 74 items are traded in that period. But if we see the modern age of Nepal trade and industry going to be decline. Cause of unification comprising of Prithivi Narayan Shah and the after Nepal's Rana government didn't relies to establish industries from political point of view. Juddha Shumsher ruled for fourteen years (1896-1924 B.S.) In this period some development works had been done in the field of industry of Nepal. The company Act passed only for outward show. In 1944 Nepal Bank Limited was established. In the time of Juddha Shumsher Biratnagar Jute Mill, Juddha match factory and cotton mill in Birganj, Nepal plywood company Morang, flour mills and Nepal chemical Industries etc. were established. After Democracy people get education and after get knowledge people give emphasis on the industry and established more industries. Many of these were later run by government, and with lack of good management have had to close and some of them are privatization. After the government favourable Industrial Enterprises Act many industries were established in public and private sector. At least 10 year ago industries were developing systematic and strategically became the five year plan was started. Where it made committed efforts towards development planning. But last five year plan and now running 3 year interim plan all the industries and Trade are badly defeated by the political condition of Nepal.

1.1.4 Types of Industry in Nepal

On the basis of their products industries are categorized into three groups. Agriculture, forestry, mining etc. belong to the primary industries. House building, car factories, furniture hydro-power generation etc are examples of the secondary industries while tourism hotels, banks insurance companies schools, cinemas etc rank in the third category. In order to rapid growth in the economy, industries are necessary, Basically, there are three kinds of industries. They are

-) **Cottage and small scale Industry**
-) **Medium scale Industry**
-) **Large scale Industry**

According to the Industrial Enterprises Act 2049 (with amendment), cottage industries in Nepal include following types of industries:

Industries with their fixed capital up to two lakhs, that include hand loom, warping, semi-power loom dying and painting, sewing wearing carpentry, bamboo and red work, paper making, pottery, jewellery, leather work, rural tranning, making goods of cotton, clay, babiyo, jute, handicraft, doll batik, making utensils etc.

According to the Industrial Act 2054 (Amendment) and industry that invests up to Rs. 30 million as a fixed capital is known as a small-scale industry.

According to the “Industrial Act 2054 (Amendment) “Industries that invest Rs. 30 million to Rs. 100 million are called medium scale industries. Similarly, the same act states “ Large scale Industries are those industries which have over 100 million as fixed capital.”

Due to the economic condition and lack of technical knowledge, large scale industries are not developed. In our country, the majority of industries are small-scale industries.

1.1.5 Industrial Estates in Nepal.

Nepal is a developing country most of the parts of it are still lacking the infrastructures of development especially in the field of industries. Although industries are the major source of national income and economic development of the country they are not fulfilling our national needs due to the lack of infrastructures like transportation, electricity, telecommunication, raw materials, land water resources, proper market skilled manpower etc. Those places where such infrastructures are available and are getting proper situation for the operation of industries, are declared as industrial areas (Estates) by the government.

The places where there are adequate infrastructures and pre-requisites are declared as industrial estates in 2016 B.S. These estates are:

1. Balaju Industrial Estates, Kathmandu
2. Hetauda Industrial Estates, Makawanpur
3. Patan Industrial Estates, Lalitpur
4. Dharan Industrial Estates, Sunsari
5. Nepalgunj Industrial Estates, Banke
6. Pokhara Industrial Estates, Kaski
7. Dhankuta Industrial Estates, Kaski
8. Butwal Industrial Estates, Rupendehi
9. Surkhet Industrial Estates, Surkhet
10. Rajbiraj Industrial Estates, Saptari
11. Dhangadi Industrial Estates, Kailali
12. Small Industrial Estates, Bhaktapur

Besides the above given estates, there are many others small or large scale industries running in several parts of the country.

1.1.6 Relation Among Trade, Agriculture and Agriculture

Most of the industries in Nepal are based on agriculture products. Most of the Nepalese industries are agro-based. A farmer also produces extra amount (Surplus) to sell this products are used as raw materials by various industries. Without the contribution of agriculture many industries come to closure in the absence of their raw materials. In a process of supplying raw materials trade has always involved. Traders buy the agro- products from farmers and sell these to the industrialists.

Trade and industries are supplementary to each other and these together are supplementary to agriculture. Thus when trade and agriculture develop, industries are benefited and vice-versa. Similarly if agriculture and industry develop, trade also flourishes. In Nepal agriculture development should go together with industrialization. Agro-based industries are immensely important

1.1.7 List of road transportation of Nepal.

Good system of transport network is needed for a country's economic and social growth. Industries get their raw materials. Tourists can visit places of interest. Trade and business can flourish local products find market. Human relatives and co-operations are widened. Being land locked country water transportation is impossible and being uneven land topography. Air transportation is also difficulty to run. And it is also expensive means of transportation for average people of Nepal. As hills and mountains cover the major parts it has been difficult for the development of train transportation. So Road transportation is little more possibility and it is also cheaper than other. Thus motor industry is suitable for the contest of our country.

It is must necessary to developed road transportation for the overall development of the country and development of the motor industry.

Here is a list of road transportation in Nepal

Major Highways				
S.N.	Name of Highway	Connected Places	Length (Km)	Construction Year B.S.
1	Mahendra Highway	Mechi-Mahakali	1028	2019
2	Tribhuvan Highway	Kathmandu-	192	2013-2018
3	Prithvi Highway	Naubise- Pokhara	174	2028-2032
4	Siddhartha Highway	Sunauli-Pokhara	180	2023-2029
5	Bhimdatta Highway	Dhangadhi-D	135	2028-2032
6	Arniko Highway	Kathmandu- Kodari	114	2020-2028
7	Madan Bhandari Highway	Dharan-Dhankuta	50-5	2033-2042

Besides these, these are other highways in Nepal; They are Dhangadhi-Darchula Highway, Narayangadh- Butwal Highway, Nepalgun-Gularia Road, Trishuti-Dhunchhe Road, Dumre-Beshishahar Road, Narayand adh Butwal Mngling- Narayangadh Road, Tansen-Ridi-Tanghas Road.

Zonal Roads in Nepal

Zones	Length (Km)
Mechi	1075
Koshi	1189

Sagarmatha	725
Janakpur	1320
Bagmati	2307
Narayani	1542
Gandaki	801
Dhaulagiri	73
Lumbini	1362
Rapti	806
Bheri	891
Karnali	00
Seti	613
Mahakali	519

1.1.8 Motar history of Nepal

Gehendra Shumser, the senior son of Bir Shumser is known as the first scientist of Nepal. Though he was enrolled in Durbar High School. He is interested in creative works. His father Bir Shumser as Prime Minister at that time, he not only managed a favorable environment but also encouraged and co-operated him to establish a manufacturing factory and imported a motor car for Prime Minister from Japan. He contributed in the field of Science and Technology.

The scientist born in 1928 B.S. imported a motorcar from ford company towards the end of 1956 B.S. He tried to make new motor car by undoing and studying in detail every part of it. Unfortunately, King Prithvi Bir Bikram shah wished to have it for his personal use. Therefore, he had to leave that attempt. Then after for the longtime no any work had done in the field of motor Industry.

Motor Industries has grater prospect and scope now a days. Hulas motor company is Nepal's first and only one motor company where it own manufacturing factory. Five types of motor produced and started to be dominant in the market in Nepal. Hulas motor uses mostly Indian and Chinese parts. H.M. factory which is situated in Eastern Development Region, Morang District, Koshi Zone, Biratnagar, Mills area. The industries was establish in 2054 B.S. on Magh and has been operating as far as successfully, Name of the producing motor are as follows:

- (i) Power Touch
- (ii) Sherpa
- (iii) Mustang
- (iv) Mustang V2
- (v) Mustang max

It provides regular employment. It provides regular salary to workers. At least 120 workers and 35 staff are working in the factory. The basis salary of this company is Rs. 200 per day for helper on the management side Rs.800-1000 per day. Hulas Motor factory covers at 5 bigha of land. Managing director of the company is Surendra Golcha Board of director and member are from Golcha family.

1.2 Focus of Study

Industrialization is an integral part of national plans to accelerate the rate of economic development in Nepal. Industrialization is the major instrument of Progress. Industrialization and various form of backwardness unless they tackle the problem of economic backwardness through Industrialization. In other words, backwardness leads to economic backwardness. Developing countries are continuously trying to create necessary infrastructure and emphasizing on industrialization because it helps to uplift the economic standard of the people generate employment opportunities, save foreign exchange through export promotion and reduce the dependency on import. In the other hand, Industrialization helps to create a country's economic infrastructure and gives a path of diversification into new area of activity.

Nepal has mixed economy as well as least developed countries in the world and industrial sector is the second lead sector after agriculture. It is usually thought that as country advances on path of economic development, the role of agriculture sector goes on decreasing whereas the role of industrialization sector goes increasing.

Industrially point of view, Nepal is backward so for the development of Nepal and Nepalese Citizen, it is necessary to emphasize the private sector for that the govt. should have to take action in several fields of industrialization. If we see at the context of the world economic condition is

impossible without industrial and business development. If we look back history we found small scale cottage industries, which produced consumer goods and trying to fulfill people's needs and what they want.

Consequently, Mainly-by the causes of development idea and educated person .

) due to sense of people that industries is best idea than agriculture.

) Due to system and strategy of government for national revenue.

) Due to flow a big amount of foreign aid and loans.

The development of the business enterprises and industries in Nepal took place of faster rate.

Some importance of industries Nepalese economy can be pointed out as follows.

(i) Generate employment opportunities.

(ii) Import substitution

(iii) Accelerate the rate of economic development

(iv) Proper utilization of raw materials

(v) Increasing foreign exchange reserve by promoting export.

(vi) To increase national production.

“Industrialization is a process of economic development in which growing part of the national resource is mobilized to develop technically upto date diversified domestic economic structure characterized by a dynamic manufacturing consumer goods, capable of assuring a high rate of growth for economy as a whole and achieving economic and social progress”³

“Real progress must ultimately depend on industrialization throughout the world industrialization has, indeed, become the magic word of the mid twentieth century.”⁴

Above facts make us clear that industrialization is essential and important for the national upliftment and major-requirement for economic development in the country and major –requirement for economic

³ R.S.Pradhan, Mangement of working capital, National Book organization, New Delhi, India 1986 A.D. P-34

⁴ D.Murry Brylle, Industrial Development, A Guid for Accelerating Economic, M.C. Gra Hill Inc. Newyork 1960. P-3

development in the country. It is believed that in order to achieve security stability and high standard of living the country must proceed towards industrialization.

Proper financial management is great importance for every business enterprises from the point of view of achieving success. Working capital play a vital role in every aspect working capital is needed for day to day operations of the business. So it is consideration as the lifeblood of any business.

Any business industries, working capital management is essential mainly four reason first business firm determine the adequacy of investment in current assets, secondly, they must be select the types if current assets suitable for investments so as to raise their operational efficiency. Thirdly, they are required to ascertain the turn over the current assets that determine the profitability of the private enterprises and lastly, they must find out the appropriate sources of finds to finance current assets.

A manufacturing company must have an adequate supply of raw material to process, labor, power fuel etc. Then raw materials convert into work-in-progress into finished goods and the final product sell in market. It also must have capability of waiting for the market and also have an ability to sell in credit in this era of cut-throng out- competitions. Either excess working capital or less working capital may be dangerous for the company.

Working capital deals with of Matrix of current assets and current liabilities. The conversion process of current assets that include cash, inventory and accounts receivable etc. Must be as quick as possible to get readily available cash within one year to meet current obligations. In a like manner the current liabilities comprising sundry debtors trade creditors accounts payable, short term bank loan, outstanding expenses etc must be paid within one years as the became due.

The gross working capital concepts makes the imphed meaning to working capital to current assets only. “It is also called circulating capitals. It is equal to total sum of current assets only and it may represent both owned capital as well as loan capital assets used for financing current assets.”

“The net working capital, being the difference between current assets current liabilities, indicates the liquidity position and suggests the extent to which working capital needs may be financed by the permanent sources of fund”

Working capital is a firm's investment in short term assets-cash, short term securities, amounts receivable and inventories. Gross working capital is the firm's total current assets. Net working capital is current assets minus current liabilities. Working capital management which encompasses all aspects of administration of both current assets and current liabilities based two main functions,

- (i) To adjust to change in the firm's level of sales activities caused by seasonal, cyclical and random factors.**
- (ii) To contribute to maximizing the value of the firm's current assets holidays.**

For successful industries on establishing and only however the operating is not important. The working capital management plays the vital role. Answer the following questions is relating to efficiency of working capital.

- (i) Is the working capital being effectively utilized ?**
- (ii) Is the working capital position improving or becoming worse day by day?**
- (iii) Is the amount of working capital sufficient su..... or inadequate keeping in view the day to day operation of the firm?**

The study focuses on how HMC utilized the available fund very well. This study also focuses on the relationship between current Assets and current liabilities and relationship of other variables, which effort the working capital management. This study deals with efficiency of working capital management of H.M.C. This study only focuses the working capital management and its significance during past 5 years upto 2066/067

1.3 Statement of Problems

Hulas Motor company have not been able to meet the huge production and demand of country. No organization are problem less although they are trying well managed HMC is also not free from problems. The main problems of the company is parts (Raw materials) and some problems in working capital Management. The problems are as follows:-

- 1. What is the significance of current assets management?**
- 2. What is the variability in the size of investment in current assets?**
- 3. Is there any need to control our investment in current assets?**
- 4. Has there been change in the variability in investment in the current assets over a period of time?**
- 5. How difficult are current assets of HMC to manage?**
- 6. How difficult are current assets of HMC to manage ?**
- 7. Which of the current assets are more problematic?**

1.4 Need of the study

Day to day smooth operation of organization in the short run as well as long run sound financial performance is pre-requisite factor working capital is very essential elements for the organization. Without proper handle of working capital firm can not be able to earn profit and they will not able to handle the daily production and trade creditors. Therefore, it is most necessary to utilize the funds in proper was to fulfill the demand of various department.

HMC is a production oriented firm, if produces (manufactured) different kinds of Motor. Which is based for hilly area. So it plays vital role to economic development of the country by the economic development of hilly area. It helps to reduce unemployment problem of our country by the side of factory and side of transportation. Therefore, the study of working capital is very necessary for the firm.

1.5 Objective of the Study

The main objective of the study is to obtain a low sight into the working capital management of HMC. The main objectives of the study are point out as follows.

1. To analysis of working capital management of H.M.C
2. To find out and identify the basis reasons for losses
3. To analysis and find out whether the available fund are optimum utilized or not
4. To highlight working capital on the application of financial tools and standard norms used by HMC
5. To analyze the current assets and current liability of HMC.
6. To study the relation between sales and different variables of working capital.
7. To evaluate the size, growth structure liquidity, efficiency, payable and productivity of working capital position of HMC on the basis of ratio.
8. To watch under in which financing policy the firm is running.

1.6 Hypothesis of the study

In order to evaluate the problem and to meet the objectives of the study following Null Hypothesis is formulated.

1. There is no significant difference between current assets and total assets in the regard of average proportion increase.
2. These is no significant differences in average proportion increase of inventory and current Assets.
3. The relationship between cash balance and current assets does not differ in the regard of average proportion increase.
4. These is no significant difference in average proportion increase between receivable and current assets amount, i.e. the volume of current assets depends on the share of receivable on it.
5. There is no significant difference between current assets and current liabilities in the sense of average proportion increase i.e. current assets are affected by current liabilities.

1.7 Research Questions

In order to fulfill the study and to make easier analysis of data, research question are essential some research question are raised as follows.

1. Whether the working capital of HMC is well managed?
2. Whether the working capital position of HMC is well defined?
3. Why and how HMC has follow on losses?
4. Is there positive balance between current assets and current liabilities?

1.8 Assumption and Limitations of the Study.

Following limitations have come along and the assumptions are made in the study.

- 1. The study has covered only a period of 7 years upto 2066/067**
- 2. The study is limited to working capital management of HMC**
- 3. The data available in published account have been assumed correct and true.**
- 4. The time is hand is also short.**
- 5. It is based on historical data, so it is not the forcast for the current financial position of the future period.**
- 6. The effects of monetary inflation not considered in this study.**
- 7. Government rules and regulation, Technological aspect of the industries, strike, labour strike, electricity problem of the country also affect the financial position of the industries. So they ignore this study.**
- 8. Working days of the industry is assumed 560 days per year**

1.9 Organiization of the Study

The study of working capital management of HMC has been divided into five major chapters as follows.

- I. Introduction**
- II. Review of Literature**
- III. Research Methodolody**
- IV. Presentation and analysis of data.**
- V. Summary, Conclusion and Recommendation.**

1.10 Terms use in this study.

(i) Current Assets

Current assets refers to those assets which is the ordinary course of business can be or will be turned into cash within one fiscal year without undergoing a diminutiation in value and without distrupting the operations of the firm and include cash, short term securities, debtors, bill receivables and stock.

(ii) Current Liabilities

It refers to those liabilities which are expected to mature for payment within an accounting year and includes bank loan, bank overdraft, provision for taxation, dividend payable and outstanding expenses.

(iii) Fixed Assets

Fixed assets are those assets which are tangible physical properties and anticipated working capital life of more than one year in the regular operations of the business.

(iv) Quick Assets

Those assets, which may be converted into cash as and when desired or required without any capital loss.

(v) Net working capital

Difference between current assets and current liabilities as known as Net working capital

(vi) Fiscal year

Fiscal year is the period of the 12 months from 1st Chaitra to 31st Ashadh.

(vii) Current Ratio

Current ratio represents to measure firm's liquidity. It shows the firm's short term solvency and indicates the availability of current assets in rupee for every one current liability. It is calculated by dividing current Assets by Current Liability.

(viii) Inventory

Inventory is the most important assets of the firm. It keeps to meet its requirement of production and sales.

(ix) Income Statement

Summary of firm's revenue and expenses over a specified period is represented by income statement.

(x) Total Fund

Total fund refers the total of long term debt as well as short-term debt.

(xi) Net Worth

It is worth of share holder at book value when reserve are included in share capital than it called net worth. It includes equity share capital, pefferred share capital, capital surplus, earned surplus and undistributed profit on other hand net worth may be defined as the balance of the total assets over and above the total outside liabilities to be paid by the firm.

CHAPTER- II

REVIEW OF LITERATURE/CONCEPTUAL SETTING

2.1 INTRODUCTION

Business firms need various types of assets in order to carry out its operation. Some assets are required to meet the needs of regular productions and some others are required especially to meet day to day expenses and short term obligations. The assets such as cash, marketable securities, accounts receivables and inventories, which are known as current assets, are required to be maintained at a certain level depending up on the volume of production and sales. The cash and marketable securities are respectively considered as purely liquid and near liquid assets whereas the account receivable and inventories are not. However, they can be liquidated as and when necessary with in a period of less than one year. The capital invested on these assets is known as working capital. “In short, the working capital is the sources of financing current assets and it includes short as well as long term financing”⁵

The management of W/C is an important and time-consuming aspect of managerial finance. Inadequate level of W/C can result in serious financial difficulties and even bankruptcy; excessive levels are likely to reduce corporate profitability and ultimately cause the firms effectiveness and market value to decline. Working capital management (WCM) plays vital role in maximizing shareholders wealth since the most crucial decision of the firm are related to working capital. As such it would be better to understand the theory of working capital management in brief as it provides conceptual and analytical insights in making these decision skillfully.

Thus, W/C is a firm’s investments in short term assets-cash, short terms securities, accounts receivable and inventories. Working capital management, which encompasses all aspect of the administration of both current assets and current liabilities, has needed to adjust to changes in the

⁵ Dr. Surendra Pradhan “Basics of financial Mgmt.” Educational enterprise (P) Ltd., Nepal 1992, P-147

firms level of sales activity caused by seasonal and cyclical, and random factors.

This function is important because a firm with favourable long-run prospects may experience serve difficulties and losses caused by adverse short-run developments. In another side working capital management provided an aspect to contribute to maximizing the value of the firm.” Current assets holding , for example, should be expanded to the point where marginal returns on increases in such assets are just equal to the cost of capital required to finance the increases. Current liabilities should be used in place of long term debt where their use lowers the cost of capital”⁶

The purpose of this chapter is to provide an insight in to working capital management and gives a birds-eye view of different experts thoughts regarding theory of working capital and its implications while making review of related literature’s of working capital management. The researcher has gone through different financial books, bulletins, documents, reports and journals. This chapter aimed to review the available literature on working capital management in the context of manufacturing industries including available literature on Hulas Motor company Pvt. Ltd. This chapter includes review of related books, articles and journals and review of thesis as well which are conducted by the student of master level.

2.1.1 Conceptual Thoughts :-

A business firm needs not only fixed capital but also the working capital for day to day operation of the concern, it finances I some of assets of short term nature like inventories, account receivable (Sundry debtors), cash and marketable securities etc. When all these short-term assets are put together it is called working capital. It is therefore said that working capital is related with short term financing.

Conceptually speaking, the term “Working Capital” deals with the nature of current assets and current liabilities. The conversion process of

⁶ J. Fred Weston and Eugene F. Brigham, Managerial Finance “Holt-sounders international editions, P-266

current assets that include cash, inventories and account receivable etc. must be quick as possible to get readily available cash within one year to meet current obligations. In a like manner, the current liabilities comprising trade creditors, account payable, short term bank loan, outstanding expenses etc, must be paid with in one year as they become due.

The problems involved in the management of working capital differ from those in fixed assets. In the first place, fixed assets are acquired to be retained is the business over a period of time and yield returns over the life of the assets. Probably, the most notable feature of such assets, from the view point of financial analysis, is the time dimension. The operational implication is that discounting and compounding techniques to adjust the value of benefits accruing from such assets over time play a fairly significant role in financial management, In contrast, the stock-in-trade of working capital management, by definition is a short-term asset, which lose their identity fairly. Quickly, usually within a year. In the management of working capital, therefore, the time factor is not crucial as a decision variable.

Yet another notable feature of short-term assets is the question of profitability versus liquidity and the related aspect of risk. If the size of such assets is large, the liquidity position would improve, but profitability would be adversely affected as funds will remain idle, conversely, if the holding of such assets are relatively small, the overall profitability will no doubt increase, but it will have an adverse effect on liquidity position and make the firm more risky. Working capital management should, therefore, aim at striking a balance such that there is an optimum amount of short-term assets.

In the section an attempt has been made to review some books on financial management, which deal with management of working capital. Professor W. Brigham have given some theoretical insights in to working capital management after their various research studies on it. The conceptual finding of their study provides sound knowledge and guidance for the further study on the field of management of working capital in any business enterprise and naturally to this study as well. They explain in the beginning the importance of working capital, concept of working capital, financing of W/C, the use of short-term Vs long-term debt, relationship of current assets to fixed assets.

In the next chapter they deal with the various component of working capital and their efficient management techniques. The components are cash, marketable securities, receivable and inventories. The term working capital management is closely related with short-term finance and it is concerned with collection and allocations of the resources. Working capital management is related to the problems that arise in attempting to manage the current assets, the current liabilities and the interrelationship that exists between them.

Mostly there are two schools of thoughts or concepts regarding the meaning of working capital. According to one school of thought, working capital is meant for the current assets only. It is concerned nothing the liabilities side. According to other school of thought working capital is the excess of current assets over current liabilities. The former concept, which can be termed as gross concept, is important to newly established companies where liabilities have not been acquired immediately, but the latter one which can be termed as net concept is important for both newly established and operating concerns where some amount of current liabilities has been maintained for payment of different creditors, income taxes, bills payable, secured and unsecured loan etc.

2.1.1.1 Gross Concept

Gross concept in working capital means total sum of current assets only. The view has supported by Baker and Adam Smith. Adam Smith called “Circulating capital for current assets. The use of this term emphasises on the short-term cash cycle refers to the recurring transaction from cash to inventory, inventory to receivable to cash again.”⁷

The use of the tem circulating capital instead of working capital indicates that its flow is circular in nature. At the beginning of business venture cashis provided by owners and lenders. A part of this cash is invested in tool machinery, furniture, equipment, building and other forms of fixed assets, which are nto to be sold throughout the year during the normal course

⁷ K.V. Smith Management of Working Capital, New York weet publishing company 1974

of business. The remaining cash is used as working capital to meet the current requirement of a business enterprise such as the purchase of services, raw materials and merchandise, payment of wages. When a firm's products or finished goods are sold, it has what is known as cash or receivable for the planning of services and the purchase of raw materials or merchandise. These flows of cash in to production credit sales, collection and then back in to inventories, production and so on illustrate the circular flow of working capital.

In the words of Adam Smith "The goods of the merchant yield him no revenue in profit-till he sells them for money and the money yields him a little till it is again exchanged for goods. His capital is continuously going from him in one shape and returning him in another and its only by means of such circulation's or successive exchange that can yield very him any profit. Such capital therefore may properly be called circulating capital."⁸ R.S. Pradhan and K.D. Koirala express their view about gross concept of working capital as "If all expenses needed to run day-to-day operation of gross concept of business such as amount to be invested in the form of cash, finished goods receivables etc. are put together, it is called working capital. This working capital and total current assets are synonymous."⁹

2.1.1.2 Net Concept

Now a days, this concept has overcome to gross concept because the gross concept is narrow in term of working capital as it includes the temporary assets side only. Sufficient procurement of funds in business can't be made without having current liabilities. Current assets and current liabilities both play a vital role in operation cycle of business. So all the current liabilities must be considered rather than current asset alone. Since, working capital is current assets, it includes all those assets, which is the normal course of business return to the firm, as cash with in a short period of time. Ordinary investments, which may be readily converted in to cash upon need, are also current assets. The short term or current liabilities on the left

⁸ Adam Smith, The wealth of nations, modern lib., New York 1973 PP 262-283

⁹ R.S. Pradhan and K.D. Koirala "Some reflections on working capital management in Nepalese co-operation management dynamics Vol.3, No.1

¹⁰ M.K. Shrestha, "Working capital management in PES. " A study on financial results and constraints, ISODOC Bulletin, Vol 8, July 1982-June 1989 IVOSI-4 P-2

side of balance sheet are closely related and include those debts that mature with in a year. If manufacturing concerns fail to consider current liabilities, the management of working capital gives misleading results.

Again “the true financial position of business enterprise is out revealed if they rely on this concept. The separation between current assets and fixed assets is not always easy to demarcate because in some cases what is considered fixed may be current & vice versa.”¹⁰ The term working capital in net concept is the excess of current assets over current liabilities. In other words, it means the difference between current assets and current liabilities. Distinguished authorities like Lincoln, Davis & Gitman support the view of net working capital. They have defined net working capital as that portion of firm’s current assets, which is financed with long term fund. This definition can best be illustrated by a special term on balance sheet, like that for the GNI company presented in figure 2.1.1.2. the vertical axis of the balance sheet is a dollar scale on which all the major items on the firm’s balance sheet are indicated.

Figure 2.1.1.2 shows that the firm has current assets of \$2700, fixed assets of \$4300 and total assets of \$7000. It also shows that the firm has current liabilities of \$1600, long term debts of \$2400 (\$4000-\$1600) and stock holder’s equity of \$3000 (\$7000-\$4000). A firm long term debt plus its shareholders equity represents its sources of long term fund; the GNI Company’s long term funds equal \$5400. The portion of the firm’s current assets that have been financed with long term funds has been labeled “net working capital” in figure 2.1.1.2

ASSETS		LIABILITIES & EQUITIES	
Current Assets (\$2700)		1000	Current Liabilities
		(\$1600)	
	Net Working Capital (\$1100)	1600	
Fixed Assets (\$4300)		2000	Long Term Debts (\$ 2400)
		2700	
		3000	
		4000	
		5000	Share Holder Equity
		6000 (\$3000)	
	7000		

Fig. 2.1.2 Net Working Capital

Sources: An Overview of Working Capital Management

[Cited on Gitman LTJ, Principle of Managerial Finance (NW) hoper and row, 1976, P-150]

Analysis of this figure should show why a firm's not working capital could be thought of as the portion of current assets financed with long-term funds. Since current liabilities represent the firms sources of short term funds, as long as current assets exceed current liabilities, the amount of excess must be financed with long-term funds.

Thus, the concept of net working capital considers both current assets and current liabilities as against the current assets, the company in turn has current liabilities like credit facilities through its accounts payable or sundry creditors. If form the current assets the current liabilities are deducted result becomes net working capital deployed by the company. The excess of the

current assets over current liabilities means employment of owners interest which is called capital on it. Current liabilities means employment of owners interest which is called capital on it.

More, we are going to put some ideas given by some financial experts. “According to Van Home, he has categorized the various components of working capital receivable, liquidity, inventory and current liabilities. He has grouped them according to the way they affect valuation and also described the different methods for efficient management of cash and marketable securities and various models for balancing cash and marketable securities. For the management of receivable different credit and collection polices have been described and various principles of inventory have been examined for inventory management and control.”¹¹

An expressed by American Institute of certified public accountants U.S.A. working capital sometimes called net working capital, is represented by the excess of current assets over current liabilities and identifies the relatively liquid position of total industries capital which constitutes a margin suffers for maturing obligations with in the ordinary operation cycle of the business. Net working capital indicates the liquidity position of the business and shows the ability to pay its creditors.

