

**RESEARCH PROJECT ON**

**A STUDY OF WORKING CAPITAL MANAGEMENT**

**OF LARGE COMPANY**

FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE  
AWARD OF THE DEGREE OF  
***“BACHELOR OF BUSINESS ADMINISTRATION”***  
FROM GALGOTIAS UNIVERSITY GREATER NOIDA UP

**BATCH: 2018-21**

SUBMITTED BY:

Ashutosh kumar (18GSOB1010342)

BBA Batch-02

Sem-06

SUBMITTED TO:

Dr.Ramarcha kumar



**GALGOTIAS UNIVERSITY GREATER NOIDA U.P**

## **CERTIFICATE**

This is to certify that the project report on “**A Study Of Working Capital Management Of Large Company**” been prepared by **Mr.Ashutosh kumar** student of BBA , Batch 2018-21 from Galgotias University, Greater Noida, has successfully completed his project under my supervision and guidance.The project report is submitted towards the partial fulfillment of 3<sup>rd</sup> year, full time Bachelor of Business Administration.

Name and signature of Faculty

( **Dr.Ramarcha kumar** )

## **ACKNOWLEDGEMENT**

I wish to show my sincere gratitude to all those who made this study possible. First of all, I am thankful to the helpful staff and the faculty of Galgotias university Greater Noida. I would like to extend my sincere thanks to my Mentor **Dr.Ramarcha Kumar**, for her untiring cooperation. One of the most important tasks in every good study is its critical evaluation and feedback which was performed by my faculty guide.

I am very thankful to my faculty for investing his precious time to discuss and criticize this study and explained the meaning of different concepts and how to think when it comes to problem discussions and theoretical discussions. My sincere thanks go to my Institute and family, who supported and encouraged me.

## **DECLARATION**

I Ashutosh kumar (18GSOB1010342) student of BBA of School of Business , Galgotias university , Greater noida , hereby declare that the project report on **“A STUDY OF WORKING CAPITAL MANAGEMENT OF LARGE COMPANY”** is an original and authenticated work done by me.I further declare that it has not been submitted elsewhere.

Researcher  
**Ashutosh kr**

## **TABLE OF CONTENT**

<b>Chapter</b>	<b>Page No.</b>
<b>CHAPTER 1- INTRODUCTION</b>	<b>1-26</b>
1.1 General	1-7
1.2 Title	8
1.3 Objective	9
1.4 Need of the study	10
1.5 Limitations of study	11
1.6 working capital definition	12
1.6.1 Gross working capital	12
1.6.2 Net working capital	13
1.6.3 Permanent working capital	13-14
1.6.4 Temporary working capital	14
1.6.5 Negative working capital	15
1.7 Ratio Analysis	16-25
1.8 Hypotheis	26
<b>CHAPTER 2- Review of Literature</b>	<b>27-33</b>
2.1 Introduction	27
2.1.1 working capital management	28
2.2 Relevance of working capital	28-31
2.3 Book review -Natrajan sundram	31
2.4 - Rao Kv and Rao Chinta	31
2.5 -Hossain, syed and zabed	32
2.6 –Smith kaith V.	32

2.7 -Batra G S and Sharma A K	33
<b>CHAPTER 3- Research Design And Methodology</b>	<b>34-42</b>
3.1 Introduction	34
3.2 Research Design	35
3.3 Questionnaire	36-40
3.4 Research Approaches	41-42
<b>CHAPTER 4 – DATA ANALYSIS &amp; INTERPRETATION</b>	<b>43-49</b>
4.1 Introduction	43
4.2 Profile of Berger paints	44
4.3 Vision	45
4.4 Mission	45
4.5 Advantage	45
4.6 Analysis of Questionnaire	46-48
4.7 Cashflow Statement	49
<b>CHAPTER 5 - CONCLUSIONS AND RECOMENDATIONS</b>	<b>50-51</b>
5.1 Conclusions	50
5.2 Recommendation and Suggestions	51
<b>CHAPTER 6- BIBLOGRAPHY</b>	<b>52</b>
<b>APPENDICES</b>	<b>53</b>

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 GENERAL**

One of the most important areas in day to day management of the firm is the management of working capital.