Efficient working capital management requires that firm should operate with some amount of Net-working capital, the exact amount varying from firm to firm and depending, among other things, on the nature of industry, The theoretical justification for the use of NW/C to measure a firm’s liquidity is based on the premise that the greater the margin by which the current assets cover the short-term obligation, the more able it will pay its obligations when they become due for payment. “NWC is necessary because the cash outflows and inflows do not coincide. In other words, it is the non-synchronous nature of cash flows that makes NWC necessary. In general, the cash outflows resulting from payment from current liabilities are relatively predictable. The cash inflows are, however, difficult to predict. The more predictable the cash inflows are, the less NWC will be required and vice versa.”¹²

¹¹ James C Van Home “Financial Management and Policy”, New Delhi Prentice Hall of India Pvt.Ltd.

¹² M.Y. Khan and P.K. Jain, “Financial Management”, Tata Mc Graw-Hill Publishing Company Limited, New Delhi, P-608

2.1.1.2 Need For Working Capital

The management of working has been regarded as one of the conditioning factors in the decision making issue. It is no doubt, very difficult to point out as to how much working capital is needed by a particular company, but it is very essential to analyse and find out the solution to make an efficient use of funds for minimizing the risk of loss to attain profit objectives. Thus goes the importance of working capital in operating life of a company. A successful business keeps its working capital moving rapidly, hence it is also a lead circulating capital or a moving capital. Hence it is also a lead circulating capital or a moving capital. The transmutation of a company is working capital in-to income and profits and back into working capital is one of the most dynamic and vital aspects of business operation. And only this movement of current assets keeps the business alive. A fully equipped factory, without the supply of materials to process and without cash to pay bills and a store without stock to sell is of no use. These circumstances emphasise the importance of working capital in a business firm.¹³

The need for working capital or current assets cannot be over-emphasised. The objective of financial decision-making is to maximize the shareholders wealth. To achieve this, it is necessary to generate sufficient profits. The extent to which profits can be earned will naturally depend upon the magnitude of the sales, among other things. A successful sales programme is, in other words, necessary for earning profit by any business enterprise. However, sales do not convert into cash instantly, there is invariably a time-log between the sales of goods and the receipt of cash. There is, therefore a need for working capital in the form of current assets to deal with the problem arising out of the lack of immediate realization of cash against goods sold. Therefore, sufficient working capital necessary to sustain sales activity. Technically, this is referred to as the operating or cash cycle. The operating cycle can be said to be at the heart of the need for working capital. “The continuing flow from cash to suppliers, to inventory, to accounts, receivable and back in to cash is what is called the operating cycle.”¹⁴ In other words,

¹³ Dr. Khagendra Acharya, “The management of Working Capital is an Enterprise” ,Vaishleshan,Vol-1 Baishakh 2051, P-2

¹⁴ O.M. Joy, “Introduction to Financial Management”, (Moom Wood-III), Richard D. Irwin 1977, P-406

the term cash cycle refers to the length of time necessary to complete the following cycle of events:

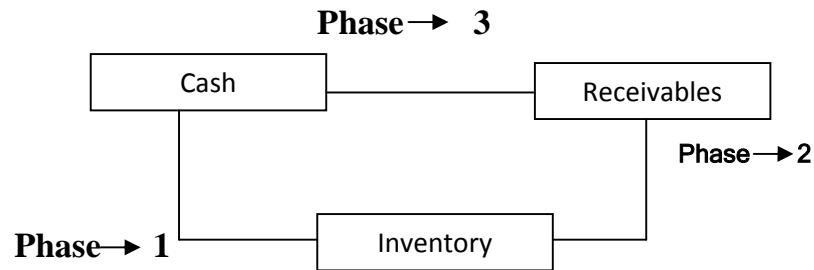


Fig 2.1.2 Operating Cycle

If it were possible to complete the sequences instantaneously, there would be no need for current assets (working capital). But since it is not possible, the firm is forced to have current assets. Since cash inflows and cash outflows do not match, firms have to necessarily keep cash or invest in short-term liquid securities so that they will be in a position to meet obligation when they become due. Similarly, firms must have adequate inventory to guard against the possibility of not being able to meet a demand for their products. Adequate, inventory, therefore, provides a cushion against being out of stock. If firms have to be competitive, they must sell goods to their customers on credit, which necessitates the holding of account receivable. It is in these ways that an adequate level of working capital is absolutely necessary for smooth sales activity which, in turn, enhances the owner's wealth.

2.1.3 Working Capital Management

It involves the administration with in policy guidelines of current assets and current liabilities. Important elements of working capital management include inventory management, cash management, credit and collection policy and short term borrowing.

The ultimate aim of any business organization is to maximize its shareholders wealth, In order to achieve the said target, it has to perform various activities extremely well and for which it has to employ various forms of short term as well as long term financial measures in to both current and fixed forms of assets. In this regard a firm has to manage both the short term financing and the current assets for their better performance which is called working capital management.

In other words working capital management is concerned with problems that arise in attempting to manage the current liabilities and interrelation that exist between them. The goal of working capital management in such way, that a satisfactory level of working capital is maintained. This is so because if the firm can't maintain a satisfactory level of working capital, it is likely to become insolvent and may even be forced to bankruptcy. The current assets should be large enough to cover its current liabilities in order to ensure a reasonable margin of safety. Each of the current assets must be managed efficiently in order to maintain the liquidity of the firm while not keeping too high a level of any one of them. Each of the short-term sources of financing must be continuously managed to ensure that they are obtained and used in the best possible way. The interaction between current assets and current liabilities is, therefore, the main theme of the theory of working capital management.

Working capital management involves deciding upon the amount and composition of current assets and how to finance these assets. These decision involves trade off between risk and profitability. The greater the relative proportion of liquid assets, the lesser the risk of running out of cash, all other things being equal. Profitability, unfortunately, also will be less. The longer the compositic maturity schedule of securities used to finance the firm the less the risk of cash insolvency all other things being equal. Again the profits of the firms are likely to be less. Resolution of the trade off between risk and profitability with respect to these decision depends up on the risk preferences of management.

The subject of WCM basically covers two areas namely working capital policy and current assets management. The following figure presents the area of concern and aspects of WCM.

2.1.4.1 DETERMINANTS OF WORKING CAPITAL

There are no specific rule or formula to determine W/C requirements of the firms. A large number of factors influence working capital needs of firms. All factors are of different importance and the importance of factors changes for a firm overtime. Therefore, An analysis of relevant factors should be made in order to determine total investment in working capital. The following is the description of the factors which generally influence the working capital requirements of firms

“The need of W/C arises due to time gap, between production and realization of cash from sales. W/C is needed for the following purposes”¹⁵

- 1. For purchases of raw material components and spares**
- 2. To pay wages and salaries.**
- 3. To need operating expenses and overhead cost such as fuel, power and office expenses.**
- 4. To meet the selling cost as packing advertising**
- 5. To provide credit facilities to the customers**
- 6. To maintain the inventory of raw materials work-in-progress, spares, and finished stock.**

“All these need are mainly to maximize the wealth of share holders and to improve the organization to complete in the market.”¹⁶ Due to maximization of shares value the good will of the firm will be high.

i. Nature and size of business :

Working capital requirement of a firm are basically influenced by nature of its business. Trading and financial firms have a very small investment in fixed assets, but require a large sum of money to be invested in working capital. For example, retail stores, manufacturing business, stockiest have to invest large amount in working capital and nominal amount in fixed assets. In contrast, public utilities have a very limited need for working

¹⁵ R.K. Sharma and S.K. Gupta Management Accounting principal and practice Kalyani publishers ludhyana Edition 1996, P-217

¹⁶ Ibid, P-217

capital requirements are nominal because they may have cash sales only and supply service not product.

The size of the business also has an important impact on its working capital needs. Size may be measured in terms of the scale of operation. A firm with larger size of operation will need more working capital than a small firm.

ii. Manufacturing Cycle :

The manufacturing cycle comprises of the purchase and use of raw materials and use of raw materials and the production of finished goods. Longer the manufacturing cycle, larger will be the firm's working capital requirements. For example the manufacturing cycle in the case of boiler, depending on its size, may range between six to twenty-four months. On the other hand, the manufacturing cycle of products such as detergent power. Soaps, chocolate etc. may be few hours. An extended manufacturing time span means a larger tie-up of funds in inventories. Thus, if there are alternative ways of manufacturing a product the process with the shortest manufacturing cycle should be chosen. Once a manufacturing process has been selected, it should be ensured that manufacturing process has been selected, it should be ensured that manufacturing cycle is completed within the specific period. This needs proper planning and co-ordination at all levels of activity. Any delay in manufacturing process will result in accumulation of work in process and waste of time. In order to minimize their working capital some firm's specifically firms manufacturing industrial products, have a policy of asking for advance payments from their customer's. Non-manufacturing firms service and financial enterprises do not have manufacturing cycle.

iii. Sales growth :

The working capital needs of the firm increase as its sales grow. It is difficult to precisely determine the relationship between volume of sales and working capital needs. In practice, current assets will have to be employed before growth takes place, it is therefore, necessary to make advance planning of working capital for growing firm on a continuous basis. A growing firm may need to invest funds in fixed assets in order to sustain its growing production and sales. This will, in turn, increase investment in current assets to support enlarged scale of operation. It should be realized

that a growing firm needs funds continuously. It uses external sources as well as internal sources to meet increasing need of funds. Such a firm faces further financial problems when it retains substantial production of its profit. It would not be able to pay dividends to shareholders. It is therefore imperative that such companies to finance their increasing needs for working capital do proper planning.

iv. Demand Condition :

Most firms experience seasonal and cyclical fluctuations in the demand for their products and services. These business variations affect the working capital requirement, especially the temporary working capital requirement of the firm. When there is an upward swing in the economy, sales will increase; under boom, additional investment in fixed assets may be made by some firm to increase their productive capacity. This act of firms will require further additions of working capital. To meet their requirements of funds for fixed assets and current assets. Firms generally resort to substantial borrowing. On the other hand, when there is a decline in the economy, sales will fall and consequently, levels of inventories and book debts will also fall. Under recessionary condition, firm try to reduce their short-term borrowing. Seasonal fluctuations not only effect working capital requirement but also create production problems for the firm. During periods of peak demands increasing production may be expensive during slack periods when the firm has to sustain its working force and physical facilities without adequate production and sales. A firm may, thus follow a policy of steady production, irrespective of seasonal changes in order to utilize its resources to the fullest extent. Such a policy will mean accumulation of inventories during off-season and their quick disposal during the peak season. The increasing level of inventories during the slack season will require increasing funds to be tied up in the W/C for some months.

Unlike cyclical fluctuation, seasonal fluctuation generally confirm to steady pattern. Therefore, financial arrangement for seasonal working capital requirements can be made in advance. However, the financial place or arrangement should be flexible enough to take care of some abrupt seasonal fluctuations.

v. Production Policy

A Constant productive strategy is maintained in order to resolve the working capital problems arising due to seasonal changes in the demand for the firm's product. A constant production policy need regular investment in working capital. A steady production policy will cause inventories to accumulate during the off-season periods and the firm will be exposed to greater inventory costs and risks. Thus, if costs and risks of maintaining a constant production schedule are high, the firm may adopt the policy of varying its productions schedule in accordance with changing demand. Those firms, whose productive capacities can be utilized for manufacturing varied products, can have the advantage of diversified activities and solve their working capital problems. They will manufacture the original product line during its increasing demand and when it has off-season, other products may be manufactured to utilized physical resources and working force. Thus, production policies will differ firm-to-firm depending on circumstances of individual firm.

vi. Price level changes :

Generally, rising price levels will require a firm to maintain higher amount of working capital. Some levels of current assets will need increase investment when prices are increasing. Effects of increasing general price level will be felt differently by firms as individual prices may move differently. It is possible that some companies may not be affected by rising prices while other may be badly hit by it. Thus, effect of rising prices will be different for companies. Some will face no working capital problem, while working capital problem of others may be aggravated.

vii. Operating efficiency and performance :

The operating efficiency of the firm relates to the optimum utilization of resources at minimum costs. The firm will be effectively contributing to its working capital if it is efficient in controlling operating costs. The use of working capital is improved and place of cash cycle is accelerate with operating efficiency. Better utilization of resources improves profitability and, thus, helps in realizing the pressure on working capital.

Although it may not be possible for a firm to control prices of materials or wages of labour, it can certainly ensure efficient and effective use of its materials, labour and other resources.

Firms differ in their capacity to generate profit from business operations. Some firms enjoy a dominant position due to quality product or good marketing management or monopoly power in the market and earn a high profit margin. Some other firms may have to operate in an environment of intense competition and may earn a low margin of profits. A high net profit margin contributes toward the working capital pool. In fact, the net profit is a source of working capital to the extent it has been earned in cash. The cash profit can be found by adjusting non-cash items.

The financial manager must see whether or not the cash generated has been used for rightful purposes. The application of cash should be well planned.

Even if net profits are earned in cash at the end of the period, whole of it is not available for working capital purposes. The contribution towards working capital would be affected by the way in which profit is appropriated. Higher the amount of dividends, less will be the contribution towards working capital funds. The firm can enhance its working capital funds by saving taxes through appropriate, thus, depends upon taxation, dividends and retention policy and depreciation policy.

viii. Firm's credit policy :

The credit policy of the firm affects working capital by influencing the level of book debts. The credit terms to be granted to customer may depend upon norms of industry to which the firm belongs. The firm should be discretionary in granting credit terms to its customers. Depending upon individual's case, different terms may be given to different customers. A longer credit period needs more investment in working capital than short credit period policy.

A liberal credit policy, without rating the credit-worthiness of customers, will be detrimental to the firm and will create a problem of collecting funds later on. The firm should be prompt in making collections. A high collection period will mean tie-up of funds in book debts. Slack collection procedures can increase the chance of bad debts.

In order to ensure that unnecessary funds are not tie-up in book debts, the firm should follow a rationalized credit policy based on the credit outstanding of customers and other relevant factors. The firm should evaluate the credit standing of new customers and periodically review credit worthiness of existing customers. The case of delayed payments should be thoroughly investigated.

ix. Availability of credit :

The W/C requirements of a firm are also affected by credit terms granted by its creditors. A firm will need less working capital if liberal credit terms are available to it. Similarly, the availability of credit from bank also influences the W/C needs of the firm. A firm which can get bank credit easily on favorable conditions will operate with less working capital than without such a facility.

x. Technological Development :

Technological development also affects the working capital, Due to nw technologies development firms are able to do the work is short period in effectively and efficiently. Thus, the need of working capital reduce with previous level.

xi. Transportation and communication facilities.

If the facilities of transportation and communication are available then the firm's product are easily can be distributed and sold. Due to this need of w/c will not be high.

xii. Business cycle :

Business cycle emphasize of the general work performance in terms of recession and boom, condition of business cycle requires more working capital due to increment in price level, enlargement of business etc. But in condition of depression less working capital fund require due to low sales, shortening the business etc.

xiii. Access to money market :

If the firm has good relation with the loan granting financial institute or bank than the firm need less working capital. A firm can take benefit with

bank in the process of operating business. Due to their good relation with financial institute the firm can take easily needed capital from there.

2.1.4.2 Determination of money market:

In process of running the business, working capital plays vital role in the organization. Due to lack of working capital, business can not run efficiently. On the other hand, the excess of capital is not also good for the company. Therefore, the manager should be able to maintain the working capital in right quantity at the right time.

To determine the working capital, the following facts are considered:

- a. Annual Production
- b. The cost of inventory, wages and indirect overhead.
- c. The period of keeping raw material.
- d. The period of production cycle.
- e. The period keeping finished good.
- f. The credit facility to the customers.
- g. Daily expenses to operate the business.
- h. Advance payment policy.
- i. Credit facility to the firms.
- j. Time period of payment of wages and other expenses.

All these facts are determined the need of working capital to the firm.

2.1.5 Components Of W/C

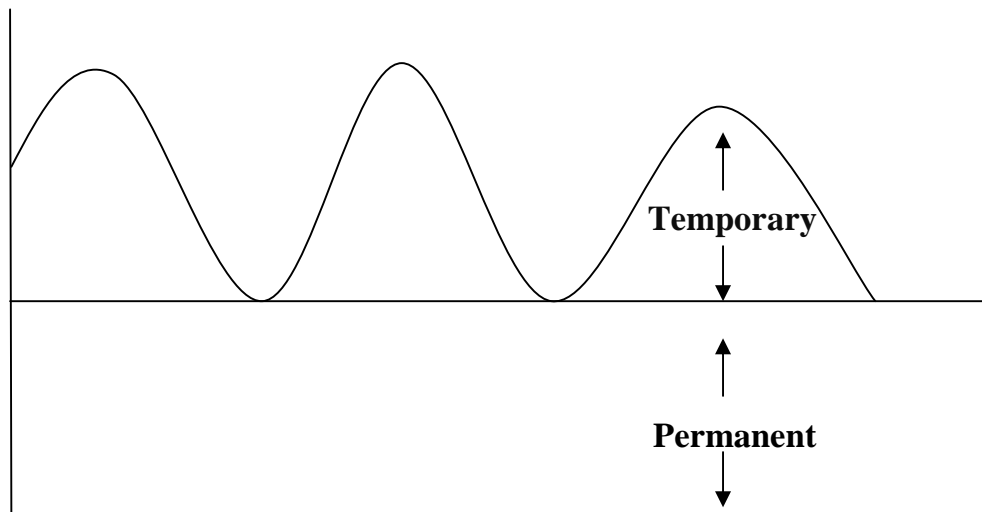
Working capital may be comprised of two kinds of components. Permanent or fixed working capital and temporary, variable or fluctuating working capital is necessary to facilitate production and sale through the operation cycle.

The operation cycle, thus, creates the need for currents (working capital). However, the need does not come to an end after the cycle is completed. It will continue to exist.

The need for working capital arises, as already observed, because of cash. Business activity does not come to an end after the realization of cash

from customer. For a company, the process is continuous and, hence, the need for a regular supply of working capital. However, the magnitude of working capital required will not be constant, but will fluctuate. To carry on business on business a certain minimum level of working capital is necessary on a continuous and uninterrupted basis. For all practical purposes, this requirement will have to be met permanently as with other fixed assets. This requirement is referred to as permanent or fixed working capital. In other word, permanent working capital represents the current assets required on a continuing basis over the entire year. It includes the amount of cash receivable and inventories as a minimum to carry operation at any time according to van horn “A firm’s permanent working capital is the amount of current assets required to meet long-term minimum needs. You might call this “bare bones” working capital”.¹⁷

“Any amount over and above the permanent level of working capital is temporary, fluctuating or variable working capital.”¹⁸ This portion of the required working capital is needed to meet fluctuations in demand consequent upon changes in production and sales as a result of seasonal changes. Added inventory must be maintained to support the peck-spelling period. The basic distinction between permanent and temporary working capital is illustrated in Fig 2.1.5. a Permanent and Training Working Capital



¹⁷ James C. Van Horn and Wacgowicz, “Fundament of Financial Management”, Prentice-Hall of India, Private limited New Delhi-1997-207

¹⁸ O.M Joy “Introduction to Financial Management”, (Home wood III) Richard D, Irwin P-407

Above figure shows that the permanent level is fairly constant, while temporary working capital is fluctuating some times increasing and sometimes decreasing in accordance firm the permanent working capital line may not be horizontal. This is because the demand for permanent current assets might be increasing (or decreasing) to support a rising level of activity. In that case line would be a rising one as shown in fig 2.1.5

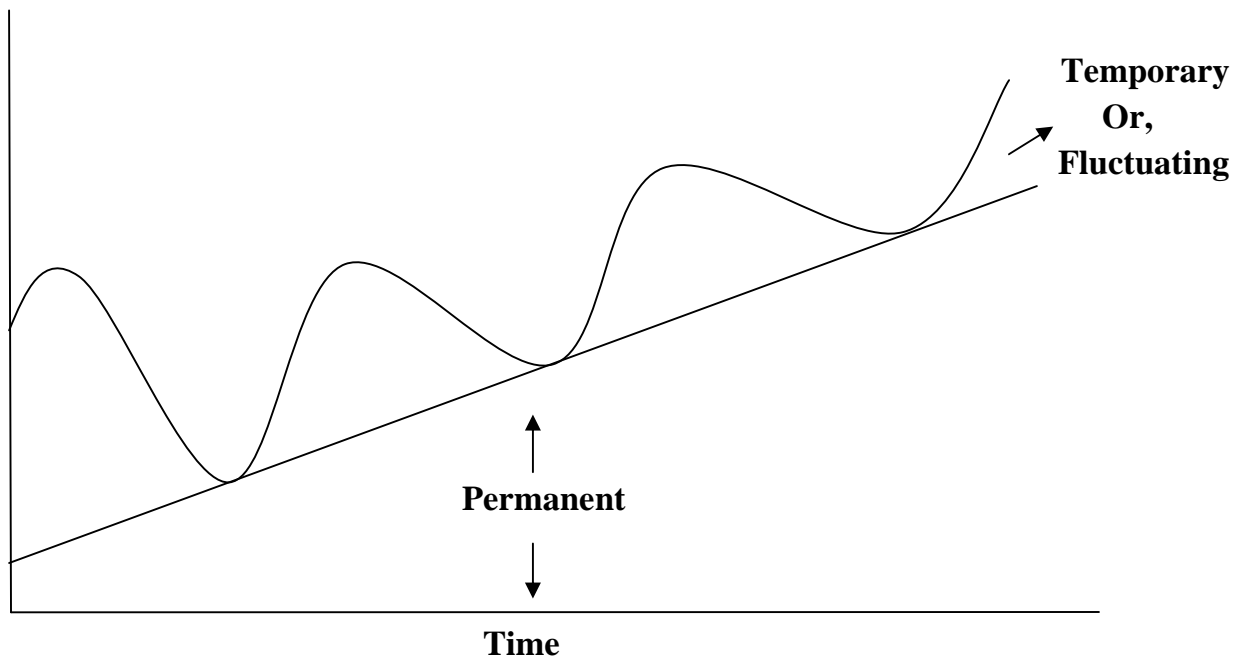


Fig 2.1.5_B Permanent and Temporary Working Capital

Both kinds of working capital are necessary to facilitate the sales process through the operation cycle. Temporary working capital is created to meet liquidity requirements that are of a purely transient nature. Permanent working capital is similar to the firms fixed assets in two important respects. First the dollar investment in both of these assets groups is long term and second, for a growing firm, the level of permanent working capital needed will increase over time in the same way that a firm's fixed assets will need to increase overtime. However, permanent working capital is different from fixed assets in one very important respect-it is constantly changing. The permanent working capital does not consist of particular current assets staying permanently in place, but is a permanent level of investment in current assets, whose individual items are constantly turning over. Viewed

stick another way, permanent working capital is similar to the level of water that you find in a bay at low tide.

2.1.6 Financing Of Working Capital

The term financing of working capital may be used to denote the arrangement of funds equal to the amount of working capital. This term is used to manage the funds necessary to finance the current assets. In business enterprises the main source of working capital financing are trade credit, short term financing and long term financing. The size of financing is depends upon the relationship with suppliers, it growths rate and market situation. Some of the amount is borrowed from the suppliers. This borrowed money will be paid at the period when it matures. When payment of this loan is made the interest of loan is also included. The rate of interest may be changed by the creditors for the overdue period of according to the agreement between borrower and lenders.

“According to Dr. K. Acharya, generally a firm would like to finance its current assets with spontaneous sources as much as possible. And in current assets, financing lies between either short term loan or long term sources which, may be grouped either internal or external or financed by stockholder’s or creditors.”¹⁹

“The banks and other lending bodies extend short-term debts. Maximum benefits may be enjoyed by close banking connections, which may be of much help on times of financial stress. This source is to be used continuously because lending agencies are more concerned with the protection of their investments than is the furnishing of adequate funds to make the firm most profitable in case everything works out as planned.”²⁰

¹⁹ Dr. Khagendra Acharya “Working capital managed in manufacturing public enterprise”

²⁰ R.C. Osborn, Business finance- The management Approach Appleton century-profits, New York 1995, P-108 as quoted in bid.

²¹Encyclopaedia of social science, Vol III and IV New York, Macrnillian company P-u 27 As quoted in Ibid

²² H.G. Guthman analysis financial statement, Prentica hall Inc. New York 1960.P.70 as quoted in 2 Ibid.

“If all the current assets are financed by long term sources, the entire working capital of the firm would be represented by net quick assets and there would be no difference between gross and net amount of W/C. This position will be unprofitable due to high cost of long term financing. However, in a successful firm, it is usual to obtain the successful increment of working capital by perpetual re-investment of earnings.”²¹ Later it will pay more by way of dividend and, hence, the stock of such firm will be sold easily at high prices. “It is a rule of finance that as the value of business for a given concern increases the amount of working capital must be increased in order that the amount of working capital must be increased in order that the current liabilities may be provided with a proper margin of safety.”²² Thus, in some occasions, the financing of working capital might be a safety measure to protect the interest of short term lenders.

The major sources of financing for working capital are trade credit, bank credit, currency-provisions of non bank, short term borrowing and long term sources comprising equity capital and long term borrowing. “These sources reveal that trade credit constitutes the most important sources accounting for approximately two-fifths of the total while short term bank credit finance more than one fourth.”²³

Bank credit is the primary institutional source for working capital finance. “According to an estimate both these sources together finance about three-fourth of the working capital requirement of industry.”²⁴ These sources are main sources of permanent and temporary type of working capital finance.

Permanent sources of working capital can be both internal and external. Retained earnings depreciation funds are the important sources for internal finance of working capital. Retained earnings are the accumulated but not distributed profits to the share-holders in the form of dividends. This earnings does not compel the share-holders for immediate payment. However, this fund can use the permanent sources of working capital.

²³ Financial Management Tatu Mo Gra-Hill publishing company limited New Delhi P-645

²⁴ V. Murthy, Management Finance, Vikils better and Simons, Bombay 1978, P-186 as quoted in Ibid.

Another permanent fund is depreciation which is the none cash expenditure and does not involve in cash outlay. “Internal sources of permanent working capital finance are irregular and for the most part are temporary. External sources of W/C finance in the form of loans and shares are sources that can be planned with certainty of the two, issue of equity share is preferable because it does not add to interest burden like long term loans.”²⁵

The another permanent sources of financing working capital are debenture, which are very important. When there are financial crises for business the enterprise can issue right debentures for working capital.

The temporary sources of financing for working capital may be commercial banks, indigenous banker, trade credits, installment credit, advances accounts receivables etc. These sources are of short period. These sources can be used for not more than an accounting year. Apart from these sources like shares, debentures, public deposits, ploughing back of profit or retained earning, and loans from financial institution are long term sources of working capital finance which last for more than a year. These short term and long term sources are the main sources of working capital financing.

Generally, there are three types of sources of working capital financing. One is long-term financing, second is short-term financing and third is spontaneous financing. First two financing are discussed above and spontaneous financing is not yet discussed. “Spontaneous financing refers to the automatic sources of short term funds. The major sources of such financing are trade credit. (Creditors and bills payable) and outstanding expenses. Spontaneous sources of finance are cost free. Therefore, a firm would like to finance its current assets with spontaneous sources as much as possible. Every firms is expected to utilize spontaneous sources to the fullest extend.”²⁶ Thus the firm’s actual choice of financing in current-assets is between short term ad long term sources.

There are mainly two sources of financing of working capital requirements. These are short-term and long-term sources. What portion of working capital should be financed by each source. However working capital

²⁵ S.P. Jain and K.C. Narang, P.-184, Financial & Management Accounting, New Delhi 1988

²⁶ I.M. Panday Op. Cit. P.184

financing policies be formulated and implemented with anyone or more than one of the following three approaches to working capital financing mix. These three policies are laid down for the financing of current assets. These approaches are- matching or hedging approach, conservative approach and aggressive approach.

“Under hedging approach, a firm uses long-term financing to finance fixed assets and permanent current assets and short-term financing to finance temporary or variable assets. In other words, with reference to an appropriate financing mix, the term hedging can be said to refer to a process of matching maturities of debt with the maturities of financial need.”²⁷

The hedging or matching approach emphasizes on matching the period of assets to be financed and the period of sources of fund to be used. The term “hedging” usually refers to two-off-setting transactions simultaneously but opposite nature which counter balances the effect of each other with reference to an appropriate financing mix, the term hedging can be said to refer to a process of matching maturity of debt with the maturity of financial needs.²⁸ This approach is also known as the matching approach because the maturity of sources of fund should match the nature of assets to be financed. “If the firm adopts a hedging approach to financing, each asset would be offset with the financing instrument of the same approximate maturity. With this matching of assets and liabilities structures of the firm, the only remaining risk, is that which is associated with deviations in cash flows from those that are expected.”²⁹

“A hedging approach to financing suggests that apart from current installments on long term debt, a firm would show no current borrowings at the seasonal through short term borrowing would be paid off with surplus cash. As the firm moved in to a period of seasonal fund needs, it would

²⁷ Lawrence J. Gitman, “Principle of Managerial Finance”, Raw Publishers, 1976, P-157

²⁸ J.C. Vanhorne, “Financial Management & Policy”, Prentice-Hall of India Pvt. Ltd., New Delhi 1991, P-168

²⁹ J.C. Vanhorne & J.M. Wachowicz, “Fundamentals of Financial Management”, Prentice Hall of India (P) Ltd. New Delhi 1997, P-210

borrow on a short-term basis, again paying off the borrowing as surplus cash was generated. In this way, financing would be employed only when it was needed. In a growth situation, permanent financing would be increased in keeping with underlying increase in permanent funds requirements.”²⁹

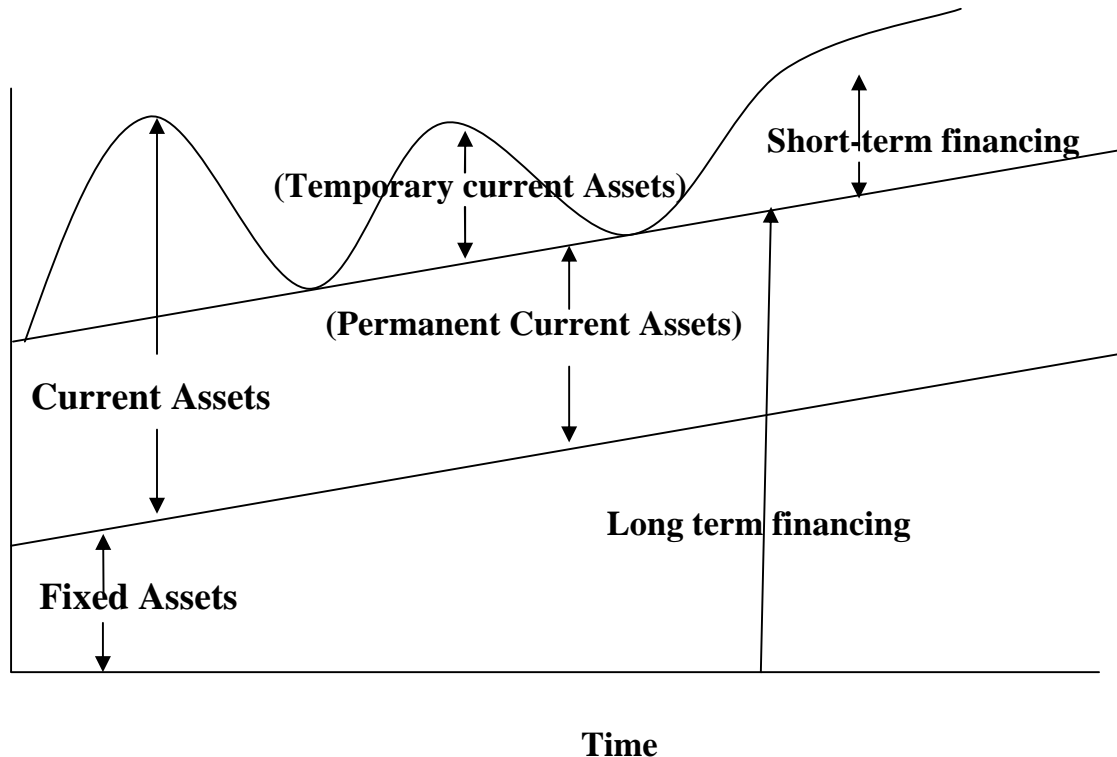


Fig 2.1.6_A Financing under Hedging Approach

The managers who are extremely risk averse use the conservative approach of financing of working capital. “Nearly all investors who provide capital funds to firm are risk averse, meaning that other thing being equal, They prefer less uncertainty to more.”³⁰ Under this approach all the long as well as short term needs of a firm are financed through permanent sources living a sizeable amount of unusual funds during the slack seasons of the firm. This will lead to uneconomic use of resources and there by causing operating deficit.³¹ Under a conservative plan, the firm finances its permanent assets and a part of temporary current assets with long term financing. Thus, in

³⁰ Soloman, Ezrs and J.J Pringle, “An Introduction to Financial Management”, Prentice Hall of India(P) Ltd. New Delhi 1978, P-96

³¹Dr. Khagendra Acharya, Working capital management in Manufacturing PES with special reference to the industry in Nepal 1985, P-108

periods when the firm has no temporary current assets, it stores liquidity by investing surplus funds into marketable securities. The conservative plan relies heavily on long-term financing and, therefore, is less risky. The conservative financing policy is shown in fig. 2.1.6

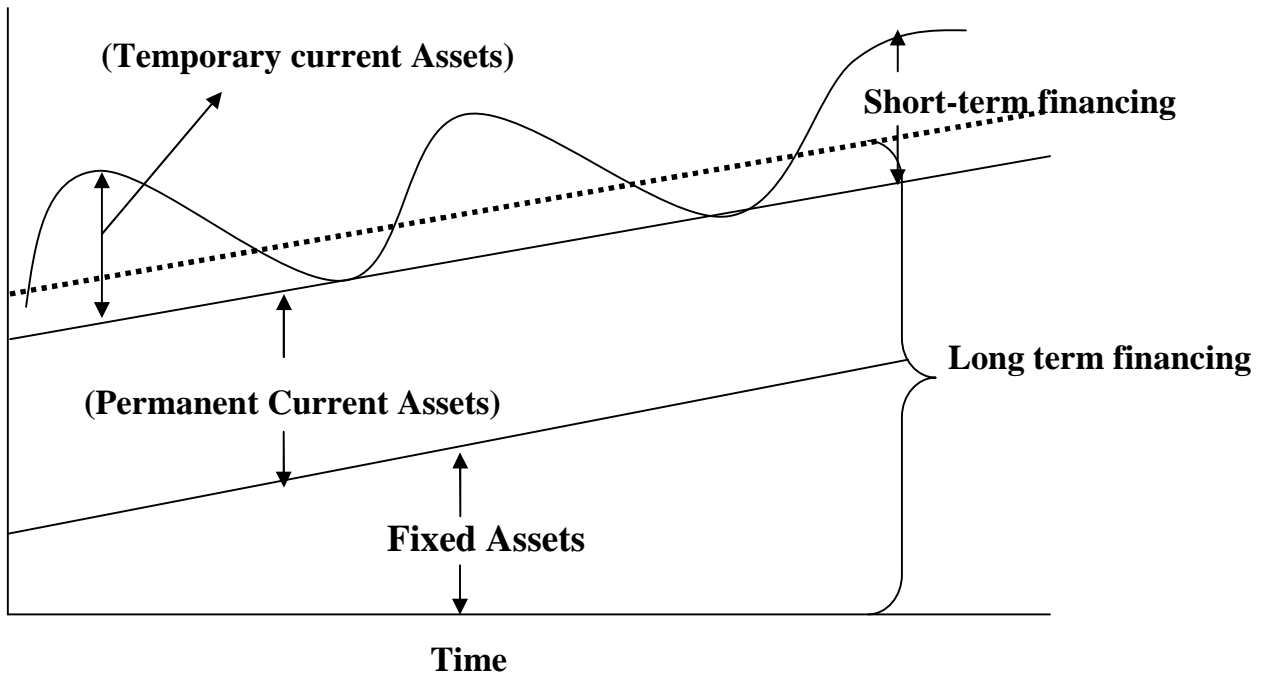


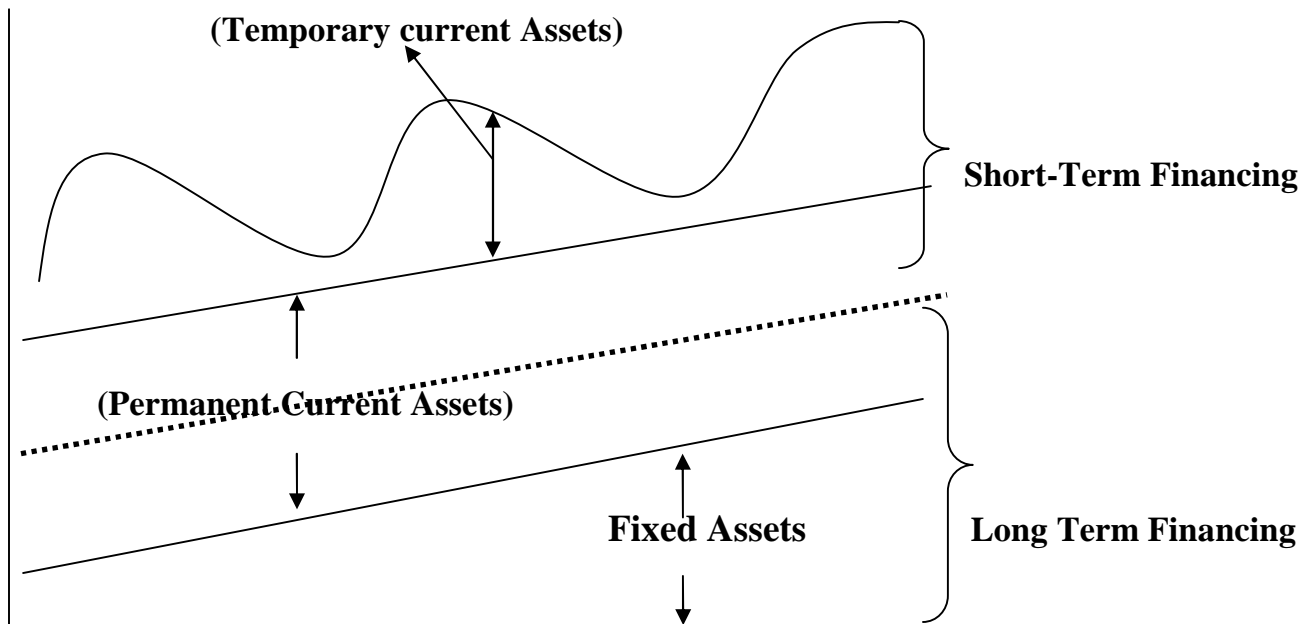
Fig 2.1.6_B Financing under Conservative Approach

These two hedging and conservative approaches can also be contrasted on the basis of risk involved, because the shorter the maturity schedule of a firm's debt obligations. The greater the risk that it will be unable to meet principle and interest payments. On the other hand, the longer the maturity schedule, the less risky the financing of the firm, all other things being the same. However, it can be said that hedging approach is more risky than the conservative approach in any manufacturing concern because there are two reasons. First, there is as already observed no net working capital with the hedging approach because no long-term funds are used to finance short-term seasonal needs i.e. current assets are just equal to current liabilities on the other hand, the conservative approach has a fairly high level of net working capital. Secondary the hedging plan is risky because it involves almost full utilization of the capacity to use short-term funds and in emergency situation, it may be difficult to satisfy the short term needs. With the conservative approach, in contrast the company does not use any of its short-term

borrowing capacity. Therefore, the firm has sufficient short-term borrowing capacity to cover unexpected financial needs and avoid technical insolvency.

In conclusion, the hedging approach, implies low cost, high profit and high risk (no net working capital) while the conservative approach, implies to high cost low profit and low risks. These two types of approach are used in financial decision making. In other side, it can be seen that “There is a conflict between long-term and short-term financing are less expensive than long-term financing but at the same time short-term financing involved greater risk than long-term financing. The choice between long-term and short-term financing involves a trade-off between risk and return.

The aggressive approach suggests that a major part of total current assets and minor part of fixed assets investment is to be financed from short-term sources. This approach implies low cost, high risk and high return or profitability. A firm may be aggressive in financing its assets. An aggressive policy is said to be followed by the firm when it uses more short-term financing than warranted by the matching plan. Under an aggressive policy, the firm finances a part of its permanent current assets with short-term financing. Some extremely aggressive firms may even finance a part of their fixed assets with short-term firms may even finance a part of their fixed assets with short-term financing. The relatively more use of short-term financing makes the firm more risky.



Time Fig 2.1.6c Financing under Aggressive Approach

In conclusion we make the following generalization :-

	High ←————→ Low		
Liquidity	Conservative	Hedging	Aggressive
Profitability	Aggressive	Hedging	Conservative
Risk	Aggressive	Hedging	Conservative

Ultimately, the optimal level of each current assets (cash, marketable securities, receivables, and inventory) will be determined by management’s attitude to the trade-off between profitability and risk.

2.1.7 Working Capital And Technical Solvency Of A Firm

Heavy investment in cash, receivable and inventory puts the financial managers in to safe and less problem will be there regarding the liquidity position. The obligation shall be met at or before they mature, thus the short-term creditors and manager may feel themselves comfortable with heavy blocked of funds in current assets. On the contrary, there are other groups of persons who aspect and reasonable size of return on their investment in earning assets i.e. fixed assets. From this points of view, the management always tries to reduce its investment in current assets diverting the excess amount wither to fixed assets or paid back to shareholders. However, minimizing the size of current assets may create problems, like inability to meet obligation due to risk of stock-out and deterioration of sale due to tight credit policy. Consequently, the financial manager finds himself I a dilemma between risk and return.

Under the general assumption that current assets are is yielding to fixed assets and short-term funds are less costly to ling-term funds, the financial managers may put the profitability of the firm in danger by maximizing the investment in current assets, while the liquidity may be challenged if he minimizes the investment in current assets. This is the risk return trade-off for which the financial manager uses his best judgement to optimize it.

Solvency is the indicator of position where total assets exceed total liabilities and most of the going concerns occupy this position. This is the legal concept of solvency. Instead, the firm might not be in a position to pay off its obligation a their maturely even when it is legally solvent. This

situation occurs in the course of operations, the firm is called technically insolvent and such condition occur due to insufficient time to liquidate the assets, the firm already has- “Technical insolvency occurs when a company has too high a proportion of its assets for removed from cash and is unable to generate cash when required, this is known as over-trading. The creditors become apprehensive and will demand immediate payment of their debts. It is the situation when a firm has sufficient assets to met all its financial obligation, but not enough time to convert those assets into cash.”³² However, the measurement of a firm’s technical solvency constitutes the core of all forms of short-term credit analysis.

There also exists a trade off between the benefits of liquidity and cost of maintaining it; insisting the firm to maintain optimum liquidity. Besides a firm cannot avoid risk either by putting excess amount in current assets or by minimizing them. “The particular risk cannot be avoided, they cannot be shared, they must be assured by someone who is both willing and able to do so”.³³ Where no person or firm is ready to assume such risk, the want of such commodity or service will remain unfulfilled. Obviously the return on such investment is the compensation not for between risk but for assuming it at one time in past.

In a going concern, neither the whole current liability is discharge at a time for the whole current assets are available for this purpose. The financial manager tries to synchronise the inflow and outflow of funds and put sufficient cash margin for only default there of Vanhorne correctly states, “If the firm could both borrow and lend at the same interest rate, there would be no ‘cost’ to maintaining whatever level of liquidity was desired to reduce the profitability of technical insolvency.

2.2 SOURCES OF WORKING CAPITAL

2.2.1 Management Of Cash And Marketable Securities

Cash refers to all money items and sources that are immediately available to help to pay a firm’s bills. One the balance sheet a firm will

³² J.R. Frank, and N.N. Schelefield, “Corporate Financial Management”, Gower press, U.K. 1974. P-8 as quoted in Dr. Khangendra Acharya Ibid P-100

³³ Bion Howard, and Miller Upton, , “Introduction to Business Finance”, Mc Graw-Hill co. Inc New York, 1953 P-20 as quoted in Ibid P-101.

normally list cash assets in two categories- cash and marketable securities, cash assets are coin and currencies held by the firm in cash register and petty cash where marketable securities include the firm's short term investment on treasury bills, commercial and financial papers, negotiable time certificates of deposits etc. done from excess cash.

Cash management is concerned with the management of Cash inflows into and out of the firm (ii) Cash flows within the firm, and (iii) Cash balance held by the firm at a point of time. It is one of the key area of working capital management since apart from the fact that it is the least productive assets that a firm holds. It is the most liquid current assets and is the common denominator to which all current assets can be reduced because the other major liquid assets i.e. receivable and inventory get eventually converted into it. The main goal of cash management should be to maintain adequate cash position to keep the firm sufficient liquid and to use excessive cash in some profitable way. The management of cash is also important because it is difficult to predict cash flows accurately and that there are perfect coincidence between the inflows and outflow of cash. On the other hand, cash outflows will exceed cash inflows because payments for taxes, dividends, seasonal inventory etc build up. At other times, cash inflows will be more than cash payments because there may be large cash sales and debtors may be realized in large sump promptly.³⁴

So that in order to resolve the uncertainty about cash flow prediction and lack of synchronization between cash receipts and payments, the firm should develop some strategic for cash management which are as follow; cash planning, managing the cash flows, determining the optimal cash level and investing idle cash.

2.2.1.1 Motives Of Holdig Cash

A firm generally holds cash for the following primary reasons (i) transactionary motives (ii) precautionary motives (iii) speculative motives

Transactionary motives refer to the holding of cash, to meet routine cash requirements to finance the transaction, which the firm carries on the

³⁴ I.M Pandey "Financial Management" Vikash Publishing House Pvt. Ltd. 1982, P.356

ordinary course of business. Whereas precautionary motives refers a cash balance held in reserve for random unforeseen fluctuations in cash inflows and outflows i.e. to pay cash for unexpected sharp increase in cost of raw materials, floods, strikes and failure of important customers etc. Similarly, speculative motives refers to the desire of a firm to take advantage of opportunities which present themselves an expected moment and which are typically outside the normal course of business yet another motive to hold cash balance is to compensate banks for providing certain services and loans. Compensating balances are also required by some loan agreements between a bank and its customers, During periods when the supply of credit is restricted and interest rates are rising, banks require a borrower to maintain a minimum balance in his account as a condition precedent to the grant of loan. This is presumably to “compensate” the bank for a rise in the interest rate during the period when the loan will be pending.

It is out of the question to predict cash flows accurately and there is no perfect coincidence between its inflows and outflows. But since both under and over cash balance effects on risk and return position of the firm a firm should have efficient cash management which consists planning and managing cash flows, maintaining optimal cash level and investing the idle cash into profitable sectors in our sufficient manner.

2.2.1.2 Cash Planning

Cash inflows and outcomes should be planned to project cash surplus or deficit for each period of the planning. Any firm needs cash to invest in inventories, receivable and fixed assets and to make payments to operating expenses in order to maintain growth in sales and earning. Cash planning can help anticipate future cash flows and need of the firm and reduce the possibility of idle cash balance (which lowers firm’s profitability) and cash deficits (which can cause the firm’s failure). It is a technique to plan for and control the use of cash. It projects the financial condition of the firm by developing a projected cash statement from a forecast of expected cash inflows and outflows for a given period. It is very crucial in developing the overall operating plans of the firm.

2.2.1.3 Determination Of Cashflows

Firms prepare cash budget in time to time to co-ordinate the timing of cash needs, to pin point the period when there is likely to be excess cash to enable a firm. Which have sufficient cash to take advantage and to help to arrange needed fund on the most favourable terms and prevent the accumulation of excess fund.

The cash budget as a cash management tool, would throw a light on the net cash position of the firm. After, knowing the cash position the management should work out the basic strategy to be employed to manage its cash. The cash management strategies are intended to minimize the operating cash balance requirement. The basic strategies are:

- (1) Stretching accounts payable
- (2) Efficient inventory-prediction management
- (3) Speedy collection of accounts receivable
- (4) Combined cash management strategies.

The first strategies, stretching account payable refers to the payment of account payable as late as possible without damaging its credit standing as well as taking advantages of the cash discount available on prompt payment. The second strategy is to increase the inventory taken over rate avoiding shortage of stock which can be done by increasing the raw materials turn over, decreasing the production cycle and increasing the finished good turnover. The third strategy is to collect accounts receivable as quickly as possible without losing further sales because of high pressure on collection techniques which can be achieved by changing credit term, credit standard and collection period. The fourth strategy, combined cash management strategy refers to the combination of three strategies mentioned above.

Today, when cash, like any other assets of the company is a tool for profits, the emphasis is on the right amount of cash, at the right time, at the right place, and at the right cost. Among the determinants of cash needed by a firm, the policy of the firm itself has got much importance. On the other hand, it is also adjusted on the basis of availability of short-term credit for the credit worthiness of the firm consequently the money market condition and the requirement of compensating balance and expected variation in cash movement also affect the balance of cash required.

The central problem in managing cash balances is deciding how much cash to hold to produce the best balance for the particular business between the cost of not holding enough cash in the balance, and the cost of holding too much. This is turn, cash management problems are apparently related to over-or-under-capitalization, the accrued system of accounting, the taxation laws of the country and other compulsions, which partly nullify the profit shown in books of accounts.³⁵ Obviously cash management is an art of maintaining its balance to the optimum level from where it may be gently moved upward.

2.2.1.4 Managing The Cash Flows

Once the planning is done, there should not be significant deviation between projected and actual cash flows. And in order to get rid of it, cash flows should be managed efficiently i.e. to accelerate cash collections and to decelerate cash disbursements as much as possible. Cash collection can be accelerated by reducing the lag between the time a customer pays his bill and the time the cheque is collected and funds become available for the firm's use through introducing decentralized collection system, v.z. Concentration banking box-box system. It can also be done by encouraging customers to make them pay as quickly as possible offering various concessions like trade discount, cash discount etc.

The effective control of disbursement can also help the firm in conserving cash and reducing the financial requirements. It provides spontaneous funds which are cost free but may endanger the firm's credit standing as well. So a firm should apply it quite prudently. Some of its measures are playing the float and accruals, centralized disbursements that makes delay in payment of account payable.

³⁵ Chattopadhyay, "Survey of research on financial management". (Sankar, Mishra, Ravisankarets.) Bombay Himalaya Publishing house 1983 P-189 as quoted by Dr. K. Acharya "Working capital mgmt in manufacturing Public enterprise, University of Allahabad, 1985, P-205.

2.2.1.5 Optimum Cash Level

There should be optimum cash balance i.e. adequate investment in cash, neither excess nor deficit, as both of them are unsound. So a financial manager should determine the appropriate amount of cash balance. But such decision is influenced by a trade-off between risk and return. More is the cash balance, more will be the liquidity but the return and vice versa.

Many firms hold marketable securities, because they serve as substitute for cash balance and they are used as a temporary investment. Some firms hold portfolios of marketable securities in view of large cash balances, than sell of some securities to increase the cash account and cash outflow exceeds inflow. Therefore, the investment in marketable securities should be properly managed excess cash should homely be invested in marketable securities which can be promptly converted into cash.

The cash budget helps in determining periodical cash position. It reflects a clear picture of cash collections, disbursements, and the ending cash position. It examines whether cash inflows synchronise with cash outflows and indicateds in advance the time period when it will have cash surplus or deficiency. Although, it is an important part of cash management, it does not help appropriate the available funds into cash in hand and marketable securities. Several models have been developed and are being used by business firms to determine cash balance and ways to transfer funds from cash to marketable securities when the balance exceeds the requirement, and from marketable securities to cash when the balance slides down below the minimum need. One of the techniques of mixing the cash balance and the marketable securities is the Baumol model which is based on the inventory model. Another technique is the MILLER-ORR Model which is based on the high-low cash balance.

The following four models are commonly used:

1. Baumol Model (Eoq Model)
2. Miller-orr (Stochastic Model)
3. Beranek Model (with probability distribution of cash flows)
4. Probability approach (also known as simulation Technique)

By using any of these Techniques, a reasonable size of cash balance and marketable securities can be estimated and maintained. The Boumol Model is

restrictively applicable to simple cases of certainty. The Miller-orr model is more realistic and is valid in most of cases. The Beranek model is fairly good in limited cases and the probability approach is good enough to reflect cash needs with probability distribution. Since, the Baumol Model is fairly simply and founded on the well known EOQ principle, and the Miller-orr model is more practical and flexible, our discussion will limit to these two models only.

2.2.1.5.1 Baumol's Inventory Model

It is the economic model, which determine the optimal cash level. By applying economic order quantity (EOQ) concept. In view of minimizing the opportunity cost of holding cash and maximizing the return on the available funds, the balance should be maintained at a minimum level, and the funds not required for immediate use be invested in the marketable securities. The minimum size is the amount of cash that is enough to start with at the beginning of a period to meet the cash need of that period's transaction. In orders to make sure that every period begins with the right amount of cash, a method is needed that prescribes the optimal size of cash transfer from the security account, or the optimal amount to be borrowed whenever the balance reaches to zero level. Holding of cash naturally cost some opportunity and in order to handsome transactionary cost optimum cash level lies at the point where the transaction costs and risks of too little a balance and where the total cost is minimized.

Baumol model is one of the methods that can be used for this purpose. Baumol identifies the cash maintenance as analogous to inventory maintenance and demonstrates that the model of economic order quantity that is applicable to inventory management is perfectly applicable in cash management too. The optimal cash level can be determined by using following formula

$$C^* = \sqrt{\frac{2(F)(T)}{K}}$$

Where,

C= Optimal level of cash to be maintained by sell of marketable securities or by borrowing.

F= Fixed cost of making a securities trade or of obtaining loan i.e. transactions costs.

T= Total amount of cash needed over the given period of concern (usually a year)

K= Opportunity cost of holding cash.

The figure below shows the relationship between the average size of cash balance (the size of cash transfer or borrowing) and various costs associated with the cash maintenance.

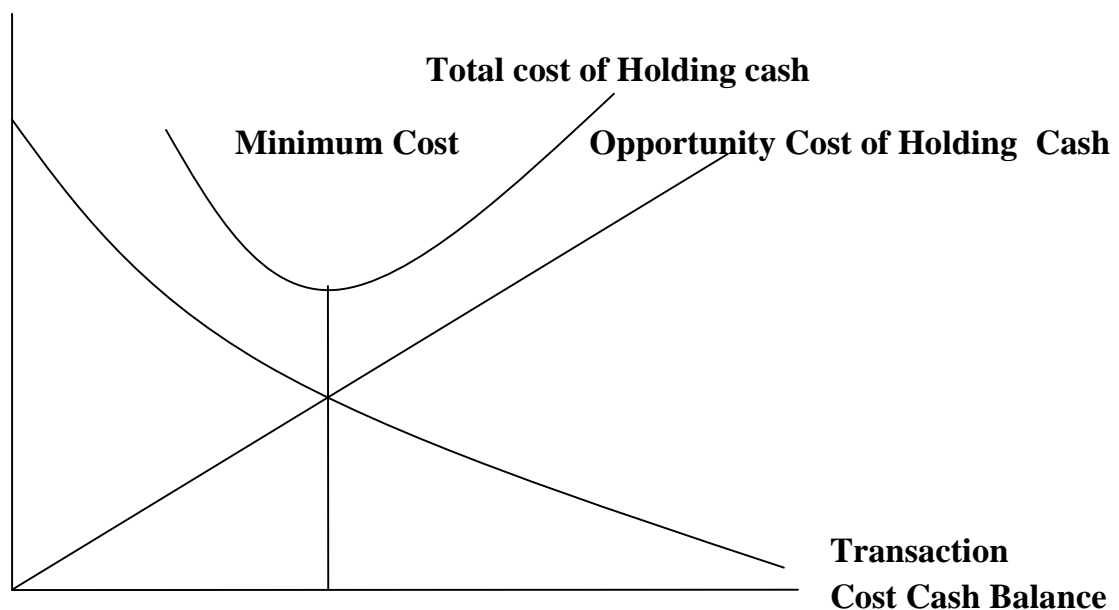


Fig 2.2.1.5.1 Baumol Inventory Model

Total cost= Holding Cost+ Transaction Cost

$$= \left(\frac{\text{Average Cash Balance}}{X} \times \text{Opportunity Cost} \right) + \left(\frac{\text{Number of Transactions}}{X} \times \text{Cost per Transaction} \right)$$

$$= C(K) + T(F)$$

2.2.1.5.2 Stochastic Model (Miller-Orr Model)

The size of cash need depends on the pattern and degree of irregularity of inflows and outflows. The Baumol model does not consider the possible irregularity and uncertainty of receipts and payments. Therefore, we need a model that estimates and maintains the optimal balance of cash to cover transaction needs and compensating requirements and balances between cash account and marketable securities in an optimal combination. Since the balance of cash fluctuates every day as receipts and payment do, firms, in order to maintain cash balance at optimal level or within optimal range, sometimes need to make transfer from marketable securities to cash and other times from cash to marketable securities. Merton Miller and Daniel Orr have developed a model, known as Miller-Orr model, that takes into account the realistic pattern of cash flows and prescribes when and how much to transfer from cash to investment account and vice-versa.