Proper working capital management facilitates the business to operate smoothly and improves its earnings. It includes the proper management of inventory, account receivables and account payables so that enough cash is available for routine operations.

It is an accounting strategy that not only helps businesses to meet their financial obligations but also enhances its earnings. It also helps in identifying the areas of the business that requires attention to maintain profitability and liquidity.

Working capital management is a procedure that ensures the effective operation of the company with the best utilization of business current assets and liabilities.

The main aim of managing your working capital is to monitor the assets and liabilities of the organization so that adequate cash flow can be maintained and the short-term goals of the business can be met. It assists in managing the planned and unplanned expenses .

## **1.2 TITLE**

# **A STUDY OF WORKING CAPITAL MANAGEMENT OF BERGER PAINTS PVT. LTD.**



### **1.3 OBJECTIVE**

A specific result that a person or system aims to achieve within a time frame and with available resources. Objectives are more specific and easier to measure than goals. Objectives are basic tools that underlie all planning and strategic activities. They serve as the basis for creating policy and evaluating performance.

1. To evaluate the financial performance of the company.
2. To analyze the working capital management of the company.
3. To make suggestion for policy makers for effective management of Working capital.
4. To examine the effectiveness of working capital management polices with help of accounting ratio.

## **1.4 NEED OF THE STUDY**

1.The projects is helpful in knowing the company's position of funds maintenance and setting the standards for working capital inventory levels, quick ratio current amount turnover level and web torn turnover level.

2.This project is helpful to the management for expanding the dualism and the project viability and present availability of funds.

3.This project is also useful as it companies the present year data with the previous year data and thereby it show the trend analysis i.e increasing fund or decreasing fund.

4.The project is useful in further expansion decision to be taken by Management.

## **1.5 LIMITATION OF THE STUDY**

The following are the various aspects involved in the analysis of the Study:

1. Study is limited to the accounting year 2019-2020.
2. Study is based on information provided by the company .
3. Study the working capital management does not take in to account the price level changes.

## **1.6 WORKING CAPITAL DEFINITION**

Working capital (WC) Can be defined in simple words as that part of the total capital which is required for daily working of business. It is the capital with which the business is worked over. According the subbing working capital is the amount of funds necessary to cover the cost of operating the enterprises. Thus the funds required by the business for conducting the day to day operation. E.g .. purchase of raw material or finished goods, payment of expenses like salary, wages, rent etc ... The term working capital is also defined as "Excess of current assets over current liabilities".

Benefits of working capital management –It can improve a company earnings and profitability

### **1.6.1 Gross working capital (GWC)**

When the term working capital is used to denote the total current asset it is stated as gross working capital .

The current assets of a company are those assets which can be converted into cash within a period of 12 months. They comprise cash in hand and bank balances, accounts receivable, inventory, short-term investments, marketable securities, etc.

It is not possible to determine the liquidity position of a company with only the gross working capital. The current liabilities of the company, such as the accounts payable, short-term loans, and other outstanding loans will also be required to calculate the net working capital, which is a determinant of the company's liquidity.

### **1.6.2 Net working capital ( NWC )**

Net working capital gives the true picture of a company's operating liquidity, as it also takes into consideration the financial obligations of the business.

Net working capital is the difference between a business's current assets and its current liabilities. Net working capital is calculated using line items from a business's balance sheet. Generally, the larger your net working capital balance is, the more likely it is that your company can cover its current obligations.

Net working capital can also be used to estimate the ability of a company to grow quickly. If it has substantial cash reserves, it may have enough cash to rapidly scale up the business. Conversely, a tight working capital situation makes it quite unlikely that a business has the financial means to accelerate its rate of growth. A more specific indicator of the ability to grow is when accounts receivable payment terms are shorter than the accounts payable terms, which means that a company can collect cash from its customers before it needs to pay its suppliers.

### **1.6.3 Permanent working capital ( PWC )**

It is the minimum amount of the current assets which are needed to conduct the business even during the dullest season of the year. This amount varies from year to year depending upon the growth of a company and stage of the business cycle in which it operates. It represents the current assets which are required on a continuing basis over the year .

There is no formula for calculating the exact permanent working capital. It is an estimation based on the experience of the entrepreneur. Statistical data on the balance of all current assets and liabilities can help in deciding that level.

“Permanent” working capital is the normal or “standard” amount of investment in current assets less current liabilities. It assumes a steady, unchanging level of sales and production activity and no changes in terms of trade. With an understanding and quantification of permanent working capital, one can then monitor or project fluctuations around the norm to better manage a business’s cash flow and funding requirements.

#### **1.6.4 Temporary working capital ( TWC )**

It represent the additional asset which are required at different time during the operating year.It is also known as variable working capital ,it is the excess amount a business needs over and above its permanent counterpart.

It is the temporary fluctuation of networking capital over and above the permanent working capital. It is the additionl working capital requirement arising out of seasonal demand of the any special event which otherwise are not predictable.

Temporary working capital is preferably financed by short-term financing sources. Even after admitting the fact that long-term sources of finance are cheaper to short-term finances, it is beneficial to adopt the latter because long-term finances cannot be redeemed easily. Short term finances have time flexibility.

### **1.6.5 Negative Working capital ( NWC )**

It emerge when current liabilities exceeds current assets such a situation is absolutely theoretical and occurs when a firm is nearing a crisis of some magnitude.

In other words we can say that there is more short term debt then there are short term assets.It is calculated as the difference between a company's current assets and current liabilities.

A buyer usually consider negative working capital as a target as detrimental because it signifies additional capital that will be required to run the business after closing.

A buyer actually prefer to see a working capital ratio of 1 to 1.5 times, which means there is at least one dollar of current assets of every dollar of current liabilities.This assure the buyer at the that company can generate sufficient cash over the short term to cover supplier and payroll obligations.

## 1.7 RATIO ANALYSIS

On the basis of purpose is more meaningful and significant. On the basis of purpose, ratios may be classified as under:

- ❖ Liquidity Ratios
- ❖ Solvency Ratios
- ❖ Turnover or Activity or Performance Ratios
- ❖ Profitability Ratios.

### LIQUIDITY RATIOS

Liquidity means ability of the firm to pay its current liabilities in time. These ratios are used to assess the short-term financial position of the firm. Therefore, these ratios are also called as 'Short-term Solvency Ratios. These ratios indicate the firm's ability to meet its current obligations out of current resources.

Liquidity ratios include two ratios:

**(i) Current Ratio:** This ratio is also known as Working Capital Ratio. It help to measure the ability of the business to pay off its current liabilities out of current assets.

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



Significance: The ratio is an index of the concern's financial stability, since, it shows the extent to which the current assets exceed its current liabilities. A higher current ratio would indicate inadequate employment of funds, while a poor current ratio is a danger signal to the management

**(ii) Quick Ratio:** This ratio is also known as Liquid Ratio and Acid Test Ratio. It measure the Firms capacity to pay off current obligations immediately.

$$\text{Quick Ratio} = \frac{\text{Quick Asset}}{\text{Quick liabilities}}$$

The ratio is an indicator of short-term solvency of the company. A comparison of the current ratio to quick ratio should also indicate the inventory holdups. For instance, if two units have the same current ratio but different liquidity ratios, it indicates over-stocking by the concern having low liquidity ratio as compared to the firm which has a higher liquidity ratio.