Stochastic model is applied in such cases when the uncertainty of cash payment may be large. According to this model, cash balance is maintained between a range i.e. upper limit and lower limit which is called “Return Point”. The cash balance will be limited between the span of upper and lower limit. When the cash balance touches the upper limit the firm purchases marketable securities to reduce the cash balance and the firm sell the marketable securities when the cash balance dropped down to lower limit to increase the cash balance. As long as the cash balance stays between these limit, no Transactions take place. The spread between upper limit and lower limit can be computed by applying following formula.

$$Z = \sqrt[3]{\frac{3bd^2}{4i}}$$

Where,

Z = Spread between upper and lower cash limit.

b = Fixed cost associated with a security transaction.

d² = Variance of daily

i = interest rate per

The model is illustrated in figure

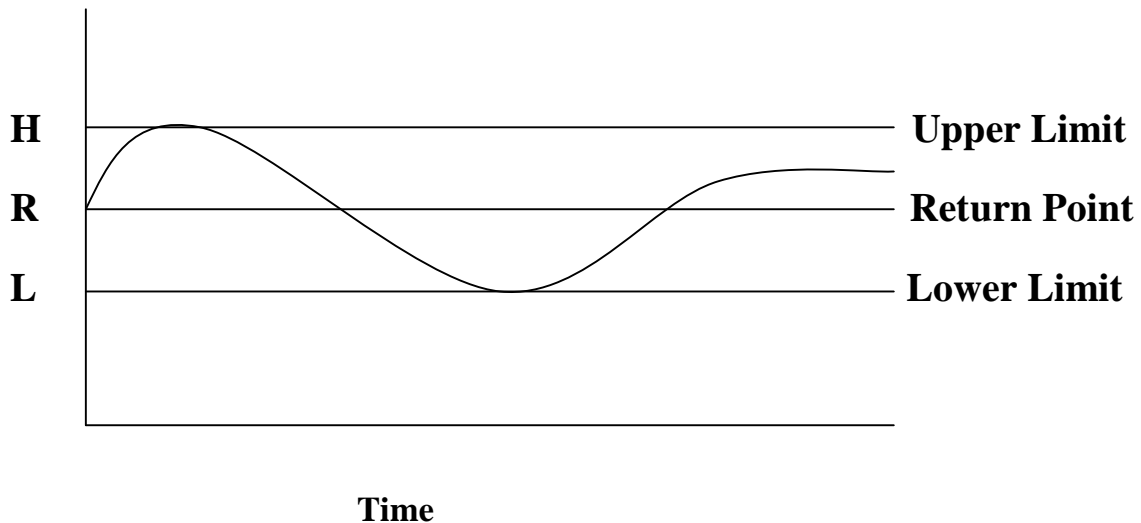


Fig 2.2.1.5.2 Miller-orr Model

Return point (R) is computed as follows

$$R = z + \text{lower limit}$$

$$\text{And upper limit} = 3(z)$$

2.3 Management Of Receivable

Receivable management is an important aspect of working capital management. Managing receivable means making decision relating to the investment of funds in this assets as part of internal short-run operation process. The term receivable is the outcomes of credit sales, which is inevitable in today's business world. The main objectives of credit sales are to achieve growth in sales, to increase in profit and to meet competition. But there exists risk and maximize the value of the firm by achieving a trade-off between liquidity and profitability. So a firm should manage its credit in such a way that sales are expanded to an extend to which risk remains within an acceptable limit.

An efficient and effective credit management helps toe expand sales and can prove to be an effective tool of marketing. It helps to retain old

customers and win new customers. All well administered credit means profitable credit accounts.

Weston and Brigham said in this connection “Since the typical manufacturing firms has about twenty percent of its assets invested in receivable, the management of these assets is obviously important.”³⁶ The level of investment in receivable on the firms credit policy, which consisted of four variables.

- I. The credit policy, which is the length of time make clear buyers have before they must pay for their purchases.
- II. Credit standards, which refers to the minimum financial strength of acceptable credit customers.
- III. The collection policy, which reflects the firms toughness or laxity in following up on slow paying accounts.
- IV. Discount given for early payments.

Trade credit, i.e., the investment in receivable is the most prominent force of the modern business. It is considered as an essential marketing tool, acting as a bridge for the movement of goods through production and distribution stages to customers. As a marketing tool, they are intended to promote sales and thereby profit. However, extension of credit involves risk and cost. Management should weigh the benefits as well as cost to determine the goal of receivable management. Thus, the objectives of receivable management is “To promote sale and profits until that point is reached where the return on investment in further funding of receivable is less than the cost of funds raised to finance that additional credit (i.e. cost of capital).”³⁷

Credit policy has an important impact on the volume of sales and the optimal policy involves a trade-off between the costs inherent in various credit policies and the profit generated by higher sales. Credit policy and receivable management involves both quantitative analysis and judgement. Both are equally important, good credit management involves a blending of quantitative analysis and business judgment.

³⁶ J. Fred Weston & Eugene F. Brigham , “Essential of Managerial Finance”, The Dryden Press, eight edition 1987, P-400

³⁷ S.E Bolten, “Managerial Finance” Weston, Houghton, Mifflin Co, 1976, P-466. As quoted by Panday I.M., Financial management’s Vikas publishing house (P) Ltd. New Delhi 1982, P-377

Managing receivable means making decisions relating to the investment of funds in this assets as part of internal short-run operating process. The general liquidity management goal is to use cash funds as economically as possible in expanding receivable, without injuring sales and the chance for increasing short-run profits. Financial execute try to keep the receivable investment low, that is consistent with the two fold purpose of maintaining adequate cash funds for current operations and expanding credit sales to take advantages of profit opportunities. Policies, which stress short credit term, strict credit standard and highly aggressive policy of collections may work to minimize bad debt losses and the locking up of funds in receivable. But such policies may well restrict sales and profit margins and the rate of return on the total investment of the firm may be lower than that receivable with high level of sales receivable and profit. On the other hand; extremely lenient credit policy may increase in sales and profits. Therefore, the objectives of receivable management is achieving a balance which results in the combination of sales and profit rates that maximize the overall return on the investment of the firm.

2.4 Inventory Management

Inventory management involves the control of assets being produced to be sold in the normal course of the firm's operations. The general category of inventory includes raw materials, work-in-progress and finished goods. In this modern age, the inventory management is one of the important roles of finance manager, because it covers a large part of current assets. The slightest deviation I inventory management may result increase or decrease in working capital requirement. The basis objectives of inventory management are to maintain a large size of inventory for efficient and smooth production and sales operation, and to maintain a minimum investment in inventories to maximize profitability. "So an effective inventory management should.

- I. Ensure a continuous supply of materials to facilitate uninterrupted production.**
- II. Maintain sufficient stocks of raw materials in periods of short-supply and anticipate price change.**
- III. Maintain sufficient finished goods inventory for smooth sales operation, and efficient customer service.**
- IV. Minimize the carrying cost and time, and**

V. Control investment in inventories and keep it as an optimum level.³⁸

The inventory should be kept in such a way that it should be enough to meet the daily requirement and on the other hand it should cost minimum. The inventory must be kept in optimal level. The economic order quantity. Considering the behavior of different types of costs involved, the model prescribes the inventory order size that assures a minimum total cost of ordering and carrying inventories. The cost of ordering decreases with the increase in the size of order as the number of order per year decrease whereas the cost of carrying increases with the increase in the level of inventory holding as the interest cost, storage cost, etc. increase. Since, these two types of costs are inversely related, minimization of total costs requires a trade-off between the two types of costs.³⁹ This is fundamental ground on which the model of economic order quantity is based. Which can be determined by using following formula.

$$EOQ = \sqrt{\frac{2AO}{C}}$$

Where,

EOQ = Economic order quantity

A = Total annual requirement

O = Ordering cost per order

C = Carrying cost per unit.

³⁸ I.M. Pandey "Financial Management", Vikash Publishing House Pvt, New Delhi 1982, P-395

³⁹ Dr.O.S. Pradhan, "Basics of Financial Management", Educational enterprise (P) Ltd. Ktm, 1982, P-183

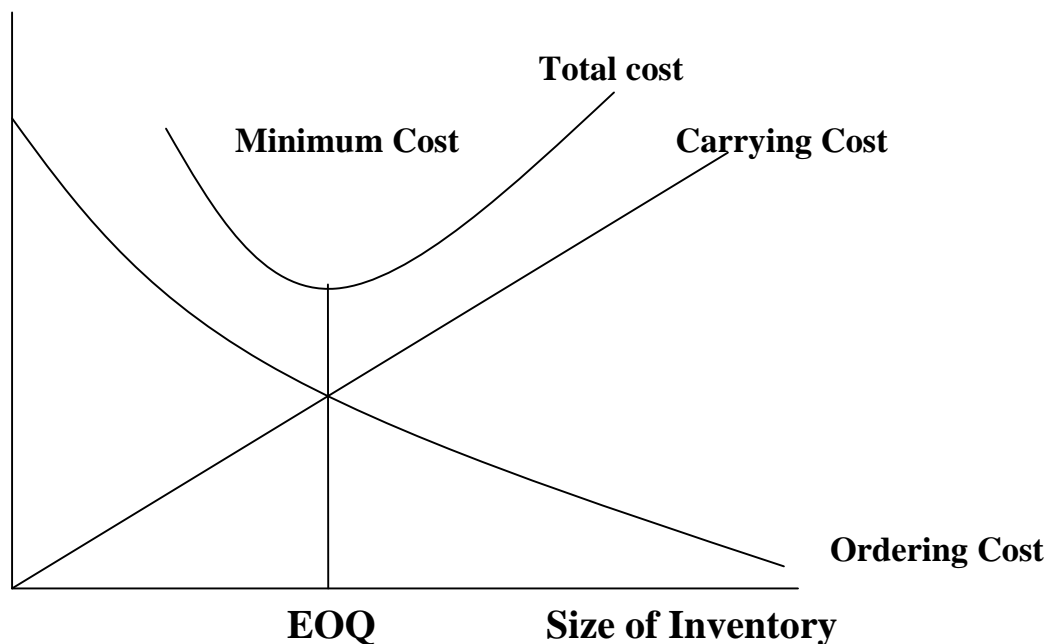


Fig 2.4 Economic Order Quantity Model

TC= Total Carrying Cost+ Total Ordering Cost

$$= \frac{Q}{2} \times C + \frac{A}{Q} \times O$$

Some basic term and concepts

The important term to be known in inventory management are:

- A. Lead time**
- B. Safety stock**
- C. Re-order level**

A. Lead Time :-

“It is the period of time required for obtaining delivery of, or for manufacturing, economic order quantity once an order has been placed.”⁴⁰

⁴⁰ C.R. Kothari, “Quantitative techniques “Vikas Publishing house Pvt. Ltd., New Delhi, 1978, P-343

It is composed of:

Lead time= Serving time+ delivery time+ receiving time

All these times never remains constant. Thus the determination of lead time is a complicated matter. In practice either it is taken to be constant or some reasonable or expected value is assigned to it.

B. Safety Stock :-

“The business would be in a pathetic situation having run out of stock owing to sudden spurt in usage of materials beyond the one during lead-time, delays in processing orders or delays in deliveries. Thus, almost all businesses have to provide for minimum inventory intended to act as a cushion against reasonable expected maximum usage that is known as safety stock. In other word, safety stock is a buffer to meet some unanticipated increase in usage. The degree of safety stock depended on;

- (1) Uncertainty in demand**
 - (2) Degree of insurance of any time**
 - (3) Uncertainty in lead time**
 - (4) Size of the batch**
- C. Re-order point : -**

The Re-order point is the level of inventory at which the firm places an order in the amount of the economic order quantity. If the firm places the order when the inventory reaches the reorder point, the new goods will arrive before the firm runs out of goods to sell.

Reorder point = Lead time x Average usage + Safety stock – Goods in transit

ABC Method of inventory control

The ABC system is a orderly used classification technique to identify various items of inventory for purpose of inventory control. The method identifies the relative importance of each type of inventory calls for managerial emphasis accordingly. Considering the need for cost cost controlling and values maximization, managers need to recognize the inventories that are critical for the operation and are of high values. This requires a classification of inventories according to their annual usage, dollar

value and the procurement lead-time. The ABC method suggests to classify inventories into three categories, Namely “A” for high value inventories, “B” for average value inventories, and “C” for low value inventories, which controls expensive inventory items more closely than less expensive items.

2.6 Review of Related Dissertations

In the preceding topics discussion have been made on the introduction and conceptual setting of the study. An attempt has been made to review the literature on working capital management in general and Hulas Motor factory in particular.

Dr. (Prof.) K. Acharya⁴¹ had studied the management of working capital in the PES of Nepal with special reference to tea industry in 1985 which is based on his D.phil Thesis. He has focused working capital management of Nepal tea development corporation (NTDO) for eight years from 1975/76 to 1982/83 AD. In the study, he found that the net working capital of NTDC was negative due to increase in current liabilities. Inventory held the largest portion and it was accumulating in the corporation. The size of receivable of NTDC had also been increasing trend whereas cash balance held by the corporation were is sufficient 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 of inventory, receivables and current assets were below average. The break even analysis revealed that the NTDC had been selling mostly below the break even point. Even variable cost was higher than selling price. Dr. Acharya gave some suggestions regarding this were proper planning of production and sales, new credit policy, action against the delinquent dealers, obtaining loans from any individual or financing institutions. Lack of proper planning and programming, declining sales, disintegrated as well as defective inventory management, lack of proper control and paucity and imprudent management of working capital have been observed as the main cause of inventory accumulation in the corporation. He added that, thus the challenges for better management of resources have to be admitted by the Nepalese entrepreneurs and managers. Only this can lead our public enterprise toward the success.

⁴¹ Dr. Khendra Acharya, The management of working capital in the PEs of Nepal, with special reference to tea industry university of Allahabad-1985

Mr. Suresh Pradhan had studied on “Working capital policy of manufacturing PES in Nepal”⁴² and sought to sort out the problem of low economic performance and poor financial management in manufacturing industries. He also examined, is there any association between the various aspects of working capital policy in financial management and the poor financial performance of manufacturing industries. Hence this study deal with liquidity position, sources of financing of current assets and determinants of working capital in manufacturing enterprise. The main findings of the study are as follow:

1. The selected manufacturing public enterprise (MPEs) had sufficient liquidity.
2. The use of current assets in selected MPEs was satisfactory and there was high turnover of cash and receivable in comparison to inventory.
3. Most of the MPEs were incurring losses and were unable to meet even the operating expenses with the sales revenue.
4. There was higher use of long-term funds followed by trade creditors, short term bank loans and operating profits in current assets financing.

Ultimately, he had made some suggestions for the improvement of working capital management and efficiencies in the manufacturing industries. He suggested that the factory should follow an appropriate sales policy from which the full production will be utilized. The industry has to adopt scientific purchasing method, quality control, and efficient inspection and should have appropriate cash balance and working capital. The manufacturing enterprise should pay sufficient attention to control investment in inventory, identification of needed funds, development of management information system, positive attitude towards risk and profit and determination of short-term and long-term sources of funds to finance working capital needs. Joshi⁴³ in his study seeks to have true insight in it to the working capital management in Biratnagar Jute Mill. The study is concerned with management of current assets and covers five years period (2036/37 to

⁴² Suresh Pradhan, A study on working capital policy of manufacturing PEs in Nepal. An unpublished master’s degree thesis. T.U.1989

⁴³ Arjun Lal Joshi, “A study on working capital management of Biratnagar Jute Mill Ltd. “ A MBA Thesis, T.U.1986

2040/41). The study has embodied various financial ratios for measuring Biratnagar Jute Mill's financial viability. The study has indicated mismanagement of inventory, no proper policy of cash holding and heavy dependence on short-term bank credit. He has recommended for effective working capital management of the mill by planning realistic turnover target specimen, designing effective inventory management program, following productive investments approach, preparing effective sales plan and exhaustive market research program, using short term bank credit up to certain reasonable limit, maintaining optimum cash balance and making proper utilization of accumulated collection debts.

The scope of study is to identify the loopholes and managerial deficiencies of Biratnagar Jute Mills on the part of working capital management. Similarity our has also some scope and also comes forward with fruitful suggestions to overcome issues and gaps in working capital management of the Hulas Motor Factory Mr. Joshi has used ratio analysis to study best not used hypothesis and correction coefficient to verify the significance and relation between working capital components. He has not evaluated the relationship between current assets components and current assets.

Giri in his study has attempted to evaluate "Working capital management of Balaju textile industries limited. The major finding of his study are no significant improvement in working capital position during study period; increased working capital was financed by sales of fixed assets or sources of share capital. Current assets was financed by long-term financing and high level of sluggish inventory's amount to unnecessary tied-up of funds, impairment of profit and increased costs.

He suggested for efficient working capital management of Balaju textile industry limited. It is better to fixed a minimum target rate of return, make regular checks to identify both excess and deficient current assets to avoid risk in management of working capital, finance current assets from the appropriate combination of short-term and long-term sources to preserve liquidity and mentioning stability, take necessary action for deposing huge inventory with tied-up working capital, involved huge carrying cost of lessees, sick position and working inefficiency of corporation should improve.

He has set only three research questions to analyse working capital management of Balaju Textile industry limited which is insufficient. He has used ratio analysis as research tools. But he has not done analysis to evaluate the relationship of current assets. Similarly, he has set null hypothesis but has not tested it through appropriate tools to find out whether null hypothesis is accepted or rejected. So we can say it is not fully analytical type of research.

2.7 REVIEW OF ARTICLES/JOURNALS

Articles, Journals and bulletins are of great significance for thesis writing. So various published articles by different management experts and journals/ bulletins relating to working capital management have been considered.

A comparative study of "Problem and Impediment in the management of working capital in Nepalese Enterprise" has been conducted by Dr. K. Acharya. He states that in most of enterprises the management of working capital has been misunderstood as the management of money rather than its efficient utilization. Thus the existing problems in the finance are mostly directed towards the management of working capital rather than in any other area. In his number of studies it has been repeatedly found that gross inefficiency exists in the operation of enterprises. He has stressed on high cost of production which has left these manufacturing concerns in a less secured position. Thus, he further added that cost reduction is the only possible measure for the smooth operation and long-term existence of the manufacturing concern. The cost reduction program is highly associated with the optimization of working capital. He has focused some operational and organizational programs of Nepalese public enterprises like aggregate current liabilities which is increased more quickly than their current assets, public enterprises like aggregate current liabilities which is increased more quickly than their current assets, public enterprises not following traditional norms, 2:1 between their current assets and current liabilities, low rate of inventory turnover, change in working capital in relation to fixed capital has very low impact over profitability, not following conventional proportions of debt equity as 1:1, then transmutation of capital employed, sales information tools and techniques and working capital management has never been considered a managerial job.

Similarly, he has suggested that manufacturing concerns finance staff must be acquainted with the modern scientific tools used for the presentation

and analysis of data. He further suggests to avoid the system of crisis decision which prevailed frequently in their operation. They have to follow system and method for decision making. Lastly he has given emphasis to optimise its level of investment at a point of time. Neither over nor under investment is working capital is desired by the management of an enterprises because both of these situation will erode the efficiency of the concern.

This study is descriptive in nature. He has not used any data and research tools. The study has covered Nepalese public enterprises (but not mentioned the name of public enterprise). Each selected enterprise does not represent the entire industry in which it falls.

Pradhan,⁴⁴ in this study aims to examining the various aspects of management of working capital is selected manufacturing public enterprise of Nepal. The specific objectives undertaken in his study are:

1. To conduct risk return analysis of liquidity of working capital position.
2. To assets the short term financial liquidity position of the manufacturing concern.
3. To assets the structure and utilization of working capital.
4. To estimate the transactions demand functions of working capital and its various components.

His study has mentioned the following findings

1. It is found that most of the selected enterprises have been activating a trade-off between risk and return thereby following neither an aggressive nor a conservative approach.
2. It has showed a poor liquidity position of most of the enterprise. This poor liquidity position has been noticed as the enterprises have either negative cash flows or negative earning before tax or, they have excessive net current debts, which can be paid with in a year.
3. To Nepalese manufacturing public enterprises have, on an average, half of their total assets in the form of current assets. Of all the different components of current assets, the share of inventories in total assets, on an average, is largest followed by receivables, and cash in most of the selected enterprises.

⁴⁴ Dr. Radheshyam Pradhan, Management of working capital. Natural Book Organizaiton, New Delhi 1986

4. The economics of scale have been highest for inventories followed by cash and grow working capital, receivable and net working capital.
5. The regression results also shows that the level of working capital and its components an enterprise desires to hold depend not only a sales but on holding cost also.

His study is concerned with inter-relationships that exist between managing current assets and current liabilities. The study manage to focus on net working capital concept. The study has employed ratio analysis, discriminate analysis and econometric models for its analysis.

Above-mentioned studies do not cover all the public enterprises as well as private industry in the manufacturing sectors. Each selected enterprise does not represent the entire industry in which it falls. The manufacturing concern selected for the study differs in its working and nature and is not similar to Hulas Motor Factory. That's why, it is necessary to study working capital management of Hulas Motor Factory. Consequently keeping in view the fact that there is no attempt to study of working capital management particularly in private sectors which is the ground base of industrialization. And our country is looking forward to list-up by economic development. In reality, It is only success when a study will find out and give special emphasis for creating a more favourable environment to attract private sectors investment in industry. By these true reasons a need has been faced to study the overall financial position and components of private sectors and study the overall financial position and components of private sectors and the study of working capital management of Hulus Motor Factory has contributed, little more to these fields. It is, for this reasons that it is necessary to study the working capital management of Hulus Motor Factory.

2.8 Empirical Hightlight Of Wc Mgmt In Nepalese Industries.

In many study reports and Journals it is shown that the proper management of working capital is neglected factor in most of the industries. In number of manufacturing industries, there are dazzling instances of inefficient cash management. Taken together one common thread joining all of the industries is talk of appropriate working capital policy to determine liquidity needs and sources of financing them.

In dealing with management of working capital, the problem common to all manufacturing industries convey the message that not only these industries are experiencing inefficient cash management but at time extended to existence of defective inventory policy and text account receivable management. In determining the efficient cash management in the manufacturing enterprise opinion survey has been made by Dr. Manohar K. Shrestha. He found that many of enterprise did not maintain yearly cash budget properly. Due to the operational in efficiency in respect of cash management, failure to control cash brought both shortage and excess of cash in different time.

Chapter - III

3.1 INTRODUCTION

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

“A systematic research study needs to follow proper methodology to active the pre-mentioned objective. Research methodology is a sequential procedure and method to be adopted in a systematic study.”⁴⁵

“It is a systematic method to finding out solution to problem where as research methodology refers to “various sequential steps to adopt by a research in studying problem with certain objectives in a view”⁴⁶

“Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain object in view.”⁴⁷

From the above definition, it can be conducted that research methodology is a systematic and scientific method of identifying problems, collecting facts and information tabulating and recording the data, setting hypothesis analyzing the facts and researching certain conclusion with view of finding answers of the thesis writing.

The main purpose of this chapter is to highlight the different methods and conditions that are applied during the present research. This chapter therefore, describes the research methodology uses for this study. It describe

⁴⁵ C.R. Kothari, Research Methodology, method & Technique Eastary Ltd. New Delhi, 1989, P-38

⁴⁷ C.R. Kothari, “Quantitative Techniques”, Bikash publishing House Ltd., New Delhi, 1994, P-19

⁴⁸ C.R. Kothari, “Quantitative Techniques “3rd revised edition Page-19

research design nature and sources of data, population and sample, data collection, procedure data, processing procedure, use of analytical tools and so on.

3.1.1 Research design

Research design is the plan, structure and strategy of investigation conceived so as to obtain a number of research questions and to control variances. It is essential for the starting of work. It is a plan of researchers, with includes what, why, when, how aspect of research like research methodology, various writers and authors have also defined research design. Keringer (1986) also describes about it.

“A research is the arrangement of conditions for collection and analysis of data in a manner that aims to combine the relevance to the research purpose with economy in procedure.”⁴⁸

The main purpose of this study is to analyze the working capital management of Hulas Motor Factory. The study is related with past phenomena. So the past information are collected evaluated, verified and analyzed systematically. It also attempts to explore certain facts, the research design for the study are historical and exploratory types for the study of working capital management of Hulas Motor Factory financial tools as well as statically tools are employed to provide analytical insights and to achieve prescribed result.

3.1.2 Population and Sample

“Representative of population is called Sample”⁴⁹

In Statistical population is whole, or a family or universe. Population is the aggregate from which the sample is to be taken. And the team sample is that port of population; which we select for the purpose of investigation. Population refers not only to people but the totality of all observations that have selected for study. Population is also known as universe sample refers to

⁴⁸ Selltiz & Claire Others, “Research Methodology”, 1992 as quoted in C.R. Kothari, quantitative Techniques, Vikash Publishing, House Pvt Ltd. New Delhi, P-22

⁴⁹ Selltiz Claire & Others, “Research Methodology”, 1992, as quoted in C.R. Kothari, Quantitative Techniques, Vikash publishing House Pvt. Ltd., New Delhi, P-223

be part chosen from the population shoppers often examine a handful of rice from the sack before purchasing any. They decide from the handful of (sample). What the sack (Population) will contain so sample is the representative of population.

3.1.3 Nature and Sources of Data

There are various sources of data. Among them sources are primary data and secondary data. It is primarily collected or secondary. Data collected by researcher through agent for the first time from related field and processing original character are known as primary data. Primary data are also called field else, used already and are made available to other in the form of published statistical are known as secondary data. Once primary data have been used, it loses its primary features and becomes secondary. The differences between primary and secondary data is a matter of relativity. Primary data are generally used in that case when one secondary data do not provide observations. Secondary data do not provide observations. In certain conditions means usually. In certain cases both data may be employed. So, it is supposed as unique technique. There are various methods collecting primary data. They are as follows:-

-) Direct Supervision
-) Questionnaire Method
-) Mailed Questionnaire Method
-) By Representative etc.

This study is primary base upon secondary data, which are publishing by the company during the fiscal year 2062/63 to 2066/67

For the study purpose, 5 years audited balance sheets profit and loss A/c and other related documents and information relating to this study are also collected from the factory by phone.

3.1.4 Data Processing Procedure.

The main sources of data is the factory building of Hulas Motor factory. The required 5 years financial statement, balance sheet and profit and loss a/c of the firm are collected directly from the factory. Some relevant and important information about the firms is also collected from the office of the management.

The audited financial statements that are presented in tax office. All the required data are available in crude, form and collected in the same form. Therefore, raw data are reclassified, rearranged and prepared as per the requirement of the study. The help of common arithmetic rates are taken to adjust, select and analyze the data presented of five years period published from H.M.F. the collected data are changed to set the ratio, correction, trend analysis to show the working capital management policy clearly.

3.1.5 Use of financial tools, statical tools and techniques:

For the purpose of analysis of working capital management of Hulas Motor Factory Pvt. Ltd. The following tools and techniques used in this research work:

a) Ratio Analysis :

Ratio analysis is a powerful tools of financial analysis. A ratio is defined as “the indicated quotient of two mathematical expressions” and as “the relationship between two or more things. In financial analysis, a ratio is used as bench mark for evaluating the financial position and performance of a firm. The absolute accounting figures reported in the financial statements do not provide a meaningful understanding of the performance and finance position of a firm. An accounting figure conveys meaning when it is related to some other relevant information. The relationship between two accounting figures, expressed mathematically, is known as the financial ratio. A ratio helps to summarize the large quantities of financial data and to make qualitative judgment about the firm’s financial performance. The point to note is that a ratio indicates a qualitative relationship, which can be in turn used to make a qualitative judgment such as the nature of all financial ratios. The technique of ratio analysis is a part of the whole process of analysis of financial statements of business or industrial concern specially to take out output and credit decision. “A ratio is simply number expressed in terms of another.” A ratio is defined as “ The indicated quotient of two mathematical expressions and the relationship between two or more things.” In the normal sense, a ratio is imply one variable expressed in terms of another and such it expressed the quantitative or numerical relationship between any two or more figure of the analysis some of the significant ratios are as below.

Composition of Working Capital

The composition of working capital is studied by analyzing following ratio:

- i. **Current Assets to Total Assets (CATA):** The ratio of CATA denotes, what percentage of the company's total assets are invested in the form of current assets. It is computed by as following formula:

$$\text{CATA} = \frac{\text{Current Assets}}{\text{Total Assets}} \times 100$$

As the ratio increases risk and profitability of the company would decrease like wise, the low ratio indicates the small amount of working capital.

- ii. **Current Assets to Fixed Assets (CAFA):** The CAFA shows the relationship between the current assets and fixed assets. If the ratio is large, it indicates the sound working capital. It is calculated as:

$$\text{CAFA} = \frac{\text{Current Assets}}{\text{Fixed Assets}} \times 100$$

- iii. **Cash and Bank Balance to Current Assets (CBCA):** In case of CBCA, the small ratio indicates the sound management and large ratio vice versa. The amount of working capital directly effected by it. The CBCA is calculated as:

$$\text{CBCA} = \frac{\text{Cash and Bank Balance}}{\text{Current Assets}} \times 100$$

The ratio of CBCA should not be large because higher ratio indicates the poor cash management.

- iv. **Cash and Bank Balance to Total Assets (CBTA):** The ratio of CBTA indicates what percentage of total assets is invested in cash and bank balance. It is calculated as.

$$\text{CBTA} = \frac{\text{Cash and Bank Balance}}{\text{Total Assets}} \times 100$$

As the ratio increases the risk and profitability would decrease and if the ratio is higher the profitability and risk decreases. It also indicates that large amount invested in working capital as in higher ratio.

- v. Inventory to Current Assets (ICA): Inventory is a major part of working capital. ICA indicates that what percentage of current assets is invested in inventory. The increase in the ratio is an indication of liberal inventory policy. It is calculated as:

$$ICA = \frac{\text{Inventory}}{\text{Current Assets}} \times 100$$

If the ratio increases, it means higher part is occupied by inventory. On the other hand, current assets are termed as working capital. If the ratio is small, the firms will have higher volume of working capital.

- vi. Inventory to total assets (ITA): The ITA ratio denotes the percentage of total assets invested in the firm of inventories. It is a part of working capital. So, if the percentage increased of inventory the working capital automatically increases. It is calculated as:

$$ITA = \frac{\text{Inventory}}{\text{Total Assets}} \times 100$$

The increase in the also indicates liberal inventory policy or blocking of materials in stock.

- vii. Receivable to Current Assets (RCA) : the RCA is determined that the share of receivable on current assets: the high degree of percentage denotes the lower working capital and vice-verse. It is calculated as:-

$$RCA = \frac{\text{Receivable}}{\text{Current Assets}} \times 100$$

If the percentage is higher the factory is unable to collect receivable promptly.