**(iii) Absolute Liquidity Ratio:** This ratio is also known as Super Quick Ratio .It is a slight variation of quick ratio. It is calculated by comparing the super quick assets with the current liabilities (or liquid liabilities) of a firm.

$$\text{Absolute Liquidity Ratio} = \frac{\text{Cash} + \text{Marketable Securities}}{\text{Current Liabilities/Quick Liabilities}}$$

This ratio is the most rigorous test of a firm's liquidity position. In case the ratio is '1', it means the firm can meet its current liabilities any time. The ratio is a conservation test and not widely used in practice.

## SOLVENCY RATIOS

These ratios are calculated to ascertain the ability of the firm to pay its long-term liabilities in time. Solvency ratios measure the relationship between external equities and internal equities. Sound solvency ratios ensure long-term financial stability of the business.

(i) **Debt-Equity Ratio:** This ratio indicates the proportion of funds which are acquired by long term borrowings in comparison to shareholders fund.

$$\text{Debt-Equity Ratio} = \frac{\text{Total long term debt}}{\text{Shareholders' Funds}}$$

The ratio is an indication of the soundness of the long-term financial policies pursued by the business enterprise. The excessive dependence on outsiders' funds may insolvency of the business. The ratio provides the margin of safety to the creditors. It tells the owners the extent to which they can gain by maintaining control with a limited investment.

(ii) **Total Assets to Debt Ratio:** This ratio determines the extent to which debt is being covered by assets.

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

Total debt equals long-term debt and short-term debt. It is not equivalent to total liabilities because it excludes non-debt liabilities such as accounts payable, salaries payable, etc.

Debt ratio is a measure of a business's financial risk, the risk that the business' total assets may not be sufficient to pay off its debts and interest thereon. Since not being able to pay off debts and interest payments may result in a business being wound up, debt ratio is a critical indicator of long-term financial sustainability of a business.

**(iii) Proprietary Ratio:** This ratio determines long term solvency of the firm.

$$\text{Proprietary Ratio} = \frac{\text{Shareholder's Fund}}{\text{Total Asset}}$$

The ratio focuses attention on the general financial strength of the business enterprise. The ratio is of particular importance to the creditors who can find out the proportion of shareholders' funds in the total assets employed in the business. A high proprietary ratio will indicate a relatively little danger to the creditors or vice-versa in the event of forced reorganization or winding up of the company.

## **ACTIVITY RATIOS**

Turnover means 'Sales', so these ratios are calculated on the basis of 'Cost of goods sold' or 'Sales'. It is an accepted fact that sales have direct relationship with the performance of business.

These ratios are also known as 'Performance Ratios' or 'Activity Ratios'. Hence, these ratios indicate how efficiently the total capital, working capital, fixed assets and stock of the business are profitably used.

**(i) Inventory Turnover Ratio:** This ratio measures how many times the average stock is sold during the year.

$$\text{Inventory Turnover Ratio} = \frac{\text{COGS}}{\text{Average Stock}}$$

The ratio signifies the liquidity of inventory. A high inventory turnover ratio indicates brisk sales and vice-versa. The ratio is therefore a measure to discover possible trouble in the form of over-stocking or over-valuation of inventory.

**(ii) Debtors Turnover Ratio:** This ratio establish a relationship between net credit sales and average debtors (or receivables) of the year. It is also known as Receivable turnover ratio.

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

Debtors Turnover Ratio or Debt Collection Period Ratio measures the quality of debtors since it indicates the rapidity or slowness with which money is collected from the debtors. A shorter collection period implies prompt payment by debtors. A longer collection period implies too liberal and inefficient credit collection performance.

The credit policy should neither be too liberal nor too restrictive. The former will result in more blockages of funds and bad debts while the latter will cause lower sales which will reduce profits.

**(iii) Creditor Turnover Ratio:** This ratio establishes a relationship between net credit purchases and average creditors (or payables) of the year.

$$\text{Creditors Turnover Ratio} = \frac{\text{Credit Purchases}}{\text{Average Account Payable}}$$

The creditors turnover ratio and the credit period enjoyed ratio indicate about the promptness or otherwise in making payment for credit purchases. A higher creditors turnover ratio or a lower credit period enjoyed ratio signifies that the creditors are being paid promptly thus enhancing the credit-worthiness of the company.

However, a very favorable ratio to this effect also shows that the business is not taking full advantage of credit facilities which can be allowed by the creditors.

**(iv) Fixed Assets Turnover Ratio:** This ratio reveals how efficiently the fixed assets are being utilized.

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{COGS}}{\text{Net Fixed Asset}}$$



- Net fixed assets = gross fixed assets – depreciation

The comparison of fixed assets turnover ratio over a period of time indicates whether the investment in fixed assets has been judicious or not. Of course, investment in fixed assets does not push-up sales immediately but the trend of increasing sales should be visible. If such trend is not visible or increase in sales has not been achieved after the expiry of a reasonable time it can be very well said that increased investments in fixed assets has not been judicious.

(v) **Working Capital Turnover Ratio:** This ratio reveals how efficiently working capital has been utilized in making sales.

$$\text{Working Capital Turnover Ratio} = \frac{\text{COGS}}{\text{Working Capital}}$$

- Working Capital = Current Asset – Current Liabilities

It indicates the velocity of the utilization of net working capital. A higher ratio indicates efficient utilization of working capital and a lower ratio indicates inefficient utilization.

## **PROFITABILITY RATIOS**

The basic aim of every firm is to earn profit. The efficiency of a business, in general, is measured by its profitability. Profitability is also the basis of liquidity and solvency of the business.

Hence, Profitability ratios measure various aspects of the profitability of a business firm, such as (i) Whether the profits earned by the firm are adequate?, (ii) What is the rate of gross profit and net profit on sales?, (iii) What is the rate of return on capital employed?, (iv) What is earning per share?, (v) How much dividend to be distributed? Etc.

(i) **Gross Profit Ratio:** This ratio shows the margin of profit on sales.

$$\text{Gross profit Ratio (\%)} = \frac{\text{Gross profit} \times 100}{\text{Net sales}}$$

The ratio indicates the overall limit within which a business must manage its operating expenses. It also helps in ascertaining whether the average percentage of mark-up on the goods is maintained.

(ii) **Operating Ratio:** This ratio measures the relationship between operating cost and net sales.

$$\text{Operating ratio} = \frac{\text{COGS} + \text{Operating exp} \times 100}{\text{Net Sales}}$$

The ratio is the test of the operational efficiency with which the business has carried on. The operating ratio should be low enough to leave a portion of sales for giving a fair return to the investors.

(iii) **Net Profit Ratio:** This ratio determines the overall profitability due to various factors such as Operational efficiency, trading on equity etc.

$$\text{NPR (\%)} = \frac{\text{Net Profit} \times 100}{\text{Net Sales}}$$

The ratio helps in determining the efficiency with which the affairs of a business are being managed. Constant increase in the above ratio year after year is a definite indication of improving conditions of the business.

**(iv) Return on Investment:** This ratio is to find out how efficiently the long term funds supplied by the Investors and shareholders' funds have been utilized in the business.

$$\text{ROI} = \frac{\text{Profit before interest and taxes} \times 100}{\text{Capital employed}}$$

Where,

Capital employed = equity + preference capital + reserve & surplus + long term loans, bonds, debentures – fictitious assets – non-operating assets

Or

Capital employed = Net fixed assets + working capital

ROI measures the profit which a firm earns on investing a unit of capital. It is desirable to ascertain this periodically. The profit being the net result of all operations, ROI, expresses all efficiencies or inefficiencies of a business collectively. Thus, it is a dependable measure for judging the overall efficiency or inefficiency of the business.



(v) **Earnings per Share:** This ratio is to measure the profitability of the company on per equity share.