- viii. Receivable to Total Assets (RTA) : The RTA indicates that the percentage of total assets invested in the form of receivable. The increase in the ratio indicates the liberal credit policy followed by the company. The formula of RTA is as:

$$\text{RTA} = \frac{\text{Receivable}}{\text{Total Assets}} \times 100$$

The ratio shows that the higher percentage means investment in working capital is large.

Liquidity Ratio

The ability of a firm to meet its obligation in short period is called as liquidity. Analysis of liquidity needs the preparation of cash budgets and cash and funds flow statements; but liquidity ratios, by establishing a relationship between cash and other current assets to current obligations, provide a quick measure of liquidity. A firm should ensure that it does not suffer from lack of liquidity and also that it does not have excess liquidity. The failure of company to meet its obligation due to lack of sufficient liquidity will result in the closure or even in legal tangles resulting in the closure of the company. A very high degree of liquidity is also bad; idle assets earn nothing. The firm's funds will be unnecessarily tied up in current assets. Therefore, it is necessary to strike a proper balance between high liquidity and lack of liquidity. It is the most significant part of the company. Because it points out the capacity of the company to pay its current obligation. It creates the goodwill of the firm. It also shows the efficiency of the manager. The liquidity position of Hulas Motor Factory is computed by CR. Or QR.

i. Current Ratio :

The current ratio is a measure of the firm's short term solvency; it indicates the availability of current assets in rupees for every one rupee of current liability. A ratio of greater than one means that the firm has more current assets than current claims against them. The CR is calculated by dividing current assets by current liabilities.

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

Current assets include cash and those assets, which can be converted into cash within a year, such as marketable securities, debtors and inventories. Prepaid expenses are also included in current assets as they represent the payments that will not be made by the firm in the future. All obligations maturing within a year are included in current liabilities.

The current ratio measure only total rupees' worth of current assets and total rupees' worth of current liabilities. It does not measure the quality of assets. Liabilities are not subject to any fall in value, they have to be paid. But current assets can decline in value. If the firm's current assets consist of doubtful and slow paying debtors or slow moving and absolute stock of goods, then the firm's ability to pay bills is impaired; its short term solvency is threatened. Thus, too much reliance should not be placed on the current ratio; further investigations about the quantity of the items of current assets should be necessary. However, the current ratio is a crude and quick measure of the firm's liquidity.

ii. Quick ratio :

This ratio established a relationship between quick or liquid assets and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss of value. Cash are the most liquid assets. Other current assets which are considered to be relatively liquids and included in quick assets are books debts and marketable securities. Inventories are considered less liquid because it requires some time for realizing into cash. Their value also has a tendency to fluctuate. It is calculated as:

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}}$$

Generally, a quick ratio of 1 to 1 is considered to represent a satisfactory current financial condition. Low ratio indicates the firm's poor liquidity condition and vice versa. Although quick ratio is more penetrating test of liquidity than the current ratio, yet it should be used cautiously. A company with a high value of quick ratio can suffer from shortage of funds. If it has slow-paying doubtful and long-duration outstanding book debts. On the other hand, a company with a low value of quick ratio may really be prospering and paying its current obligation in time. If it has been turning over its inventories efficiently-turning over its inventories efficiently. Nevertheless, the quick ratio remains an important index of the firm liquidity.

Profitability Ratio

“A company should earn profit to survive and grow over a long term period of times. It is a fact that sufficient profit must be earned to sustain the operation of the business to able to obtain funds from investors for expansion and growth and to contribute towards the social overhead for the welfare of the society.”

The profitability ratios are calculated to measure the operating efficient of the company. Besides management of the company, creditors and owners are also interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get reasonable return on their investments. This is possible only when the company earns profits.

i. Gross Profit Margin:

The first profitability ratio is relation to sales is the gross profit margin ratio. The gross profit margin reflects the efficient with average speed between the cost of goods sold and sales revenue.

When we subtract the gross profit margin from 100 percent,we obtain the ratio of cost of good sold to sales. Bothe these ratios show profit relative to sales after the deduction of production costs, and indicate the relation between production costs and selling price. A high gros profit margin relative to the industry average implies that the firm is able t product at relatively lower cost.

It is calculated by dividing the gross by sales.

$$\text{Gross Profit Margin} = \frac{\text{Sales} - \text{Cost of Good Sold}}{\text{Sales}}$$

$$\text{Or} = \frac{\text{Gross Profit}}{\text{Sales}}$$

A high gross profit margin ratio is a sign of good management. A low gross profit margins may reflects higher cost of goods sold due to the firm’s inability to purchase raw materials at favorable terms, inefficient utilization of plant and machinery, resulting higher cost of production.

The ratio will also be low due to a fall in prices in the market, or marked reduction in selling price by the firm in an attempt to obtain large

sales volume, the cost of goods sold remaining unchanged. The financial manager must be able to detect the cause of a falling gross margin and initiate action to improve the situation.

ii. Net Profit Margin:

Net Profit is obtained when operating expenses, interest and taxes are subtracted from the gross profit. Net profit margin ratio establishes a relationship between net profit and sales and indicates management's efficiency in manufacturing, administering and selling the products. The ratio is the overall measure of the firm's ability to turn each rupee sales into net profit. This ratio also indicates the firm's capacity to withstand adverse economic conditions. It is calculated as :-

$$\text{Net Profit Margin} = \frac{\text{Profit after Tax}}{\text{Sales}}$$

A firm with a high net margin ratio would be in an advantageous position to survive in the face of falling sales price, rising cost of production or declining demand for the product. It would really be difficult for a low net margin firm to withstand these adversities. A firm with high net profit margin can make better use of favorable conditions such as rising sales prices, falling cost of production or increase demand for the product such a firm will be able to accelerate its profits at a faster rate than a firm with a low net profit margin.

An analyst will be able to interpret the firm's profitability more meaningfully if he evaluates both the ratios gross margin and net margin profit margin has either remained constant or declined, or has not increased as fast as the gross margin has, it implies that the operating expenses relative to sales have been increasing. The increasing expenses should be identified and controlled. Gross profit margin may decline due to fall in sales price or increase cost of production. As a consequence net profit margin will decline unless operating expenses decrease significantly. The crux of the argument is that both the ratios should be jointly analyzed and each item of expenses should be thoroughly investigated to find out the causes of decline in any or both the ratios.

iii. Operating Ratios :

This ratio indicates the relationship between operating expenses and sales. On the basis of this ratio, production and selling cost is determined. In the operating expenses, interest and taxes are not included. It is calculated as:

$$\text{Operating Ratio} = \frac{\text{Cost of Good Sold} + \text{Operating Expenses}}{\text{Sales}}$$

The high ratio indicates increment in operating expense and reduction in transaction capacity. The low ratio indicates that the improvement in economic condition of the firm. The low ratio also indicates that the improvement in sales and full control over operating expenses.

Where,

Cost of good sold = Opening Stock + Purchase + Direct Expenses + Manufacturing Cost - Closing Stock.

Operating Exp. = Adm.Exp + Selling and Distribution Expenses.

A higher operating expenses ratio is favorable since it will leave a small amount of operating income to meet interest dividends, etc. To get comprehensive idea of the behavior of operating expenses, variation in the ratio over a number of years should be studied. The operating expenses ratio is the yardstick of operating efficiency, but it should be used continuously. It is affected by a number of factors, such as external uncontrollable factors, internal factors, employee and managerial efficiency all of which are difficult to analyze. Further the ratio may be used as a test of financial condition in the case of those firms where non-operating revenue and expenses form substantial parts of total income. This ratio indicates the aggregation variation in expenses, where some of expenses may be increasing while other may be falling. Thus to know the behavior of specific expenses items, the ratio of each individuals operating expenses to sales should be calculated. These ratio when compared from year to year for the firm will throw light on managerial policies and programs.

iv. Return on Total Assets:

The term investment may refer to total assets or net assets. The funds employed in net assets is known as capital employed. Net assets equal net fixed assets plus current assets minus current liabilities excluding bank loans. The conventional approach of calculating return on investment is to divide

profit after tax by investment. Investment represents pool of funds supplied by shareholders and lenders, while profit after tax represents residue income of shareholders; therefore, it is conceptually unsound to use PAT in the calculation of ROI.

The ROA is calculated by dividing to net profit after tax by total assets. It is a useful measure of profitability of overall financial resource invested in the assets of the company. It is computed by with the help of following formula.

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

The increment in the ratio indicates the profitability is also increased.

v. Return on net worth:

RNW is determined by dividing to net profit after tax by net worth. It indicates the return to the shareholders, how well the firm has used the resources of owners. It judges whether the firm has earned of satisfactory return for shareholders or not. It is computed by following formula:

$$\text{RNW} = \frac{\text{Net Profit After Tax}}{\text{Net Worth}} \times 100$$

The higher ratio indicates the higher return to the shareholders and vice versa.

vi. Return on working capital (RWC) :

This ratio measured the profit with respect to total current assets. “This ratio in standard business units taken at 14.5%. Generally, net working capital is the excess amount of capital over current liabilities. It measure the profitability condition the investment of working capital. To operate business efficiency, profit earning ratio on working capital should also be satisfactory. It is calculated by dividing to net profit after tax by current assets or working capital.

$$\text{RCW} = \frac{\text{Net Profit After Tax}}{\text{Working Capital or Current Assets}}$$

The increment in this ratio indicates the efficient use of working capital to earn profit.

TURN OVER POSITION

The company turnover position can be known with the help of determined various turnover ratios. The relationship between sales and assets are indicated by turnover ratio. These ratio reflects how efficiently the company is managing its resources. Thus, these ratio measures the degree of effectiveness in use of resources of funds by a firm. Funds of creditors and owner are invested in various assets to generate sales and profits. The better the management of assets, the larger amount of sales. Turnover ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. This ration indicates the speed with which assets are being converted or turnover into sales. A proper balance between sales and assets generally reflects that assets are managed well. Several activity ratio can calculated to judge the effectiveness of assets utilization.

i. Current Assets Turnover (CAT):

The CAT denotes the no. of times the current assets are turnover during the year. It is utilization of current assets, as the ratio increase. If the ratio is low, a greater volume of working capital is there. Low ratio denotes higher w/c and high ratio denotes lower w/c computed as:

$$\text{CAT} = \frac{\text{Sales}}{\text{Current Assets}}$$

Increase in the ratio indicates improvement current assets utilization. It shows the efficiency of utilizing current assets. The ratio shows the requirements of working capital for one Re. of sales. It is a reflection between sales and current assets. A low working capital turnover ratio may reflects an inadequacy of net working capital as a result of low turnover of inventory or receivable.

ii. Working Capital Turnover:

Working capital indicates that the current assets over current liabilities. The difference between current assets and current liabilities excluding short term borrowing is called net working capital or net current assets. Net working capital or net current assets. Net working capital is sometimes used as a measure of a firm's liquidity. It is considered that, between two firms, the one having the larger NWC has the greater ability to meet its current obligations. This is not necessarily so; the measure of liquidity is a relationship, rather than the difference between assets and current liabilities. NWC, however, measures the firm's potential reservoir of funds. It may thus compute net working capital turnover by dividing sales by net working capital. It is calculated as:

$$\text{Working Capital Turnover} = \frac{\text{Sales}}{\text{Working Capital}}$$

Generally it measure as reciprocal form. It indicates that for one rupee of sales, the company needs of rupees of net current assets. The gap will meet from bank borrowing and long term sources of funds.

iii. Inventory Turnover (IT):

This ratio indicates the efficiency of the firm in selling its product. It is calculated by dividing the cost of goods sold by the average inventory.

$$\text{Inventory Turnover} = \frac{\text{Cost of Good Sold}}{\text{Average Inventory}}$$

Where, the average inventory is the average of opening and closing balances of inventory.

In a manufacturing company inventory of finished goods is used to calculate inventory turnover. The cost of goods sold figure may not be available to an outside analyst from the published annual accounts. It is also calculated as sales dividend by the year end inventory.

$$\text{IT} = \frac{\text{Sales}}{\text{Inventories}}$$

The inventory turnover shows how rapidly the inventory is turning into receivable through sales. Generally, a high inventory turnover is

indicative of goods inventory management. A low inventory turnover implies excessive inventory levels than warranted by production and sales activities. Or low moving or, obsolete inventory.

A higher level of sluggish inventory amount to unnecessary tie up of funds, reduced profit and increased costs. If the obsolete inventories have to be written off, this will adversely affects the working capital and liquidity position of the firm. Again, a relatively high inventory turnover should be carefully analyzed. A high inventory turnover should be carefully analyzed. A high inventory turnover may be the result of a very low level of inventory, which results in frequent stock outs; the firm living hand to mouth. The turnover will also be high if the firm replenished its inventory in too many small lot sizes. The situations of frequent stock outs and too many small inventor replacements are costly of the firm. Thus, too high and low inventory turnover ratios should be investigated further. The computation of inventory turnover ratios should be investigated further. The computation of inventory turnover for individual components may help to detect the imbalanced investments in the various inventory components.

iv. Inventory Conversion Period (ICP):

ICP defined as the length of time required to convert raw material into finished goods and then to sell these goods. When the number of days in a year (day 360) are divided by inventory turnover, we obtain days holding or inventory conversion period.

$$\text{ICP} = \frac{\text{Average Inventory}}{\text{Cost of Good Sold}}$$
$$\text{Or, ICP} = \frac{360}{\text{Inventory}}$$

The higher period indicates slow processing and vice versa.

v. Receivable Turnover:

A firm sells goods for cash and credit. Credit is used as a marketing tool by a number of companies. When the firms extend credits to its customers, book debts are credited in the firms account. Book debts are expected to be converted into cash over a short period, and, therefore, are included in current assets. The liquidity positions of the firm depend on the

quality of debtors to a great extent. Financial analyst apply the debtor turnover ratio to judge the quality or liquidity of debtors. Fast moving ratio is better for the company in comparison of slow moving. The financial analyst of the firm tries to keep maintaining the low level of receivable, which created higher turnover ratio. Higher turnover ratio creates lower level of collection period, which shows the efficiency of the management of receivable. We can easily say that higher the value of debtors turnover, the more efficient is the management of credit or receivable, because it convert the receivable into cash quickly. It is also called debtors turnover. Debtor turnover indicates the number of times debtors turnover each year. Generally, the higher the value of debtors turnover, the more efficient is the management of credit. Debtors turnover can be calculated by dividing total sales by the year end balance of debtors.

$$\text{Debtor Turnover} = \frac{\text{Sales}}{\text{Debtors}}$$

vi. Average Collection Period (ACP):

The average number of days for which book debts remain outstanding is called the average collection period. The average collection period measures the quality of debtors since it indicates the speed of their collection. The shorter the average collection period, the better the quality of debtors, as a short collection period implies the prompt payments by debtors. The firm should consider to relax its credit and collection policy to enhance the sales level and improve profitability. In addition to measuring the firm's credit and collection efficiency with its own credit terms, the analyst must compare the firms. Average collection period with the industries average. If there is great divergence between the industry average the firm's collection period, the analyst must investigate causes. The investigation may reveal that the firms manages its debtors more efficiency or inefficiently than the industry or its credit policy is too liberal or too restrictive. This may warrant a change in credit policy. The effect of the changes in the firms existing credit policy on sales. Profits and liquidity should be analyzed. It is useful to examine trend in act to know the firms collection experience. The ACP measures the quality of debtors in an aggressive way. It is considered that low collection period if favorable for the firm and shows the efficiency of the management to collect the debt smoothly. It can be computed as follows:

$$\text{ACP} = \frac{\text{Debtors}}{\text{Sales}} \times 100 = \frac{360}{\text{DT}}$$

An exclusively long collection period implies a very liberal and inefficient credit and collection policy.

vii. Credit Turnover :-

A firm purchase goods for cash and credit. Credit is used as a marketing tool by a number of companies. When a company want to expand his business he has to purchase goods on credit. Without good relation with creditors firm cannot achieve their target. The financial manager always tries to keep good relationship with financial institute and bank from where they are able to take loan to operate the business successfully. To pay to labor, credit purchase, rent, electric etc. the manger must be able to take the funds from the market without paying these expenses firm cannot run successfully. Financial analyst apply the creditor turnover ratio to judge the quality of creditors slow moving ratio is better for the company in comparison of fast moving ratio. The financial analyst of the firm tries to keep maintaining the high level of credit purchase and payment. Lower turnover ratio creates higher level of payment period, which is good indication for the firm. Credit turnover indicates the number of times creditor's payment made in a year. It can be calculated as purchase dividend by payables.

$$\text{Credit Turnover} = \frac{\text{Purchase}}{\text{Payables}}$$

viii. Payable Deferral period (PDpP):-

Payables deferral period defined as the average length of time between the purchase of raw materials, labor and payment of cash for them. The firm might have to pay for labor and material on average 30 days. It is an important measuring tools for the credit analyses of the firm without knowing this period financial manager will not be able to know the liquidity position of the firm. It gives the knowledge about purchase the raw material have to pay for labor and material on average in a month. If the firm able to pay the creditor in longer period of payable is good for the firm because the

firm has not to pay its payment in short period or it does not put burden to the firm and firm relax to use the funds in other sector of investment. Without proper management of payable deferral period firm cannot run successfully. Therefore, it should be better to the firm to evaluate the PDP of the firm properly and after credit standard would be analyse.

PDP can be calculated as 360 divide payable turnover ratio.

$$\text{PDP} = \frac{360}{\text{Credit Turnover}}$$

The high period indicates the good relationship with the creditors and good management efficiency.

ix. Cash Conversion Cycle (CCC)

Cash Conversion Cycle combines the three period, which equals the length of time from the firm's actual cash expenditures on productive sources to its own collection of cash from the sale of products. The cash conversion cycle begins the day a bill for labor and suppliers is paid and runs to the day receivable are collected. Thus, the CCC measures the length of time. The firm has funds tied up on working capital.

Cash conversion cycle indicates that how fast cash rotation is made. It can calculated as following : $\text{CCC} = \text{ICP} + \text{RCP} - \text{PDP}$.

Low CCC is preferable than high CCC.

Statistical Tools Used.

1. Correlation analysis :-

Two variables said to have “Correlation”, when they are so related that the change in the value one variable is accompanied by the change in the value of the other. For example: (i) the amount of rain fall to extent is accompanied by an increase in the volume of production (ii) the decrease in the price of a commodity is accompanied by the increases in the quality demanded. (iii) increase in advertisement expenditure is accompanied by increase in sales. The measure of correlation called the “Correlation Coefficient” summarizes in one figure, the degree and direction or movement. But the important things that is to be noted here is that correlation analysis only helps in determining the extent to which the two variables are correlated by its does not tell us about cause and effect relationship. Though, there is a high degree of correlation one the effect. There are three types of correlation: (i) positive and negative (ii) linear and non linear (iii) simple, multiple and partial correlation.

- I. If two variables vary in the same direction i.e. increases or decreases in the value of one variable results increase or decrease in the value of other variable, then the two variable are said to have positive correlation. On the other hand, two variables are said other negative correlation if two variables move in the opposite direction.
- II. The correlation between two variables is said to be linear when a unit change in one variable result a constant change in the other variable over entire range of the values. If corresponding to a unit change in one variable. There is no constant change in other variables, then correlation is said to be non liner.
- III. The correlation between two variable is known as simple correlation when three or more variables are considered, then the correlation may be multiple or partial. In a multiple correlation, three or more variables are studied simultaneously. In a partial correlation, there will

be three or more variables but consider only two variables influencing each other and other variables being kept constant.

It is statistical tools; it deals with statically technique, which measures the degree of relationship or association between the variables. It helps us in analyzing the co-variation of two or more variables. To analyze the relationship between two variables, Karl Pearson's correlation has been used. Symbolically, it is determined by as followings:

$$R = \frac{N \sum xy - \sum x \sum y}{\sqrt{N \sum x^2 - (\sum x)^2} \sqrt{N \sum y^2 - (\sum y)^2}}$$

The value of 'r' always lies between +1 and -1, The value of 'r' never come more than +1 or less than -1.

- IV. Probable Error : the probable error of the coefficient of correlation is the basis for the interpretation of its value. When $r < 6 \text{ PEr}$, the value of 'r' is not significant at all. i.e. there is no evidence of correlation. But when $r > 6 \text{ PEr}$, the value of 'r' is significant i.e. practically the correlation is certain.

The upper and lower limits within which the correlation coefficient in the population is expected to lies $r + \text{PE}$ and $r - \text{PE}$ respectively.

Research workers usually consider a co-efficient of correlation 0.5, 0.4, fairly high degree correlations. However, a co-efficient of correlation 0.5 means only 25% of the variation is explained and the co-efficient of correlation 0.4 means only 16% of variation explained. It determined as:

$$\text{PEr} = 0.6745 \times \frac{1-r^2}{N}$$

If 'r' is less than that of PE, it is not at all significant, if r is more than PE there is correlation.

CHAPTER - IV

PRESENTATION, ANALYSIS & INTERPRETATION OF DATA

4.1 INTRODUCTION

This is one of the important chapter of the study. This chapter has been organize to present the data analyze those dates with various tools Ana techniques and interpret the findings respectively. The main objectives of the study is to evaluate the existing position of the Hulas Motors Pvt. Ltd. with the help of working capital management. To achieves this objective, it is essential to present interpret, analysis and interpret data. The presentation and analysis of data have been made for the purpose of the finding out working capital management of Hulas Motors with the help of manufacturing profit and loss A/c and balance sheet from 2060/061 to 2065/66 B.S.

In this chapter, efforts have been made to analyze the working capital management in terms of composition of current assets, liquidity position, profitability position, turnover position and conversion period position of H.M.P. Ltd. The major variables of this study are cash receivable and inventories. The components of current assets with fixed assets, total assets as well as current assets. The liquidity position is analyzed with the help of current ratio and quick ratio. The profitability position is analyzed with the help of gross profit margin, net profit margin, operating ratio, return on total assets, return on net working capital, and return on working capital. The turnover position is analyzed through current assets turnover, working capital turnover, inventory turnover, receivable turnover, credit turnover, The analysis also has been made with help of different conversion period which are inventory conversion period, receivable conversion period, payable deferral period and cash conversion cycle.

The data which are collected from the office of Hulas Motors Pvt. Ltd. is arranged according to need of the study. It has been arranged in tabular form. To analyzed and interpret the data consolidated balance sheet, Income Statement and P/L A/c has been made to evaluate the strength and weakness of the company with the help of ratio analysis tools and techniques. In this

chapter, various aspect of w/c management has been described as under different sub chapter.

4.2 Composition of Working Capital:

The need for working capital to run the day-to-day business activities cannot be over emphasized. We will hardly find a business firm which does not require any amount of working capital. Indeed, firms differ in their requirements of working capital. Each and every firm's aim at maximizing the wealth of shareholders.

In is endeavor to maximize shareholder's wealth, a firm should earn sufficient return from its operation. Earning a steady amount of profit requires successful sales activity. The firms has invested enough funds in current assets for the success of sales activity. Current assets are needed because sales do not convert in the conversion of sales into cash.

There are various types of assets involved in any business. They may be fixed, current, tangible, intangible and liquid assets. In order to run day-to-day business activities, a company invested its funds in current assets or short term assets like cash, inventories, receivables, marketable securities. The working capital is defined as the tools of those short term assets. A company needs cash for purchasing of raw materials; pay for expenses and to meet future expenses. Similarly, stock of raw materials and finished goods are kept to meet the demand of the consumers. Without proper maintaining the working capital the firms cannot run efficiently and effectively. Therefore proper maintaining of cash and other current assets is very essentials.

4.2.1 Investment of Current Assets:

To Maximized the wealth of shareholders, it is necessary to manage the current assets effectively. Proper management of working capital plays vital role to success and failure of any business enterprises. The financial manager should determined the optimum level of current assets so that wealth of shareholders be maximized. In order to run day to day business activities more efficiently, appropriate level of current assets which is called gross working capital, is necessary. The major components of current assets are cash, bank balance, debtors or receivables, inventories, advances etc. Hence to achieve the objective of the organization i.e. earns profit and ultimately

maximized the shareholder's wealth. So, the investment level in current assets of Hulas Motors is analyzed. The various level of current assets are as follows:

Table 1
Composition of Current Assets

(Rs. in Lakh)

Fiscal Year	2061/062	2062/063	2063/064	2064/065	2065/066	Average
Inventories % of CA	347.78 31%	43.35 47.98%	131.88 72.28%	136.67 65.07%	110.79 67.39%	457.48 60.24%
Receivable % of CA	25.75 22.95%	1.17 1.29%	46.34 25.40%	29.15 13.88%	9.35 5.69%	111.78 14.72%
Bank Cash % of CA	2.58 2.30%	2.86 3.16%	4.22 2.31%	2.97 1.42%	2.02 1.23%	14.65 1.93%
Claim deposit and Receivable % of CA	49.11 43.76%	42.98 47.57%	-	40.97 19.51%	42.00 19.51%	175.06 23.05%
Tax and penalty % of CA	-	-	-	0.26 0.12%	0.26 0.16%	0.51 0.07%
Total CA	112.22	90.36	182.46	210.02	164.42	759.48
Total % of CA	100%	100%	100%	100%	100%	100%

Source : Appendix -2

The above table shows the level of current assets of Hulas Motors Pvt. Ltd. The major components of current assets i.e. debtor, Inventories and cash and bank balance is considered in the analysis. The percentage composition of major component of current assets are also shown in the above table.

Inventory is the major component of current assets. Goods management of inventories minimizes the cost & maximize the profit. The size of inventory depends on the target of sales. The percentage of current assets has fluctuating nature. Inventory for the FY 2061/2062 is the lowest of

31% and the highest 72.28% in the FY 2063/2064. The average is 60.20%. The highest investment in inventories gives less favorable sign in the sense that excess possesses higher operating cost i.e. carrying cost and ordering cost. Higher percentage of inventories in the company clearly indicates low Hulas motors turnover and less efficiency in inventory management. In the case of Hulas motors Pvt. Ltd. is trying to keeps less inventories by increasing sales. To minimize the cost of inventories the Firm should develop the theoretical basis for determining the optimal investment in inventories.

Receivables for the FY 2063/64 is the highest of 25.41% and lowest of 1.29% in the year 2062/63. The average is 14.72%. The higher of debtor or receivables indicates the low receivables turnover and inefficient in receivable because higher investment in it meal collection is not good. Lower % of receivables is good for management. It is good for Hulas Motors Pvt. Ltd. is that the receivable are in increasing trend. Especially for Hulas Motors receivables management is good in few year beside of FY 2063/064.

The percentage of cash and bank balance to total assets has fluctuating trend during study period. Higher investment in cash means higher idled fund in company which earn nothing rather decrease the profitability. The lowest investment in cash and bank balance also not good it can not grab the opportunity to expand its business at the time of inflation and deflation . So, the company showed maintain optimum level of cash to fulfill all the requirements. In the FY 065/066, it has the lowest of 1.23% in the FY 062/063 it has the highest 3.16% in the study period. The average investment is 1.93% in cash & bank balance . The other idle funds are claim deposit & receivables, it create good relation with customers, workers and staffs. It is least in FY 064/065 and zero in FY 063/064 . The average is 23.05% .

The above table shows that the investment in inventory is very high and the investment in cash & bank balance are very low. High investment in inventory indicates the power management of it in Hulas Motors. It, will create lower turnover of inventory and unnecessary funds tied up in it. On the other hand, the investment in cash & bank balance are very low which may effect in the regular production and grab the good opportunity to increase the business. It should be better to increase the bank balance and cash to the Hulas motors.

4.2.2 Proportion of Current Assets to Fixed and total assets:

Current assets are very essential to business transaction. Without management of Current assets business can not run. It works as a life blood in an organization. Current assets increase sales and due to it profit also maximize. Fixed assets are also backbone of the company. It helps to produce the goods and support the requirement of current assets. Fixed assets cannot be converted into cash within a year. It helps the business to run for long time. Total assets includes current assets and fixed assets and other non-current assets. The proportion of current assets to fixed and total assets in shown in the following table.

Table 2
Proportion of Current Assets to Fixed and Total Assets

(Rs. in Lakh)

Particulars	2061/62	2062/63	2063/64	2064/65	2065/66	Average	S.D.	C.V.
Current Assets	12.22	90.36	182.46	210.02	164.42	759.48	60.92	80.21%
Fixed Assets	255.97	236.26	217.61	225.93	202.73	1138.52	91.140	80%
Total Assets	547.53	590.28	692.25	784.39	715.58	3330.02		
% of CA to TA	20.50%	15.31%	26.36%	26.78%	22.98%	22.81%		
Changes	-	(5.19)	11.05%	0.42%	(3.8%)	-		
% of CA to FA	43.84%	38.24%	83.85%	92.96%	81.10%	66.71%		
Changes	-	(5.6%)	45.61%	9.11%	(11.86%)	-		
% of FA to TA	46.75%	40.03%	31.44%	28.80%	28.33%	34.19%		

Source : Appendix -2

The above table shows that the % of current assets to total assets and % of current asset to fixed assets are fluctuate during the study period. The percentage of CA to TA is the lowest of 15.31% in the FY 2062/63, the highest of 26.78% in FY 2064/65. The average percentage is 22.81%. The higher investment in current assets indicates good liquidity position but adversary affect the profitability of the organization because idle money earn nothing. The % of CA to FA is the least of percentage is 38.24% in the FY 2062/63 and highest 92.96% in FY 2064/65. The average percentage is 66.71%. The higher CA to FA 92.96% ratio implies grater liquidity. Due to the deprecation the ratio of CA to FA increases. The percentage of fixed assets to total assets are decreasing trend. But decreasing is very low. The average percentage of FA to TA is 34.19%.

The C.V. of CA and FA are 80.21% and 80% which shows the data are high fluctuations and less uniformity.

4.2.3 Proportion of Cash & Bank balance to Current & Total Assets:

Cash is required to meet a firm's transactions and precautionary needs. A firm need cash to make payments for acquisition of resources and services for the normal conduct of business. It keeps additional funds to meet any emergency changes in prices of the input and output.

Firms prepare cash budget to plan for future and control cash flows. Cash budget is generally prepared for short period such as weekly, monthly, quarterly, half year and yearly. A firm should hold an optimum balance of cash and invest any temporary excess amount in short term securities. In choosing these securities, the firm must keep in mind safety, maturity and marketability of its investment.

Table 3

Proportion of Cash and Bank Balance to Current and Total Assets

(Rs. in Lakh)

Particulars	2061/062	2062/063	2063/064	2064/065	2065/066	Average	S.D.	C.V.
Cash and Bank Bal.	2.58	2.86	4.22	2.97	2.01	2.93	1.18	80.27%
Current Assets	112.21	90.36	182.46	210.02	164.41	151.84	60.92	80.21%
Total Assets	547.53	590.28	692.25	784.39	715.58	666.00	266.54	80.04%
% of Cash & Bank Bal to CA	2.30%	3.16%	2.31%	1.42%	1.23%	1.93%		
%of Cash & Bank Bal to TA	0.5%	0.5%	0.61%	0.4%	0.3%	0.44%		

Source : Appendix-2

The above table shows that the ratio of cash & bank balance to current assets has a fluctuating trend but after two year it is decreasing trend . During the study period, it is the highest of 3.16% in the FY 2062/063 and the lowest of 1.23% in the FY 065/066 and average ration is 1.93% . The ration of cash & bank balance to total assets also fluctuating trend. The ration of two year is equal which are lower than average and third year 063/064 ratio is above than average . In total, the ratio is the highest 0.61% in the FY 063/064 and the lowest of 0.3% in the FY 065/066.

From the above table it can be seen that the investment in cash & bank balance is low of Hulas Motors Pvt. Ltd. The lower ration of cash & Bank balance to current assets & total assets indicates the lower investment in cash. The lower investment in cash & bank balance will create problem in expanding its business. So, there should be optimum investment in cash & bank to meet day to day operation and future expansion of business. Cash & bank balance play an important role at the time of lock-out and depression. Therefore, the manager should be made fluctuating policy to manage the cash at the right time.

The C.V. bank and cash is 80.27% which shows the data is high fluctuation and less uniformity. The manager of the company should try to maintain the uniformity in it.

4.2.4 Proportion of Inventories to Current and Total Assets:

Inventories represent investment of a firm's funds. The manufacturing company like Hulas Motors Pvt. holds inventories in form of raw material, work –in progress and finished goods. The main motives of holding motives of holding inventories are transaction motive, precautionary motive and speculative of the value of the firm. The firm should therefore consider cost, return, and risk factor in establishing inventory policy. The percentage of investment in inventories out of current and total assets is calculated in the following:

Table 4
Proportion of Inventories to Current and Total Assets
(Rs. in Lakh)

Particulars	061/62	062/63	063/64	064/65	065/66	Average	S.D.	C.V.
Inventory	34.78	343.35	131.67	136.67	110.79	91.50	32.02	70%
Current Assets	112.21	90.36	182.46	210.02	164.41	151.84	60.92	80.2%
Total Assets	547.53	590.28	692.25	784.39	715.58	666.00	266.54	80.0%
% of inventory to CA	31%	47.98%	72.28%	65.07%	67.39%	60.24%		
%of inventory to TA	6.35%	7.34%	19.05%	17.42%	15.48%	13.74%		

Source : Appendix-2

According to the table, the percentage of inventories to current assets has a fluctuating trend. The ratio the highest of 72.28% in the FY 2063/64 and the lowest of 31% in the FY 2061/62. The average ratio is 60.24%. The ratio above average in the FY 2063/64, 2064/65, 2065/66 and it is below the average in the FY 2061/62 and 2062/63.

The ratio of inventories to total assets has an increasing trend only remaining in the FY 2065/66. The ratio is the highest of 19.05% in the FY 2063/64 and lowest of 6.35% in the FY 2061/62. The average ratio is 13.74% .

The higher investment in inventory is not good for the company. It is only unnecessary burden and it will lower the turnover position. On the other hand, lower level of inventories is also not good because it creates the problem in the production as well as sales. So, the optimum level of inventory gives the better situation and favorable condition. Due to it profit maximization goal can be achieved.

As shown in the above table that the C.V. of current assets is higher than C.V. of inventory. So, there is less uniformity in meaning the current assets of the firm.

4.2.5 Proportion of Debtors/ Receivables to Current and Total Assets:

Receivable or debtors play a vital role in manufacturing and non manufacturing enterprises. For any enterprises, their liquidity position depends upon the quality of debtors to great extent. In the modern world, no business can run without credit facilities. But the credit policy of the company should be clear and right; otherwise the company may fall into liquidation due to the inefficient in collection of fund.

Table 5
Proportion of Inventories to Current and Total Assets

(Rs. in Lakh)

Particulars	061/62	062/63	063/64	064/65	065/66	Average	S.D.	C.V.
Receivable and Debt.	25.75	1.17	46.36	30.15	9.35	22.36	14.12	80.64%
Current Assets	112.21	90.36	182.46	210.02	164.41	151.84	60.92	80.2%
Total Assets	547.53	590.28	692.25	784.39	715.58	666.00	266.54	80.04%
% of Rec. to CA	22.95%	1.29%	25.41%	13.88%	5.69%	14.72%		
%of Rec. to TA	4.70%	0.2%	6.70%	3.72%	1.31%	3.36%		

Source : Appendix-2

The above table shows that the ratio of receivable to current assets has a fluctuating trend. The ratio is highest of 25.41% in the year FY 2063/64 and the ratio lowest 1.29% in the FY Year 2062/63. The average ratio is 14.72%. The higher investment in receivables, it means the greater idle funds dues in the hand of customer. Which gives nothing in return and the cost of funds increase automatically.

Similarly, the ratio of receivable to total assets has also fluctuating trend. The ratio is highest of 6.70% in the year 2063/64 and lowest of 0.2% in the FY year 2062/63. The average ratio is 3.36%. It is above the average in the FY 2061/62, 2062/63, 2064/65. It is below the average in the remaining FY year.

Besides an two year like 2062/63 and 2065/66, the Hulas Motors holds maximum funds (in the remaining years) so that the firm ratio has a fluctuating trend. It is good in two year 062/063 and 065/066. Because low proportion in receivable it reduces the cost and maximize the profit. Low ratio indicates the right policy in receivable and good management policy for receivable. Hence the nature and period of credit facilities should be determined in advance so that the company would not suffer from working capital deficiency. If the Hulas Motors consider to invest in debtor and total assets then it will have good management to collect the receivable.

According to table, all C.V. are gradating but comparison with two C.V., the C.V. of receivables is 80.64% and C.V. of Current assets is 80.21% which shows that both current assets and receivable are highly fluctuation.

4.3 Turnover Position:

"Funds of creditors and owners are invested in various assets to generate sales and profits. The better the management of assets, the larger the amount of sales. Turnover ratios or activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. Turnover ratio indicates the speed with which assets are being converted or turned over into sales. Turnover ratio, Hulas, involve a relationship between sales and assets. A proper balance between sales and asses generally reflects that assets are manage well.⁵⁰

The survival and growth of the company depends on the level of the sales of the product what they produce. The company should make their sales policy as per the resources availability and market demand. The sales policy greatly affects the production policy. To promote the sales, assets should be better utilized. According to market demand and position of competitors, sales policy should be made. Without making better policy the firm cannot survive in the market. This ratio is intended to measure the effectiveness to employment of the resources in a business concern. Involving this ratio, it is known whether the funds employed have been used efficiently in the business activities or not. In a company inventory as well as other assets should be better utilized to promote the sales activity. Hence, the ratio measures the efficiency of the W/c and reflects the turnover position of the firm.

4.3.1 Current Assets Turnover (CAT)

The firm may wish to know its efficiency of utilizing current assets. This turnover ratio indicates the adequate sales in relation to the investment in current assets. It shows the effectiveness of utilizing current assets inn

⁵⁰ I.M. Pandey, Op. Cit., P-117

relation to sales. This ratio can be calculated by dividing sales to the current assets. This ratio is calculated by using the following formula.

$$\text{Current Assets Turnover} = \frac{\text{Sales}}{\text{Current Assets}}$$

The current assets turnover ratio of Hulas Motors Pvt. Ltd. is calculated in the following table.

Table 6
Current and Total Turnover

Year	Current Assets	Sales	Current Assets Turnover
2061/62	11221678.14	14143261.21	1.26
2062/63	9035781.43	6010642.90	0.67
2063/64	18246378.81	10011414.86	0.55
2064/65	21002446.11	16545790.35	1.00
2065/66	15189575.06	10830322.52	1.40
Average	75947875.32	11528286.37	-
S.D.	60.92	3.61	-
C.V	80.21%	31.36%	-

Source: Appendix -1& 2

The above table shows that the current assets turnover has a fluctuating trend. It is highest of 1.26 times in the FY 061/062 and the lowest of 0.35 times in the FY 064/065. The average is 1.40 times. The decrease in current assets, the company is unable to utilize its current assets, properly. The company holds higher level of current assets but unable to increase sales proportionately. The Hulas Motors should increase the sales as much as possible at certain level of current assets.

The above table shows that the CV. of current assets is higher, so, C.V. of sales and current assets is more fluctuate than sales.

4.3.2 Net Working Capital Turnover (NWCT):

Net working capital is the difference between current assets and current liabilities. This ratio explains how the net working capital has been utilized to generate sales in an organization. This ratio also gives the knowledge of the number of times the net working capital turned over during the year. It may compute net working capital turnover by dividing sales by net working capital.

$$\text{Net Working Capital Turnover} = \frac{\text{Sales}}{\text{Net Working Capital}}$$

This ratio can be explained by the help of following table.

Table 7
Net Working Capital Turnover

Year	Net Working Capital	Sales	Net Working Capital Turnover
2061/62	10629786.37	14143261.21	1.33
2062/63	9035781.43	6010642.90	0.64
2063/64	18246378.81	10011414.86	0.55
2064/65	(11174750.42)	7440503.29	(0.67)
2065/66	(1992480.73)	16545790.35	(8.30)
Average	4948942.97	10830322.52	2.19
S.D.	10.33	3.61	-
C.V	208.69%	31.36%	-

Source: Appendix -1&2

It can be seen that the networking capital turnover has fluctuating trend in the five year during study period. It has the highest of 1.33 times in the FY 061/062 and the lowest of (8.30%) in the FY 065/066. the average. The average networking capital is 2.19 times. All year are below the average. The higher turnover ratio indicates better performance of the networking capital as comparison of low turnover ratio.

The above table shows that the C.V. of NWC and sales are 208.69% and 31.36% respectively. As the higher C.V. of NWC than sales So, there is less consistency in net working capital in comparisons of sales.

4.3.3 Turnover of Cash (CT):

"Cash is the important current assets for the operation of the business. Cash is the basic input needed to keep the business running on a continues basis; it is also the ultimate output expected to be realized by selling the service or product manufactured by the firm. The firm should keep sufficient cash, neither more nor less. Cash shortage will disrupt the firm's manufacturing operation while excessive cash will simply remain idle, without contributing anything towards the firm's profitability. Thus major function of the financial manager is to maintain a sound cash position."⁵¹

Cash turnover measures the relationship between level of cash and volume of sales over a period of time. The cash balance is turned over during the year. Greater turnover of cash indicates greater utilization of cash which shows better the efficiency of the company in using current assets. The company should try to keep the higher turnover of cash and bank balances.

Turnover of cash and bank balance is calculated as following formula for the Hulas motors Pvt. ltd.

$$\text{Turnover of cash} = \frac{\text{Sales}}{\text{Cash \& Bank Balance}}$$

The following table shows the turnover of cash & bank balance.

⁵¹ Ibid, P-764

Table 8
Turnover of Cash and Bank Balance

Year	Cash and Bank Balance	Sales	Cash Turnover
2061/62	258460.94	14143261.21	54.72 times
2062/63	285563.23	6010642.90	21.05 times
2063/64	422179.55	10011414.86	23.71 times
2064/65	297325.56	7440503.29	25.02 times
2065/66	201751.43	16545790.35	82.01 times
Average	293056.14	10830322.52	36.96 times
S.D.	1.18	3.61	-
C.V	80.27%	31.36%	-

Source: Appendix -1

As shown in the above table the turnover of cash & bank balance over a study period has fluctuating trend. It has the highest of 82.01 times in the FY 2055/66 and the lower of 21.05 times in the FY 2062/63. the average turnover of cash & bank is 36.96 times over the study period. The turnover of cash shows a wide variation during the study period. Form table -8, it can be seen that the sales and cash & bank both are fluctuating trend during the study period. Therefore, cash turnover also fluctuates during the study period. The turnover of cash of Hulas Motors is satisfactory. It indicates the management of cash is good of Hulas Motors.

As the C.V. of cash & bank balance is very higher than C.V. of sales. So, there is greater variability maintaining the cash.

4.3.4 Receivable Turnover (RT) & Average Collection Period (ACP):

Trade credit creates books debts or account receivables. It is uses as a Marketing tool to maintain or expand the firm's sales. A firm's investment in

receivable depends in volume of credit sales and collection period. The financial manager can influence volume of credit sales and collection period through credit policy. Credit policy includes credit standards, credit terms and collection efforts.

Receivable turnover indicated the number of times debtors turnover each year. Generally, the higher the value of debtor's turnover, the more efficient is the management of credit.

Debtors turnover is find out by dividing credit sales by average debtors:

$$\text{Debtor Turnover} = \frac{\text{Credit Sales}}{\text{Average Debtors}}$$

To outside analyst information about credit sales and opening and closing balance of debtors may not be available. Therefore, debtors' turnover can be calculated by dividing total sales by the year end balance of debtors.

$$\text{Debtor Turnover} = \frac{\text{Sales}}{\text{Debtors}}$$

Collection Period:-

The average collection period measure the quality of debtors since it indicates the speed of their collection. The shorter the average collection period, the better the quality of debtors, as a short collection period implies the prompt payments by debtors. The average collection period should be compared against the firm's credit terms and policy to judge is credit and collection efficiency. An excessively long collection period implied a very liberal and inefficient credit and collection performance. On the other hand, too low collection period is not necessarily favorable. Rather, it may indicate a very restrictive credit and collection policy. Because of the fear of bad debt losses, the firm sells only to those customers whose financial conditions are undoubtedly sound, and who are very prompt in making the payment.

Table 9
Receivable Turnover

Year	Debtors/ Receivable	Sales	Receivable Turnover (times)	Average collection period (days)
2061/62	2574965.20	14143261.21	5.49	36.43
2062/63	116749.50	6010642.90	51.48	3.89
2063/64	4635502.321	10011414.90	2.16	92.59
2064/65	2915466.33	7440503.29	2.55	78.43
2065/66	935081.77	16545790.35	17.69	11.31
Average	2235553.02	10830322.52	4.84	41.32
S.D.	14.12	3.61	-	-
C.V	80.64%	31.36%	-	-

Source: Appendix -1& 2

The above table shows that the C.V of receivable is higher than the sales. So, there is greater variability in maintaining the receivable in comparison of sales.

$$ACP = \frac{200 \text{ (days in a year)}}{\text{Receivable Turnover}}$$

The above table shows the receivable turnover has a fluctuating trend. It is the highest of 51.48 times in the FY 2062/63, and it is the lowest of 2.16 in the FY 2063/64. the average time of turnover is 4.84 times.

The average collection period has also a fluctuating trend. It has the highest of 92.59 days in the FY 2063/64 and the lowest of 3.89 days in the FY 2062/63. the average collection period is 41.32 days. The average period fluctuates due to change of receivable turnover. From the above table it can be seen that the receivable turnover and collection period are normal of Hulas Motors.

4.3.5. Inventory turnover (IT) and Inventory Conversion period (ICP):

The inventory turnover shows how rapidly the inventory is turning into receivable through sales. Generally, a high inventory turnover is indicative of good inventory management. A low inventory implies excessive inventory levels than warranted by production and sales activities, or a slow moving or obsolete inventory. This ration indicates the efficiency of the firm in selling its product. It also shows the relationship between inventory production and sales. Due to help of this relation, in indicates the number of times inventory is replaced during the year. It is calculated by dividing of sales by inventory.

$$\text{Inventory turnover} = \frac{\text{Sales}}{\text{Inventory}}$$

Inventory conversion period defined as the length of time required to convert raw material into finished good. Low inventory conversion period indicates good management of processing the inventory or management production system is efficient. On the other hand, high period is not preferable because it indicated slow processing system of inventory and idle investment of it. ICP can be calculated as days in a year divided by inventory turnover ratio.

$$\text{ICP} = \frac{\text{days in a year (200)}}{\text{Inventory Turnover}}$$

Inventory turnover and inventory conversion period of Hulas Motors is presented in the following table.

Table 10

Inventory Turnover(IT) and Inventory Conversion period (ICP)

Year	Inventory	Sales	Inventory Turnover	IPC (days)
2061/62	3477726.00	14143261.21	4.07	49.14
2062/63	4335135.58	6010642.90	1.39	143.88
2063/64	13188696.94	10011414.90	7.59	26.35
2064/65	13667340.93	7440503.29	5.44	36.76
2065/66	11079330.83	16545790.35	1.49	134.23
Average	9149646.06	10830322.52	1.18	169.49
S.D.	32.02	3.61	-	-
C.V	70%	31.36%	-	

Source: Appendix -1& 2

The above table shows the inventory turnover of Hulas Motors has a fluctuating trend. It is the highest of 7.59 times in the FY 2063/64, and it is the lowest of 1.39 in the FY 2062/63. the average inventory turnover is 1.18 times during the study period. The highest inventory turnover is preferable for any company.

The inventory conversion period of Hulas Motors has a fluctuating trend, it has become due to change of inventory ratio. It has the highest of 143.88 days in the FY 2062/63 and the lowest of 26.35 days in the FY 2063/64. The average ICP is 169.49 days. The ICP of Hulas Motors is normally high. The management should try to reduce it as possible, because longer period holds idle investment in inventory. Due to idle investment in inventory, it reduces profitability of the firm. So Hulas Motors has to try to keep minimum level of ICP.

Since, C.V. of inventory is greater than C.V. of sales. So inventory is more fluctuation than sales.

4.3. 6 Credit turnover (CT) and Payables Deferral Period (PDP):

Credit turnover indicates the number of times creditor's payment made in a year. Generally, low credit turnover ratio is preferable. Lower turnover ratio creates longer period to make the payments to creditors. This ratio can be calculated as purchase divided by creditors.

$$\text{Credit turnover} = \frac{\text{Purchase}}{\text{Creditors}}$$

Payable deferral period defined as the average length of times between the purchase of raw materials and payments of cash for them. The firm might have to pay for labour and material on average 30 days. PDP can be calculated as number of days in a year divided by credit turnover. Generally, longer period of payments days are preferable. Because, the longer period do not give burden to pay the creditors.

$$\text{PDP} = \frac{\text{Number of days in a year (200)}}{\text{Credit Turnover}}$$

Table 11

Payable Turnover and Payable Deferral Period (PDP)

Fiscal Year	Payable / Creditors	Purchase	Payable turnover ratio (times)	PDP (days)
2061/062	-	3035041.65	-	-
2062/063	-	-	-	-
2063/064	-	10173514.59	0	0
2064/065	32177196.53	499876.70	1.40	181.82
2065/066	18263089.65	5113612.45	2.80	71.43
Average	10088057.24	3957400.75	3.92	51.02
S.D.	13.12	3.37		
C.V.	130.03%	85.10%		

Source : Appendix 1 & 2

The above table shows that the payable turnover of Hulas Mothers has an increasing trend except the FY 061/062, 062/063 and 063/064. It has the higher of 2.80 times in the FY 065/66 and the lowest of 1.40 in the FY 064/065 and rest is zero. The average credit turnover is 3.92 times. It can be said that the credit turnover is good in FY 061/062, 062/063 and 063/064 but compassion of two year like 064/065 and 065/066 it is good in 064/065.

Payable deferral period also has an increasing trend in two year but remaining year are zero. It is highest 181.82 days in the FY 064/065 and lowest 71.43 days in the FY 065/066. The average PDP is 51.02 days. In two year of Hulas Motors PDP are good but in three year is not good. Generally, longer period of payments days are preferable.

The C.V. for creditor than purchase is greater than C.V. of purchase. So, there is less consistency maintaining the payable.

4.3.7 Cash Conversion Cycle (CCC):

Cash conversion cycle combines the combines the three periods which equals the length of time from the firm's actual cash expenditures on productive sources to its own collection of cash from the sale of products. The cash conversion cycle begins the day a bill for labor and supplier is paid and runs to the day receivables are collected. Thus, the cash conversion cycle measures the length of time the firm has funds tied up on working capital. The CCC is shown in the following table.

$$\text{CCC} = \text{ICP} + \text{RCP} - \text{PDP}$$

Table 12

Calculation of Cash Conversion Cycle (CCC)

Fiscal Year	ICP	RCP	PDP	CCC
2061/062	49 days	36 days	-	85 days
2062/063	144 days	4 days	-	148 days
2063/064	26 days	93 days	-	119 days
2064/065	37 days	78 days	182 days	(67) days
2065/066	134 days	11 days	71 days	74 days
Average	169 days	41 days	51 days	159 days
S.D.	104.04	35.68	71.22	
C.V.	61.56%	87.02%	139.65%	

Source: Appendix -1& 2

As per the table presents the CCC is the highest of 148 days in the FY 062/063 and the lowest of (67) days in the FY 065/066. The average CCC is 159 days. The CCC comes in negative due to higher payable deferral period of due the higher credit facility given by creditor of Hulas Motors. Generally, cash conversion cycle should be short period but here except of FY 064/065, it is not good for Hulas Motors but FY 064/065 is good for Hulas Motors.

As the highest C.V. for the PDP, so there is least consistency in maintaining of it than ICP and RCP. As the least C.V. of ICP, so there is more consistency in ICP than RCP and PDP.

4.4 Liquidity Position:

To operate the business transaction smoothly liquid assets plays vital role. The company needs liquid assets to meet its current or short – term obligations when they become due for payment. The most important objective of adopting appropriate working capital policy is to maintain appropriate higher liquidity indicates and optimum liquidity of the company. Liquidity

should be neither high nor low. Higher liquidity indicates better position of the company, which reduces the risk of insolvency but at the same time it increases the cost of holding unnecessary current assets and decreases the profitability of the company. On the other hand, lower liquidity indicates financial soundness of the company, which creates the problem to make the payment for daily operation to the workers, creditors and short-term obligations. Due to lower liquidity, it reduces the goodwill of the firm. It is a very crucial problem in maintaining the appropriate liquidity in any organization as it involves risk return trade off with higher or lower liquidity level. A firm should ensure that it does not suffer from lack of liquidity, and also that it does not have excess liquidity. The failure of a company to meet its obligations due to lack of sufficient liquidity will result in a poor credit worthiness, loss of creditor's confidence, or even in legal tangles resulting in the closure of the company.

It is necessary to analyze and interpret the liquidity ratio to support the working capital management. Liquidity ratios measure the ability of the firm to meet its current obligations. The most common ratios which indicate the extent of liquidity or lack of are: (i) Current ratio and (ii) Quick ratio.

4.4.1 Current Ratio (CR):

It is the relationship of current assets and current liabilities. The current ratio is a measure of the firm's short-term solvency. It indicates the availability of current assets in rupees for every one rupee of current liability. A ratio greater than one means that the firm has more current assets than current claims against them. The calculation is made by dividing the total of current assets by total of current liabilities. Thus,

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

Higher the current ratio better is the liquidity position. For many types of business 2:1 is considered to be an adequate ratio. If the current ratio of a firm is less than 2:1 the solvency position of the firm is not good. The cash may not be available to pay current liabilities. If the current ratio is more than 2:1, the company may have an excessive investment in current assets

that do not produce a return. However, an arbitrary standard of 2 to 1 should not be blandly followed. Firms with less than 2 to 1 current ratio may be doing well while firm with 2 to 1 even higher current ratio may be struggling to meet their obligation. This is so because the current is the test of quantity not quality.

The following table shows the current ratio of Hulas Motors Pvt. Ltd.

Table 13
Current Ratio

Fiscal Year	Current Assets	Current Liabilities	Current Ratio
2061/62	11221678.14	591891.77	18.96 times
2062/63	9035781.43	-	-
2063/64	18246378.81	-	-
2064/65	21002446.11	32177196.53	6.53 times
2065/66	16441590.82	18434071.55	8.92 times
Average	15189575.06	10240631.97	1.48 times
S.D.	60.92	13.05	
C.V	80.21%	127.44%	

Source: Appendix -2

The above table shows that the current ratio is the highest of 18.96 times in the FY 2061/62 and the lowest of 6.53 times in the year 2064/65 and rest year is zero. The average current ratio is 1.48 times. As per conventional rule a current ratio of 2:1 or more is considered satisfactory but modern rules say that it is not necessary to maintain the rule 2:1. This ratio should be more than one. The firm should be able to pay its obligation and has sufficient working capital. In the case of Hulas Motors current ratio is not satisfactory. But on the basis of average it is satisfactory and the company is able to pay its obligations.

The above table shows the C.V. of CL is higher than the CA. So the variability in CL is higher than current assets.

4.4.2 Acid test of Quick Ratio (QR)

This ratio establishes the relationship between quick or liquid assets and current liabilities. An assets is liquid if it can be converted into the cash immediately of reasonably soon without a loss of values. Cash is the most liquid assets. Other assets which are considered to be relatively liquid and included in quick assets are book debts (debtors and bills receivable) and marketable securities. Inventories are considered to be less liquid. Inventory normally require sometimes for realizing into cash; their value also has tendency to fluctuate. Inventory and prepaid cannot be termed to be a liquid assets. The quick ratio can be calculated in following way:

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

$$\text{Quick Assets} = \text{Current Assets} - \text{Inventory} - \text{Prepaid exp.}$$

Higher the quick ratio better is liquidity position. As a conventional rule, generally, 1:1 is considered to be satisfactory ratio. Although quick ratio is a more penetrating test of liquidity than the current ratio, yet it should be used cautiously. A quick ratio of 1 to or more does not necessarily imply sound liquidity position.

The following table shows the quick ratio of Hulas Motors Pvt. Ltd.

Table 14

Acid test ratio of Hulas motors

Fiscal Year	Quick Assets	Current Liabilities	Quick Ratio (times)
2061/62	7743952.43	591891.77	13.08
2062/63	4700645.85	-	-
2063/64	5057681.87	-	-
2064/65	7335105.18	32177196.53	0.23
2065/66	5362259.99	18434071.55	0.29
Average	30199645.53	10240631.97	2.95

S.D.	24.18	13.05	-
C.V	80%	127.44%	-

Source: Appendix -2

The above table shows that the quick ratio of Hulas Motors Pvt. Ltd. Has fluctuating trend. The ratio of two year (2062/63, 2063/64) are zero. The ratio of the highest of 13.08 times in the FY 2061/62 and the lowest of 0.23 in the FY 2064/65. The average quick ratio is 2.95 times. The quick ratio indicates the availability of rupees of liquid assets for every rupees of current assets liabilities higher the ratio the grater margin of safety for short term creditors and vice-versa. Hence, the liquidity position of Hulas Motors Pvt. Ltd. during the study period is not satisfactory except of the FY 2061/62 . Hulas Motors should increase the quick ratio up to satisfactory level. The quick ratio 1:1. To maintain this level, the firm will have to manage its quick assets.

The above table shows the C.V. for QA & CL.AS the C.V for the CL is higher than CA, so there is less consistency in CL of the firm than in QA.

4.5 Profitability Position

Maximization of profit is the main objective of each and every business concern. It is very necessary to earn maximum profit for the successful running of a business concern. According to Lord Keynes, Profit is the engine drives the business enterprises. The profit is also important to preserve the existence of business as well as strengthen and expand it.

The profitability ratio is related to profit. It shows the overall efficiency of the business concern. The earning capacity of a business is measured by profitability of a business concern may be measured in two ways.

- i) Profitability in relation to Sales
- ii) Profitability in relation to investment.

The types of profitability ratio are as follows.

- a) Gross Profit Ratio

- b) Operating Ratio
- c) Net Profit Ratio
- d) Return on Assets ratio

The profitability ratios are calculated to measure the operating efficiency of the company.

4.5.1 Gross Profit Margin

This ratio expenses the relationship between gross profit and sales. The calculation of this ratio is done on the basis of total profit and sales. Generally, it is expressed in percentage. The ascertainment of gross profit is completed by reducing cost of good sold from sales. The formula of this ratio is as follows:

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Sales}}$$

A higher ratio is a sign of efficient management, which reflects lower cost of goods sold and maximizing profit, on the other, a low ratio may reflects higher cost of good sold due to the firm's inability to purchase at favourable terms.

The following table shows the gross profit margin of Hulas Motors Pvt. Ltd.

Table 15
Gross Profit Margin of Hulas motors

Fiscal Year	Gross Profit	Sales	Gross Profit Margin
2061/62	6901241.48	14143261.21	48.80%
2062/63	1365147.47	6010642.90	22.71%
2063/64	5848840.77	10011414.86	58.42%
2064/65	1944796.25	7440503.29	26.14%
2065/66	7196221.55	16545790.35	43.49%
Average	4651249.50	10830322.52	42.95%

The above table shows that the gross profit margin of Hulas Motors Distillery has a fluctuating trend. The ratio is the lowest of 22.71% in the FY 062/063 and the highest of 58.12% in the FY 063/064. The average gross profit margin ratio is 42.95%. The lowest ratio of 22.71% indicates very poor condition of profitability, it is due to loss in the FY 062/063. The Gross profit margin is gradually has increased due to increase in sales volume. During our study period, the gross profit margin is good in some year and the company should try to reduce production cost to maximize gross profit in the FY 062/063 and 064/065. Even it is a good indication on profitability that it has increasing trend and it will improve in future.

4.5.2 Net Profit Margin

From this ratio, the relation between sales and net profit becomes clear. The amount after subtracting the whole operating expenses, income tax, interest etc. from the gross profit is known as net profit. To ascertain this ratio, the net profit is divided by sales. The formula for ascertainment of this ratio is as under;

$$\text{Net Profit Margin} = \frac{\text{Net Profit}}{\text{Sales}}$$

A higher ratio is an indication of the higher over all efficiency of the business and better utilization of total resources. Poor financial planning and low efficiency is the indication of lower ratio.

The following table shows that net profit margin of Hulas Motors.

Table 16
Net Profit Margin

Fiscal Year	Net Profit Before Tax	Sales	N.P.M.
2061/62	(6087298.08)	14143261.21	(43.4%)
2062/63	(8432812.58)	6010642.90	(140.3%)
2063/64	(2850754.41)	10011414.86	(28.48%)
2064/65	(5625929.68)	7440503.29	(75.61%)

2065/66	683927.60	16545790.35	(4.13%)
Average	(4462573.43)	10830322.52	(41.20%)
S.D.	3.12	3.61	-
C.V	(70%)	31.36%	-

Source: Appendix -1

4.5.3 Operating expenses Ratio :

Operating ratio try to establish relationship between operating cost and net sales. Operating cost includes cost of goods sold and operating cost like administrative expenses, selling expenses, distribution expenses, interest on short term loan, discount bad debts etc. Net sales equals of sales minus returns. This ratio is calculated to determine the operational efficiency of the management and expressed as a percentage. The ratio is computed as follows:

$$\text{Operating Ratio} = \frac{\text{Operating Cost}}{\text{Net Sales}} \times 100 \dots\dots\dots \%$$

The following table shows the operating expense ratio of Hulas Motors Pvt. Ltd.

Table 17
Operating expenses ratio

Year	Cost of goods sold	Operating	Sales	Operating Ratio
2061/62	7242009.73	2734487.95	14143261.21	0.75
2062/63	4643495.43	2219475.6	6010642.90	1.14
2063/64	4162574.09	2626874.54	10011414.86	0.86
2064/65	5495707.04	1728118.15	7440503.29	0.91
2065/66	9349568.80	1448935.93	16545790.35	0.65
Average	6179071.02	2151578.44	10830322.52	0.77
S.D.	1.90	0.5	3.61	-
C.V	30.74%	23.26%	31.36%	

Source: Appendix - 2

From the above table, it is observed that the operating ratio of Hulas Motors has a fluctuating trend. It has a minimum of 0.65 or 65% in the FY

063/064 and it has maximum of 1.14 or 114% in the FY 062/063. The average operating ratio is 77%. It has been seen from the table that the operating profit is too low to meet interest, dividend and other fixed demand. It can be said that the Hulas Motors has to decrease its operating expenses ratio. Due to this, the profit margin shall increase. So, this ratio is not satisfactory of Hulas Motors (P) Ltd.

Since the C.V. of Sales is higher than that of cost of goods sold and operating expenses. So there is less uniformity in sales than cost of goods sold and operating expenses.

4.5.4 Return on Total Assets Ratio:

This ratio establishes the relationship between net profit and total assets. This ratio is also called profit to assets ratio. It is shown in percentage. To ascertain it, different formula can be used which are as follows:

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

This ratio measures the profitability of all financial resources invested in the firm's assets. Hence, the higher ratio implies that the available sources and tools are employed efficiently.

Table 18
Return on Total Assets

Year	1 Profit	2=(1-0.25) (1- Tax rate)	3 (1x0.75) Net Profit after tax	Total assets	Return on Assets
2061/62	(6087298.08)	0.75	(4565473.56)	54752573.26	(8.34%)
2062/63	(8432812.58)	0.75	(6324609.44)	59028419.16	(10.71%)
2063/64	(2850754.41)	0.75	(2138065.81)	69224847.50	(3.09%)
2064/65	(5625929.63)	0.75	(4219447.26)	78438714.67	(5.38%)
2065/66	683927.60	0.75	512945.70	71557778.39	(0.72%)
Average	(4462573.43)	0.75	(3346930.07)	58600466.61	(5.71%)
S.D.	3.12		2.34	266.54	

C.V	(70%)		(70%)	80.04%	
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Source: Appendix – 1&2

In the above table, it is seen the return or Net profit after tax in loss which gives also return on assets in loss ratio. It is lower ratio in the FY (062/063) (10.71%) and light ratio is (3.09%) in the FY 2063/64. The average return on total assets is (5.71%). All ratios are negative or loss due to the higher administration expenses and different year's losses. The ratio is not satisfactory level for the company. In the FY 065/066 ratio has come positive but not satisfactory level. It is inefficient in investing and utilization its resources. Thus, it can be concluded that the ratio should be increased in respect of Hulas Motors.

The C.V. of Net Profit after tax and before tax is least C.V. so, there is more uniformity in two.

4.5.5 Return on Working Capital (RWC)

The ratio of return on working capital measures the profit with respect to total current assets. It measures the success and failure to utilize the working capital of the company. Higher ratio indicates greater Utilization of current assets. In other work, higher ratio is preferable for the company. RWC is calculated as net profit after tax divided by current assets.

$$\text{RWC} = \frac{\text{Net Profit After Tax}}{\text{Working Capital (Current Assets)}}$$

The return on working capital of Hulas Motors is calculated in the following table.

Table 19
Net Profit Margin

Fiscal Year	Net Profit after Tax	Working Capital	Rate
2061/62	(4565473.56)	11221678.14	(40.68%)
2062/63	(6324609.44)	9035781.43	(70%)
2063/64	(2138065.81)	18246378.81	(11.72%)
2064/65	(42194470.26)	21002446.41	(200.90%)
2065/66	512945.70	16441590.82	3.12%

Average	(3346930.07)	15189575.06	(22.03%)
S.D.	2.34	4.43	-
C.V	70%	29.16%	-

Source: Appendix -1& 2

In the above table, the return on working capital of Hulas Motors has very low ratio which shows less utilization of current assets. It has the lowest ratio (200.90) in the FY 064/065 and highest ratio in negative is (11.72%). The average ratio is (22.03%). The positive ratio (3.12%) in the FY 065/066. Which shows good indication for the company. Before 065/066 year, the firm ratio is not satisfactory. It should be better for the company to maximize the ratio as much as possible because low or negative ratio indicates poor management in profit and working capital of the company.

The C.V. of working capital is higher. So, there greater variability in maintaining the WC or less consistency in it.

4.6 Correlation Analysis:

Correlation is defined as the relationship between the one dependents variable and one independent variable. In other words, correlation is the relationship between two or more variables. If two variable are so related that the change in the value of one independent variable results the change in the value of dependent variable then they are said to have correlation.

Correlation analysis is defined as the statical technique which measures the degree and direction of relationship between or among the variables. In other world, it helps studying the co-variance of two or more variables.

If both the variables move in the same direction then the two variables are said to be positively correlated. On the other hand, if both the variables move in opposite direction, then the correlation between the two variables is called negative correlation. In negative correlation, if the value of one variable increases then the value of other variable decreases and vice versa.

Note that the numerical measurement of relationship between the two variable is denoted by the symbol "r" whose values ranges from -1 to +1, i.e. $-1 \leq r \leq +1$.

If $r = 0$, There is no relationship between the variable.

If $r < 0$, There is negative relationship between the variable.

If $r > 0$, There is positive relationship.

If $r = +1$, The relationship is perfectly positive.

If $r = -1$, The relationship is perfectly negative.

4.6.1 Calculation of Correlation Co-Efficient between TCA and TCL:

TCA and TCL are the two wheels of a cart, thus they cannot separate each others but they can be managed effectively. The correlation co-efficient between TCA and TCL show the relation between TCA and TCL. The help of following table can present the relationship between TCA and TCL.

Table 20
TCA and TCL of Hulas Motors (Amount in "000000")

Year	TCA(x)	TCL (y)	X ²	Y ²	xy
2061/62	11	1	121	1	11
2062/63	9	-	81	-	0
2063/64	18	-	324	-	0
2064/65	21	32	441	1024	672
2065/66	16	18	256	324	288
Total	$\sum x = 75$	$\sum y = 51$	$\sum x^2 = 1223$	$\sum y^2 = 1349$	$\sum xy = 971$

Source: Appendix – 2

The help of Karl Pearson's correlation coefficient expresses the relation between TCA and TCL.

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

$$= \frac{5 \times 971 - 75 \times 51}{\sqrt{5 \times 1223 - (75)^2} \sqrt{5 \times 1349 - (51)^2}}$$

$$= \frac{1030}{1424.15}$$

Here, $N = 5$ $\sum xy = 971$ $\sum y = 51$ $\sum x^2 = 1223$
 $\sum y^2 = 1349$ $\sum x = 75$

Since $r=0.73$, there is positive relation between TCA & TCL for the Hulas Motors. The reliability of the correlation coefficient between TCA & TCL can be measured by the help of probably error.

$$PE = 0.6745 \times \frac{1 - r^2}{\sqrt{x}}$$

$$= 0.6745 \times \frac{1 - (0.73)^2}{\sqrt{5}}$$

$$= 0.6745 \mid 0.21$$

$$= 0.1416$$

The reliability of P.E. can be interpreted by multiplying P.E. by 6.

$$= \text{P.E.} \times 6$$

$$= 0.1416 \times 6$$

$$= 0.8496$$

Since 'r' is less than 6 (P.E.) thus it is not significant. So that there is evidence of correlation between TCA & TCL.

4.6.2 Analysis of CA to Sales :

The relationship between CA to sales can be further presented to analysis the size of working capital. The program of current assets to sales means how much volume of sales for Hulas Motors is correlated with current assets. There is essential relationship between CA to sales because current assets include cash, bank reports, receivables, marketable securities etc. sales is depend upon cash and credit sales. If credit sales policy of Hulas Motors is high then its sales will be high. With the help of Hulas Motors in a table as below can understand the relation between CA to sales.

The relationship between current assets & sales can be further analysis by the help Karl Pearson's correlation coefficient by using.

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

Table 21
Analysis of CA to sales (Amount in "000000")

Year	TCA(x)	Sales (y)	x^2	y^2	xy
2061/62	11	14	121	196	154
2062/63	9	6	81	36	54

2063/64	18	10	324	100	180
2064/65	21	7	441	49	147
2065/66	16	17	256	289	272
Total	$x \times 75$	$y \times 54$	$x^2 \times 1223$	$y^2 \times 670$	$xy \times 807$

Source: Appendix – 1&2

Now,

$$r = \frac{5 \times 807 - 75 \times 54}{\sqrt{5 \times 1223 - (54)^2} \times \sqrt{5 \times 670 - (54)^2}}$$

$$= -0.013$$

Since 'r' = -0.013 its seen that there is negative relationship between CA & sales of Hulas Motors.

The relationship between current assets to sales can be further analyzed by the help of probable error by using.

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

$$= 0.6745 \times \frac{1 - (-0.013)^2}{\sqrt{5}}$$

$$= 0.30$$

The reliability of P.E. can be interpreted by multiplying P.E. by 6.

$$= P.E. \times 6$$

$$= 0.30 \times 6$$

$$= 1.80$$

Since 'r' is less than 6 (P.E.) thus it is not significant. So that there is evidence of correlation between TCA & TCL.

DIAGRAMMATIC AND GRAPHIC REPRESENTATION

After collecting the numerical data for statistical enquiry, the next step is to classify and tabulate them. Presenting the numerical data is the use of diagrams and graphs. Graphs and diagrams are nothing but the presentation of geometrical figures like points, lines, bars, rectangles, circles etc. Diagrams of graphs much more easily obtain a clear picture of the variable in the values of variables than the values at the table.

Diagram and graphs give a bird's eye view of a set numerical data. They can present the data into simple and intelligible form. Diagrams are generally more attractive and impressive than the numerical figures. They give delight to the eye and leave everlasting impressions in the mind. It helps in designing the required information in less time and without any mental strain. They facilitate comparison of two or more sets of data at a time. To study the data of Hulas Motors multiple bar diagrams have been used. When two or more variables are to be compared at the same time, we draw multiple bar diagram. In a multiple bar diagram, two or more sets of inter-related data are represented. In multiple bar diagram, a set of adjacent bars are drawn

DIAGRAMS AND GRAPHS

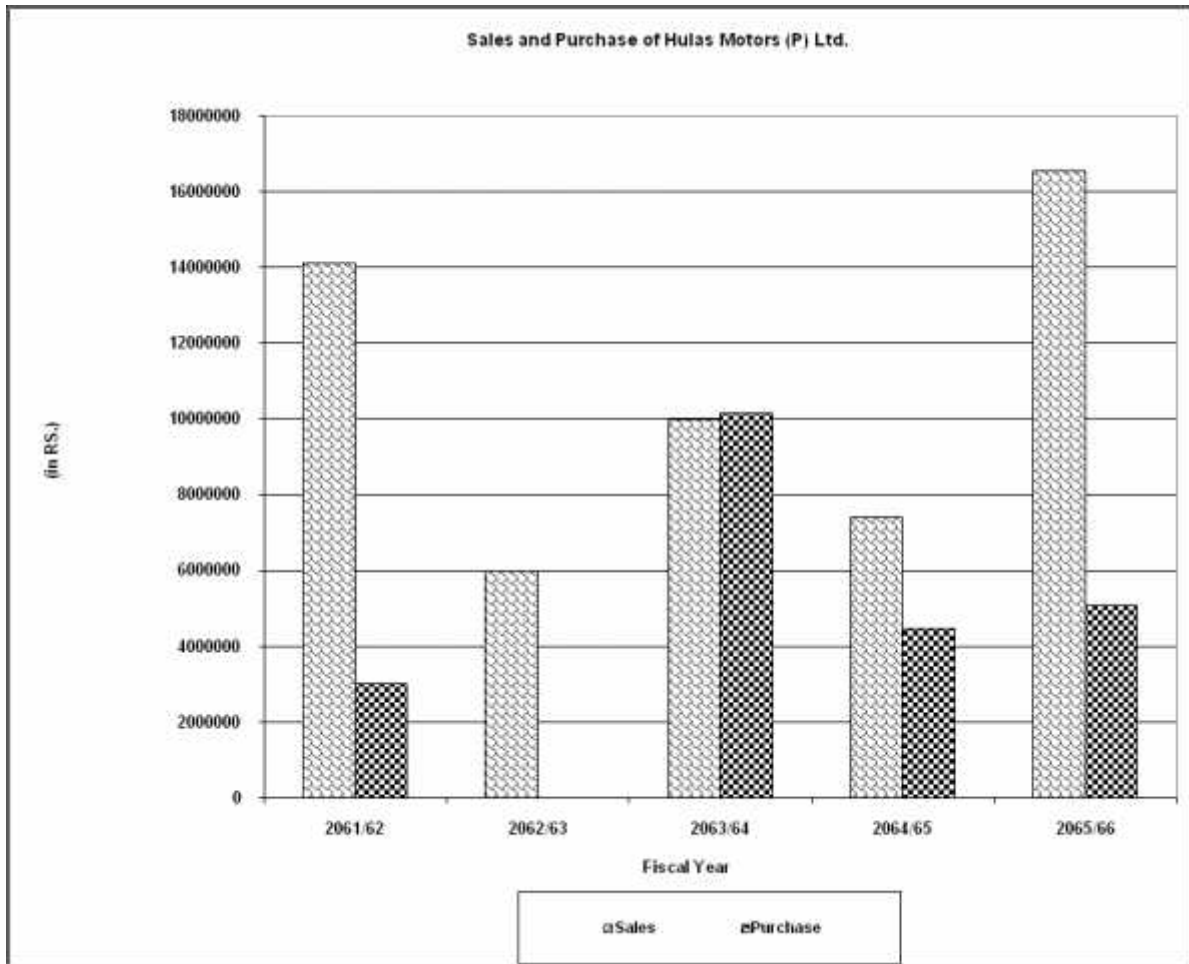
This graph shows the fluctuation between sales and purchase from 2061/62 to 2065/66 Hulas Motors.

Table 1

Fiscal Year	2061/62	2062/63	2063/64	2064/65	2065/66
Sales	14143261.21	6010642.9	10011414.86	740503.29	16545790.5
Purchase	3035041.65	0	101735144.59	4499876.7	5113612.45

Sources :-Appendix 1 & 4

Graph No. 1



Source : Table No. 1

The graph gives the information about sales and purchase in various year. It shows fluctuating trend in sales and purchase. It shows the lowest quantity of purchase in the year of 2061/62 and zero in the FY 2062/63 and the highest in the FY 2063/64. The sales various year are in fluctuating trend. It shows the least quantity in the year of 2062/63 and the highest of 2065/66. In many years it shows low sales which decrease profit. It is due the lack of proper management of sales department plan. It also shows the weakness of sales department of Hulas Motors Pvt. so, management of sales department should try to improve their sales to meet the financial position of the company.

SECURED AND UNSECURED LOANS

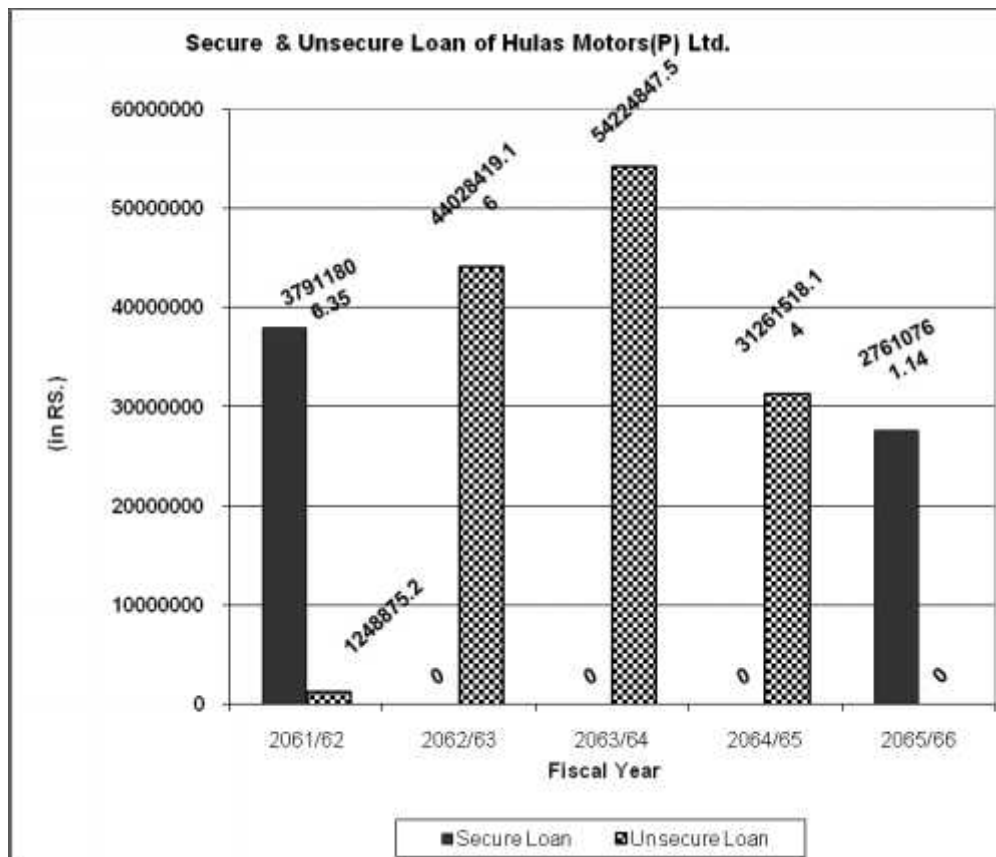
The graphs presented below shows the relation between secured loan and unsecured loan of Hulas Motors from year 2061/62 to 2065/66. if shows the position of secured loan and unsecured loan and their variability.

Table No 2

Fiscal Year	2061/62	2062/63	2063/64	2064/65	2065/66
Secure Loan	37911806.35	0	0	0	27610761.14
Unsecure Loan	1248875.2	44028419.16	54224847.50	31261518.14	0

Sources :- Appendix 2

Graph No. 2



Source : Table 2

The graph shows the great variability in maintaining the secured and unsecured loan. It shows that the amount of unsecured loan is fluctuating trend in the study period. The amount of unsecured loan is the highest in the FY 2063/64 and lowest in the FY 2061/62 and zero in FY2065/66. But the amount of secured loan are in the FY 2061/62 and only. Secure loan is zero in the three year. Thus, the firm is trying to take the risk of finance. So, we can say that the firm want to take the risk to obtain the amount for the requirement of the company.

Sundry Debtors and Sundry Creditors

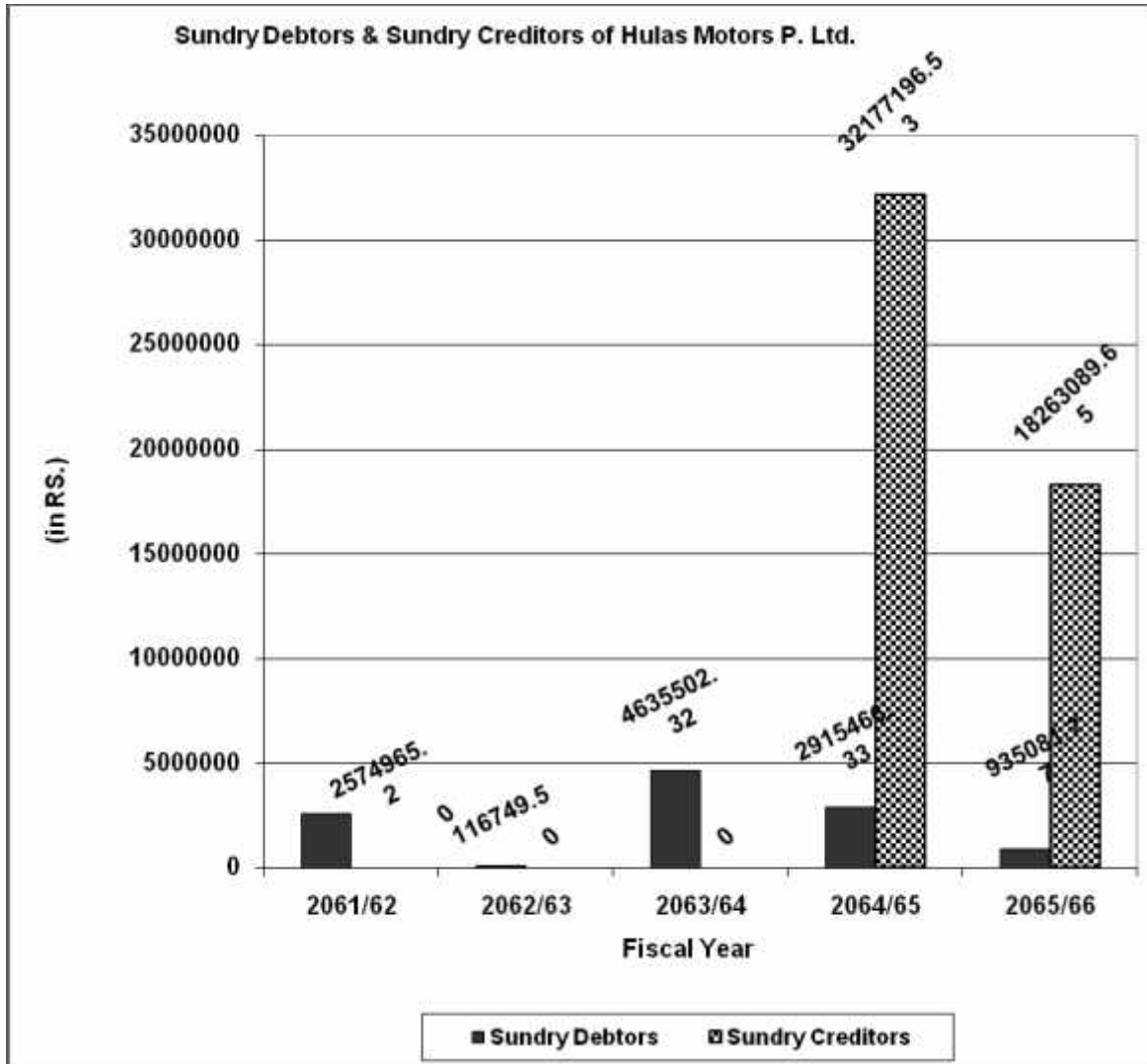
The below graphs the relation between Sundry creditors and Sundry debtors of Hulas Motors from year 2061/62 to 2065/66. It shows is the variability in maintaining the Sundry creditors and Sundry debtors of the firm.

Table No 3

Fiscal Year	2061/62	2062/63	2063/64	2064/65	2065/66
Sundry Debtors	2574965.2	116749.5	4635502.32	2915466.33	935081.77
Sundry Creditors	0	0	0	32177196.53	18263089.65

Sources :- Appendix 2

Graph No. 3



Source : Table 3

The above graph shows that the amount of sundry creditor are not available in many years except 2064/65 and 2065/66 comparison with their two year has the least amount of in FY 2065/66 and the highest in FY 2064/65. The amount of sundry debtor are in fluctuating trend. It has the lowest of in FY 2062/63 and the highest in FY 2063/64. The graph indicates that there are greater variability in maintaining the level sundry creditor and sundry debtor. The firm is not keeping the greater level of amount of creditor which

also shows, it is not made relation with creditor. Which is not good for the company. The firm also trying to keep the lower level of sundry debtor. It show light policy of the firm. The financial mgt of firm is trying to remove bad debts and maintaining fast collection.

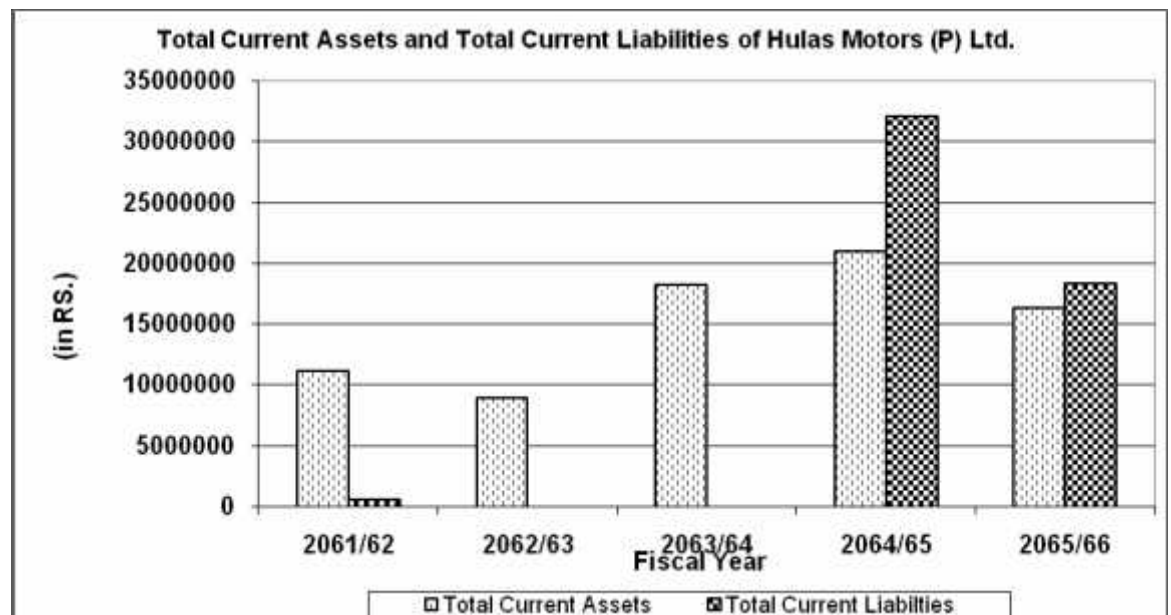
Total Current Liabilities and Total Current Assets

The below table shows the level of total current liabilities and total current assets a Hulas Motors from year from 2061/62 to 2065/66. The amount current liabilities and not too much fluctuating.

Table 4

Fiscal Year	2061/62	2062/63	2063/64	2064/65	2065/66
Total Current Assets	11221678.14	9035781.43	18246378.81	21002446.11	16441590.82
Total current Liabilities	591891.77	0	0	32177196.53	18434071.55

Graph No. 4



Source : Table 4

The above table shows that the level of total current liabilities of the firm is fluctuating trend except the 2062/63 and 2063/64. It has lowest in the FY 2061/62 and in the highest FY 2064/65 in the FY 2062/63, 2064/65 is zero. The total level of total current assets is in fluctuating trend with increasing also. It has the lowest of in the fiscal year 2062/63 and highest in the 2064/65. It indicates that the firm is trying to expand its business activities. It is good for the mgt. that its area is increasing due to these activities. The firm reputation and good will are also increased. The above graph also indicates that the mgt of current liabilities and current assets are not normal for the firm because there is no CL in two and there is a high CL in one year only, like 2064/65. The firm's current assets are increasing trend indicates that the firm will expand its business in large scale. It also shows that the firm's earning capacities are at the satisfactory level. So its business are growing year after year.

CHAPTER – V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary:

This is the last chapter of the thesis. In this chapter, the finding of study and analysis is concluded summarized and recommended and suggestion are made on the basis of the analysis.

Nepal is an agricultural country, where about 94.40% of the total economically active population are engaged in agriculture. Hulas Motors Pvt. Ltd. is only one motor production company of Nepal. This motor company supports the transportation business of Nepal and by the development of transportation it is possible to develop the country. By the establishment of this motor company less number of motors are imported from other countries which in return helps to maintain the Balance of Payments (BOPs). This present study has been undertaken to evaluate the working capital management in the Hulas Motors for the evaluation. The necessary data has been taken from the Audited Balance Sheet & Income Statements of the company for the period of five fiscal years from 2061/062 to 2065/066. To analyze the working capital management various statically and financial tools have been used.

The study has been divided into five chapters. They are introduction of Hulas Motors Pvt. Ltd., focus of the study, objective of the study, statement of the problem, need of the study, research methodology, assumption and limitation of the study and organization of the study are discussed briefly. Similarly, in the second chapter, review of literature, working capital and its management, concept of working capital, need for working capital, determinants of working capital, determination of working capital, classification of working capital, finance in working capital, management of cash, receivable and inventories, and approaches of working capital are described. The third chapter consists of research design, nature and sources of data, population and sample of the study, data processing procedure, use of financial tools, statistical tools and technique. In the fourth chapter, composition of working capital, turnover position, liquidity position,

profitability position and correlation are discussed briefly. The major finding of the study as revealed from the analysis are briefly discussed below.

5.1.1 Current assets position :

Current assets of Hulas Motors Pvt. Ltd. consists of inventory, sundry debtor, bank and cash and claim deposit and receivable. The major component of currents assets are inventory, receivable/debtor and cash and bank balance. Among these component, inventories hold the larger proportion of 60.24% and the cash and bank balance hold the least proportion of 1.93%. The proportion of debtor and claim deposit and receivable are 14.72% and 23.05% respectively.

The current assets level with respect to total assets has fluctuating trend. It has the lowest of 15.31% in the FY 2061/062 and the highest of 26.78% in the FY 2064/065. The average percentage is 22.81% same as the CA to FA has also fluctuating trend. It has highest of 92.96% and the lowest of 38.24% in the FY 064/065 and 2062/063 respectively.

Out of CA, cash and bank balance hold the least position and has fluctuating trend. It has the lowest of 1.23% and the highest fo 3.16% in the FY 2065/066 and 2062/063 respectively. The average proportion of cash and bank balance to current assets is 1.93%. the company hold low level of cash and bank balance, which may create a problem in day to day operation as well as graphing an opportunity to expand the business.

The proportion of inventory to CA has also fluctuating trend during the study period. The quantity of inventory of Hulas Motors Pvt. Ltd. is maximum, which is the unnecessary burden for the company, it will increase the cost of holding inventories and reduce the profitability of the firm. It also shows the poor inventory management of the firm.

The proportion of debtors to CA of Hulas Motors Pvt. Ltd. has fluctuating trend. It has the highest of 25.41% in the FY 2063/064 and the lowest of 1.29% in the FY 2062/063. The average percentage of receivable is 14.72%. The percentage of debtor to CA of Hulas Motors Pvt. Ltd. has tried to decrease in the FY 2062/063 and 2065/066. The lower percentage indicates good management of debtor and higher percentage indicates inefficient

management of receivable. The high percentage of it means the company unable to collect receivable on time. Due to lack of definite credit and collection policy, the higher percentage is not good for the company.

5.1.2 . Turnover Position :

Turnover ratio is measuring tools of effectiveness of the business enterprise. But the decreasing and fluctuating trend of various turnovers indicated that the CA are not properly utilized of the company. The CA turnover of Hulas Motors Pvt. Ltd. during the study period is very low and has fluctuating trend. It is maximum of 1.26 times in the FY 2061/062 and the minimum of 0.35 times in the FY 2064/065. The average ratio is 1.10 times. The lower ratio indicates the poor utilization of CA. the position of net working capital turnover is also not good, it is also low and has fluctuating trend. It is maximum of 1.33 times in the FY 2061/062 and minimum of or in negative figure(8.30) times. The average turnover is 2.19 times. In the year 2064/065, 2065/066 the position of working capital turnover is very bad. The higher ratio indicates the better utilization of net working capital.

The turnover of cash and bank during the study period has fluctuating trend. It has the highest of 82.01 times in the FY2065/066 and the lower to 21.05 times in the FY 2062/063. The average time of turnover is 36.96 times. The calculated ratio indicates that mainly sales is done on credit system, cash sale is very low of the firm.

Receivable turnover of Hulas Motors Pvt. Ltd. has fluctuating trend, so as average collection period. The higher of receivable turnover is 51.48 times with an ACP 3.89 days. The average ratio is 4.84 times with and ACP 41.32 days. It is fluctuating trend. Highest times is good indication for the company but lowest indication shows the poor management of the receivable. Normally, it's ACP is not bad because it's payable deferral period is higher than it's ACP.

Inventory turnover of Hulas Motors Pvt. Ltd. has low and has fluctuating trend. The turnover is lowest of 1.39 and the highest of 7.59 times in the FY 2062/063 and 2063/064 respectively. Generally, a higher inventory turnover is indicative of good inventory management. A low inventory turnover implies excessive inventory levels than warranted by production and sales activities or a slow moving or obsolete inventory. The inventory

conversion period is also very high. It indicates the poor management of inventory. The credit turnover of Hulas Motors Pvt. Ltd. has low and increasing in two year only. It has zero in 2061/062 and 2062/063 and 2063/064. In comparison two years, it has the highest of 2.80 times in the FY 2065/066 with payable deferral period of 71.43 days and the lowest of 1.40 times with payable deferral period of 181.82 days. The average turnover is 3.92 times, with payable deferral period 51.02 days. Generally, a low turnover is good for the company. The Hulas Motors Pvt. Ltd. has longer credit facility is good for the company, which increase the profitability of the firm. If the firm is able to pay the creditor in longer period of payable is good for the firm because it has not to pay its payment in short period or it does not put burden to the firm and ready to use the funds in other sector of investment.

The cash conversion cycle of Hulas Motors Pvt. Ltd. is high and fluctuating trend. It has highest of 148 days and the lowest of 67 days. It is average of 119 days. The cash conversion cycle is not good of Hulas Motors Pvt. Ltd. Higher cash conversion cycle indicates that the company has no good management of inventory conversion period, receivable conversion period and payable deferral period. Thus, low cash conversion cycle is preferable than low cash conversion cycle, like FY 2064/065.

5.1.3. Liquidity Position

The liquidity position of Hulas Motors Pvt. Ltd. is not good. But on the basis of 5 year average, it shows good ratio. In liquidity ratio includes current ratio and de ratio. The current quick ratio of Hulas Motors Pvt. Ltd. has fluctuating trend except in two year. The highest current ratio is 18.96 times in the FY 2061/062 the lowest of 6.53 times in the FY 2064/065. The average times of it is 1.48 times. In the year 2062/063 and 2063/064 there is not current liabilities, it is not good for firm. It means there is no relationship with creditor and also there is not goodwill of the firm. Thus normally, current ratio should be 2:1 but it is an old concept. The new concept is that it is not necessary to maintain this ratio. The company can also run in low ratio and high ratio.

Acid test ratio of Hulas Motors Pvt. Ltd. has fluctuating trend. It has highest 13.08 time in the FY 2061/062 and lowest in the FY 2064/065 and zero in the FY 2062/063 and 2063/064. Here ratio zero means there is no relationship with creditors. The average acid ratio is 2.95 times. Generally,

quick ratio should be 1:1 but it is high in the 2061/062 and it is very low in the other years which are not satisfaction level for the firm.

5.1.4 Profitability Position

Profitability is the indication of the efficiency with which operations of the business are carried on profitability ratio indicates the degree of success in achieving desire profit. Without profit firm can not run successfully. The gross profit margin ratio of Hulas Motors Pvt. Ltd. has fluctuating trend. The higher ratio is 58.42% in the FY 2063/064 and lowest 22.71% in the FY 2062/063. The company has high percentage of GP which is good indication for the company. And the company has to increase its level of gross profit in the future period also.

Net profit margin of Hulas Motors Pvt. Ltd. is not good and its loss is also increasing in fluctuating trend except FY 2065/066. It has the highest of 4.13% in the FY 2065/066% and lowest 140.30% in negative figure or loss. The average is also loss like 41.20%. These ratio are very weak for the company because if they invest their money in bank they could earn more than the company's earning.

The operating ratio tastes the relation between expenditure of a company and its sales. It measures the efficiency of the company and its sales. It measures the efficient of the company as regard to minimizing total cost. This ratio is very high and has fluctuating trend. It has the higher of 1.14 and the lowest of 0.65 in the FY 2062/063 and 2064/065 respectively. The higher ratio indicates the operating profit is too low to meet interest divided and other fixed demands. Therefore, the Hulas Motors Pvt. Ltd. will have to reduce ti as much as possible.

Return on total assets of Hulas Motors Pvt. Ltd. is very bad and on the ban environment the loss is getting in fluctuating trend. In the FY 2062/063 is greater loss like (10.71%) and in the FY 2063/064 lower low like 3.09%. The average is low (5.71%). These ratio shows very bad condition to efficient on return on assets. Only in the year 2065/066 is good but not best. But it is good indication for the company in the FY 2065/066. If the company increase gradually in the future in positive ratio then it will be well.

Return on working capital of Hulas Motors Pvt. Ltd. is not satisfaction due to loss trend. In loss, it has an fluctuating trend and only it is good in FY 2065/066 like 3.12% positive.

5.1.5 Correlation Analysis

Correlation defines the relation between two variables. It measures the degree and direction of relationship between and among the variables.

In the case of Hulas Motors Pvt. Ltd., the relation between total CA and total CL is positive degree of correlation between the variable with 0.73. the P.E. is 0.1416 and $6*PE$ is equal to 0.8496 is more than correlation 0.73. Thus, it is insignificant so that there is not evidence of correlation between these two variables.

The relation between sales and CA is negative , which means both the variables move in the opposite direction. There is low degree of correlation of -0.013 between two variables. The P.E. is 0.30 and $6*PE$ is equal to 1.80 which is more than correlation of -0.013. Therefore, there is insignificant relation and is not evidence of correlation coefficient between these variable in the study period.

5.2 Conclusion

The analysis of working capital management in Hulas Motors Pvt. Ltd. shows a lot of variation in turnover position, profitability position and overall relationship between working capital and its operation what ever correlation has been drawn from the analysis of this study, we will conclude in this session. We shall give the conclusion about position of CA position of turnover, profitability and liquidity in this session.

- 1. While examining the CA composition, the average inventory position is very high, which would increase the cost of held it. Same as the receivable (Debtors) held with and average 14.72% during the study period. Therefore the company should avoid unnecessary working capital tied up. The proportion of cash and bank with an average is 1.93%, it is good for the company because this fund can be used in productive objective of the company. The average proportion of CA to total assets during the study period is low, the average proportion of it is 22.81% only. It means the smallest proportion of total assets is used to finance in CA.**

2. While examining the turnover position of Hulas Motors Pvt. Ltd., it has found that the average turnover of CA (1.40 times), net working capital (2.19 times), inventory (1.18 times) and payable (3.92 times) are very low. The average turnover cash (36.96 times) and receivable (4.48 times) are also low. All the turnover are in fluctuating trend. The low turnover indicated the company is unable to utilize its CA. The high turnover of the company indicates the company has utilized its CA properly. Mainly, the position of inventory is high, this is due to poor supply policy and improper policy of its management. It is necessary to increase turnover position for the survival of the company for a long period of time.
3. The liquidity of Hulas Motors Pvt. Ltd. is not satisfactory for the outsider point of view. The current as well as quick ratio is higher than the standard as a average but individually year it is low than standard level except 2061/062. The average current ratio is 1.48 times and average. Quick ratio is 2.95 times. Here average quick ratio is very high than standard level. Even at the high position of it's the company is running well. In the conclusion, it can be said that the Hulas Motors Pvt. Ltd. have to decrease its level to reduce the bad debt and invest for extra investment.
4. In the analysis of profitability position of Hulas Motors Pvt. Ltd., it has been found that the company income statement is not sufficient during the study period. Because it is showing large loss except of FY 2065/066, which is also very low profit in FY 2065/066. Gross profit margin, net profit margin, operating expense ratio, return on total assets, return on working capital all these ratio are not favorable for the company. The loss is showing of firm except FY 2065/066. The average return on gross profit margin and NPM in are 42.95% and 41.20% respectively. Operating expenses ratio 0.77 or 77% in an average which is very high and it indicates that the operating inefficiency of the company. Similarly, the average return on total assets and net working capital are (5.71%) and (22.03%) respectively. Which indicates very poor due to loss of company and less utilization of assets? During the study the company income statement is showing that the company except 2065/066, which is not good indication on the company.

Finally, it can be concluded that the Hulas Motors Pvt. Ltd. has followed in effective management policy. It has been seen that the company

has not used the proper management of inventory control for cost selling process, receivable management and investment policy in current assets.

The company has not been adopting new policy and technology since few year, so the company profitability is showing loss trend. From 2065/066, the company is trying to impose the better policy to improve overall profitability of the firm.

5.3 Recommendations

On the basis of this study, the following recommendation are made for the improvement of working capital management in the Hulas Motors Pvt. Ltd.

1. From the analysis of working capital of Hulas Motors Pvt. Ltd., it has been seen that the highest proportion of CA hold inventories. The investment on inventories should not be more or less than requirement. Over investment in inventory involves certain carrying cost and ordering cost, which minimize profitability. On the other hand, under investment in inventory also involves certain risk and cost. So, an optimum level of inventory should be maintained by which there would not excess investment in inventory. The financial manager of Hulas Motors Pvt. Ltd. should try to adopt systematic inventory system to know the inventory position in the company time to time and make a proper balance between the cost of over investment and under investment.
2. Receivable plays a greater role to maximize the sales for increasing the profit and to meet the completion. The credit policy largely affects the sales. Longer credit policy increase the sales than the tight credit policy. Investing huge amount in receivable is not beneficial for the company it increases the cost for hold it. Tight policy is also not good below. It reduces the sales. In the case of Hulas Motors Pvt. Ltd., its collection period is high in 2061/062, 2063/064, 2065/066 and low in 2062/063 and 2065/066. The average collection period is high. So, it is not good. The company should maintain the level.
3. During the study period, the proportion of cash and bank balance to CA is very low. Cash is the most liquid assets so it should never be underestimated. The Hulas Motors Pvt. Ltd. should hold higher level of cash to meet its day-to-day operations as well as the expansion of the

business. In other words, there should be a policy to have optimal cash management policy.

4. The Hulas Motors Pvt. Ltd. is investing huge amount in fixed assets like land and building, machine, electricity and other in the beginning clear. But these amount decrease year after year. The fixed assets should be used properly in productive sector. By the proper management of fixed assets, the Hulas Motors Pvt. Ltd. can get sufficient return and achieve successive goal.
5. Ratio of Hulas Motors Pvt. Ltd. in CA is low and net working capital turnover is very low. This means CA is not used properly. The Hulas Motors Pvt. Ltd. should try to increase the level of these turnover.
6. The Hulas Motors Pvt. Ltd. hold maximum level of inventory, so its turnover is very low and ICP is very high. Higher level of inventory deduces the profitability. Therefore, Hulas Motors Pvt. Ltd. has to reduce the level of inventory to increase the profitability position.
7. Normally payable deferral period of Hulas Motors Pvt. Ltd. is satisfactory. The financial manager of Hulas Motors Pvt. Ltd. should try to maintain the level of payable deferral period.
8. Liquidity position of Hulas Motors Pvt. Ltd. is below and above the standard level. Current ratio is below and quick ratio is above the standard level. So, the management of Hulas Motors Pvt. Ltd. should have to increase and decrease this level up to standard level.
9. The company have a very loss except FY 2065/066. So, the company should forecast for financial planning, rate on its investment sales forecast, production scheduling, plant design and other planning. All the financial function should be set to overcome the problem of lower profit and losses.
10. Return on total assets and return on working capital, both are very loss due to loss income, which fund has invested in the company, where it shows losses, but the company invest the fund in other sector, it can earn profit than present loss. To make profit Hulas Motors Pvt. Ltd. minimize its operating cost and administration cost by increasing the operating efficiency, of their employee and sales and also credit sales.

BIBLIOGRAPHY

1. Acharya, Khangendra, *“Working Capital Management in Manufacturing Public Enterprise”*, University of Allahabad, 1985
2. Acharya, Khagendra, *“Working Capital Management in Manufacturing PES with Special Reference to the Industry in Nepal”*, 1985
3. Acharya, Khagendra, *“The Management of Working Capital is an Enterprise”*, Vaishleshan, Vol-1 Baishakh 2051
4. Acharya, Khagendra, *“Working Capital Management in Manufacturing Public Enterprise”*
5. Acharya, Khagendra, *“The Management of Working Capital in the PEs of Nepal, with Special Reference to Tea Industry”*, University of Allahabad-1985
6. Anthony, Robert N., *“Management Accounting”*, 3rd Edition, Home Wood, Illi Mois, 1964
7. Bolten, S.E., *“Managerial finance”*, (Beston), Houghton, Mifflin Co, 1976, P-466. As quoted by Panday I.M., Financial management’s Vikas publishing house (P) Ltd. New Delhi 1982
8. Chattopadhyay, *“Survey of Research on Financial Management”*. (Sankar, Mishra, Ravisankareads.) Bombay Himalaya Publishing house 1983
9. Claire, Selltiz & Others, *“Research Methodology”*, 1992, as quoted in C.R. Kothari, *“Quantitative Techniques”*, Vikash Publishing House Pvt. Ltd., New Delhi.
10. Claire Selltiz & Others, *“Research Methodology”*, 1992 as quoted in C.R. Kothari, *“Quantitative Techniques”*, Vikash Publishing, House Pvt Ltd. New Delhi.
11. Drucker, P.F., *“The Practice of Management”*, Pan 1960
12. Encyclopedia of social science, Vol III and IV New York, Macrnillian company P-u 27 As quoted in Ibid.
13. Frank, J.R. and Schelefield, N.N. *“Corporate financial management”*, Gower press, U.K. 1974. P-8 as quoted in Dr. Khangendra Acharya Ibid.
14. Gitman, Lawrence J., *“Principle of Managerial Finance”*, Raw Publishers, 1976
15. Guthman, H.G., *“Analysis Financial Statement”*, Prentica hall Inc. New York 1960.P.70 as quoted in 2 Ibid.

16. Howard, Bion and Upton, Miller, *“Introduction to Business Finance”*, Tata Mc Graw-Hill Co. Inc New York, 1953
17. Jain S.P. and Narang, K.C. Pg-184, *“Financial & Management Accounting”*, New Delhi 1988
18. Joshi, Arjun Lal, *“A Study on Working Capital Management”* of Biratnagar Jute Mill Ltd. “ A MBA Thesis, T.U.1986
19. Joy, O.M., *“Introduction to Financial Management”* (Home Wood-III), Richard D. Irwin 1977
20. Joy, O.M, *“Introduction to Financial Management”*, (Home Wood III) Richard D, Irwin.
21. Khan, M.Y., and Jain, P.K., *“Financial Management”*, Tata Mc Graw-Hill Publishing Company Limited, New Delhi.
22. Kothari, C.R., *“Quantitative Techniques”*, Vikash Publishing House, New Delhi.
23. Kothari, C.R., *“Quantitative Techniques”*, Bikash Publishing House Ltd., New Delhi, 1994
24. Kothari, C.R., *“Quantitative Techniques”* 3rd Revised Edition
25. Kothari, C.R., *“Research Methodology”*, Method & Technique Eastern Ltd. New Delhi, 1989
26. Kothari, C.R. *“Quantitative Techniques”*, Vikash Publishing House Pvt. Ltd., New Delhi, 1978
27. Murthy, V., *“Management Finance”*, Vikils Better and Simons, Bombay 1978
28. Osborn, R.C., *“Business Finance- The Management Approach Appleton Century-profits”*, New York 1995
29. Panday I.M., Op. Cit.
30. Pandey, I.M., *“Financial Management”*, Vikash Publishing House Pvt. Ltd., New Delhi 1982
31. Pandey, I.M., *“Financial Management”*, Vikash Publishing House Pvt. Ltd. 1982
32. Pradhan, Surendra, *“Basics of financial Mgmt.”* Educational enterprise (P) Ltd., Nepal 1992
33. Pradhan, Radheshyam, *“Management of working capital”*. Natural Book Organizaiton, New Delhi 1986
34. Pradhan, O.S., *“Basics of Financial Management”*, Educational enterprise (P) Ltd. Ktm, 1982

35. Pradhan, Suresh, “*A Study on Working Capital Policy of Manufacturing PEs in Nepal*”, An unpublished Master’s Degree Thesis. T.U.1989
36. Pradhan, R.S., and Koirala, K.D., “*Some Reflections on Working Capital Management in Nepalese Co-operation Management Dynamics*”, Vol.3, No.1
37. Sharma, R.K., and Gupta, S.K., “*Management Accounting Principal and Practice*” Kalyani Publishers, Ludhiana Edition 1996
38. Shrestha, M.K., “*Working Capital Management in PES. A study on Financial Results and Constraints*”, ISODOC Bulletin, Vol 8, July 1982-June 1989 IVOSI-4
39. Smith, Adam, “*The Wealth of Nations, Modern lib.*”, New York 1973
40. Smith, K.V., “*Management of Working Capital*”, New York wet publishing Company 1974
41. Social Book, Class 9, Kosheli Prakashan 5th Edition
42. Social Book, Class-9, Kosheli Prakashan 6th Edition
43. Soloman, Ezrs, and Pringle, J.J, “*An Introduction to Financial Management*”, Prentice Hall of India (P) Ltd. New Delhi 1978
44. Vanhorne, J.C., and Wacgowicz, “*Fundamental of Financial Management*”, Prentice-Hall of India, Private limited New Delhi-1997
45. Vanhorne, J.C., “*Financial Management & Policy*”, Prentice-Hall of India Pvt. Ltd., New Delhi 1991
46. Vanhorne, J.C., Wachowicz, J.M., “*Fundamental of Financial Management*”, Prentice Hall of India (P) Ltd. New Delhi 1997
47. Vanhorne, J.C., “*Financial Management and Policy*”, New Delhi Prentice Hall of India Pvt. Ltd.
48. Weston & Brigham, “*Essential of Managerial Finance*”, The Dryden Press, eight edition 1987
49. Weston, J. Fred, and Brigham, Eugene F., “*Managerial Finance*” Holt-sounders International Editions

Appendix No. 1
Hulas Motors Pvt. Ltd.
Biratnagar
Income Statement

Year from 2062/063 to 2065/066

Particular	2061/062	2062/063	2063/064	2064/065	2065/066
Sales	14,143,261.21	6,010,642.90	10,011,414.86	7,440,503.29	16,545,790.35
Cost of goods sold	7,242,009.73	4,645,495.43	4,162,574.09	5,495,707.04	9,349,568.80
Gross Profit	6,901,241.48	1,365,147.47	5,848,840.77	1,944,796.25	7,196,221.55
<u>Operating Expenses</u>					
Selling and Distribution Expenses	599,485.55	22,075.00	459,391.50	-	-
Administrative Expenses	2,135,002.40	2,197,400.60	2,167,483.04	1,728,118.15	1,448,935.93
Total Operating Expenses	2,734,487.95	2,219,475.60	2,626,874.54	1,728,118.15	1,448,935.93
Operating Profit/(Loss)	4,166,753.53	(854,328.13)	3,221,966.23	216,678.10	5,747,285.62
Bank Interest Expenses	6,967,970.25	5,169,186.37	3,820,876.19	3,374,786.57	2,854,245.70
Depreciation	3,286,081.36	2,498,514.08	2,251,844.45	2,467,821.22	2,346,985.86
Income from miscellaneous income	-	89,216.00	-	-	137,873.00
Loss or Sale of Assets	-	-	-	-	-

Preliminary Expenses	-	-	-	-	-
Total Financial Expenses	10,254,051.61	7,578,484.45	6,072,720.64	5,842,607.79	5,063,358.56
Profit Before Provision	6,087,298.08	(8,432,812.58)	(2,850,754.41)	5,625,929.69	683,927.06
Provisions	-	-	-	-	-
Bonus Provisions	-	-	-	-	-
Special Provision	-	-	-	-	170,981.90
Total Provision	-	-	-	-	170,981.90
Net Profit/(Loss)	(6,087,298.08)	(8,432,812.58)	(2,850,754.41)	(5,625,929.69)	512,945.16

Appendix No. 2
Hulas Motors Pvt. Ltd.
Biratnagar
Balance Sheet
Year from 2062/063 to 2065/066

Particular	2061/062	2062/063	2063/064	2064/065	2065/066
Authorized Capital 50,000 Share @ Rs. 1,000	50,000,000.00	50,000,000.00	50,000,000.00	50,000,000.00	50,000,000.00
Issued Capital 15,000 Share @ Rs. 1,000	15,000,000.00	15,000,000.00	15,000,000.00	15,000,000.00	25,000,000.00
Paid up Capital	15,000,000.00	15,000,000.00	15,000,000.00	15,000,000.00	25,000,000.00
Liabilities					
Retained Earning	-	-	-	-	512,945.70
Secure Loan	37,911,806.35	-	-	-	27,610,761.14
Unsecure Loan	1,248,875.20	44,028,419.16	54,224,847.50	31,261,518.14	-
(A)	39,160,681.55	44,028,419.16	54,224,847.50	31,261,518.14	28,123,706.84
Current Liabilities & Provision					
Sundry Creditor	-	-	-	32,177,196.53	18,263,089.65

Other Liabilities & Provision	591,891.77	-	-	-	170,981.90
Total Current Liabilities (B)	591,891.77	-	-	32,177,196.53	18,434,071.55
Total Liabilities (A+B)	39,752,573.32	44,028,419.16	54,224,847.50	63,438,714.67	46,557,778.39
Total Capital & Liabilities	54,752,573.32	59,028,419.16	69,224,847.50	78,438,714.67	71,557,778.39
Assets					
Fixed Assets	25,597,456.47	23,626,386.94	21,761,463.49	22,593,333.67	20,273,254.11
Inventory (Closing Stock)	3,477,726.00	4,335,135.58	13,188,696.94	13,667,340.93	11,079,330.83
Sundry Debtors	2,574,965.20	116,749.50	4635502.32	2915466.33	935081.77
Bank & Cash	258460.94	285563.23	422179.55	297325.56	201751.43
Claim Deposit & Receivable	4910526.50	4298333.12	-	4096805.29	4199918.70
Tax and Penalty	-	-	-	25508.00	25508.00
Total Current	11221678.14	9035781.43	18246378.81	21002446.11	16441590.82

Assets (D)					
Sundry Expenses	-	-	-	-	-
Preliminary Expenses	1607043.16	1607043.36	1607043.36	1607043.36	1607043.36
Loss (Current Year)	6087298.08	8432812.58	2850754.41	5625926.68	33235891.00
Loss (Last Year)	10239096.77	16326394.85	24759207.43	27609961.84	-
Total Expenditure	16326394.85	26366250.79	29217005.20	34842934.88	34842934.36
Total Assets (C+D+E)	54,752,573.32	59,028,419.16	69,224,847.50	78,438,714.67	71,557,778.39

Appendix-3
Operating Expenditure

Particular	2061/062	2062/063	2063/064	2064/065	2065/066
Administrative Expenses	2135002.40	2197400.60	2167483.04	1728118.15	1448935.93
Selling & Distribution Expenses	599485.55	22075.00	459391.50	-	-
Financial Expenses	6967970.25	5169186.37	3820876.19	3374786.57	2854245.70
Total Operating Expenses	9702458.20	7388661.97	6447750.73	5102904.72	4303181.63

Appendix-4
Cost of Goods Sold

Particular	2061/062	2062/063	2063/064	2064/065	2065/066
Raw Materials	3035041.65	-	10173514.59	4499876.70	5113612.45
Production Expenses	2212201.98	5502905.01	2842620.86	1474474.33	1647946.25
Opening Stock	5472492.10	3477726.00	4335135.58	13188696.94	13667340.93
Closing Stock	(3477726.00)	(4335135.58)	(13188696.94)	13667340.93	11079330.83
Cost of Goods Sold	7,242,009.73	4,645,495.43	4,162,574.09	5,495,707.04	9,349,568.80