It is calculated by dividing the profits available to the shareholders by number of outstanding shares. The profits available to the ordinary shareholders are arrived at as net profits after taxes minus preference dividend. It indicates the value of equity in the market.

$$\text{EPS} = \frac{\text{Profit after int., taxes \& Pref. dividend}}{\text{Total No of Equity share}}$$

(vi) **Price Earnings Ratio:** This ratio measures the relationship between market price of the share and earning per share. PER helps the investors in deciding whether to buy or not to buy the shares of a company at a particular price.

$$\text{PER} = \frac{\text{Market Price per Equity Share}}{\text{Earnings per Share}}$$

(vii) **Dividend per Share:** This ratio is to know dividend on per equity share. The sum of declared dividends for every ordinary share issued. Dividend per share (DPS) is the total dividends paid out over an entire year (including interim dividends but not including special dividends) divided by the number of outstanding ordinary shares issued.

$$\text{DPS} = \frac{\text{Distributed profits}}{\text{Total no of Equity Shares}}$$

## **1.8 HYPOTHESIS**

Hypothesis has definite utility and important place in social research . the formulation of hypothesis is pre-requisite of any successful research .

one of the most important areas in the day-to-day management of the firm is the management of working capital .

1-There is a positive relationship between efficient working capital management and profitability of the company

2-The different components of the working capital have a major effect on the management of the working capital in the company.

## **CHAPTER -2**

### **REVIEW OF LITERATURE**

#### **2.1 INTRODUCTION**

A literature review is a search and evaluation of the available literature in your given subject or chosen topic area. It documents the state of the art with respect to the subject or topic you are writing about.

A literature review has four main objectives:

- It surveys the literature in your chosen area of study
- It synthesises the information in that literature into a summary
- It critically analyses the information gathered by identifying gaps in current knowledge; by showing limitations of theories and points of view; and by formulating areas for further research and reviewing areas of controversy
- It presents the literature in an organized way

A literature review shows your readers that you have an in-depth grasp of your subject; and that you understand where your own research fits into and adds to an existing body of agreed knowledge.

Here's another way of describing those four main tasks. A literature review:

- demonstrates a familiarity with a body of knowledge and establishes the credibility of your work;

- summarizes prior research and says how your project is linked to it;
- integrates and summarizes what is known about a subject;
- Demonstrates that you have learnt from others and that your research is a starting point for new ideas.

### **2.1.1 Working Capital Management – Applicability, Analysis, and Ratios**

Working capital management is the process of managing these short-term assets and liabilities to ensure the company has adequate liquidity to operate smoothly.

## **2.2 RELEVANCE OF WORKING CAPITAL**

The working capital ratio is crucial to creditors as it shows the liquidity of the company. The liabilities of current nature are paid with current assets like marketable securities, cash, and cash equivalents. The faster an asset can be converted into liquid cash, more likely that the company will be able to pay off its debts.

When the current liabilities are exceeded by the current assets, the business will have ample capital for its daily operations. In other words, it will have enough capital to work with.

This ratio is a measure of a company's short-term financial health and its efficiency.

Anything that is below 1 is indicative of a negative W/C (working capital). While anything that is over 2 indicates that the company is not investing the excess assets. Most ideally this ratio should be between 1.2 and 2.0. Another name for working capital is net working capital.

**Working Capital = Current Assets – Current Liabilities**

### **2.2.1 Measure the efficiency of working capital**

Working capital efficiency can be measured by certain ratios. The working capital cycle and other working capital ratios are compared to other industry benchmarks or the company's peers.

Some of the measures used in estimating the efficiency of working capital management include current ratio, days of payables outstanding, days of inventory outstanding, days of sales outstanding, etc. Due to the small scale of operations in small business, liquidity tends to be in tight supply and investment in the area of working capital can be an issue.

Many small businesses are unable to fund their operating cycles with account payables and hence, have to rely on the cash that is generated through the internal sources like the owner, etc. if the working capital is managed efficiently, the business will be able to free up cash to pay debts or for reinvestments.

**Working Capital can be divided into two main categories:**

A. Based on capital

1. Gross Working Capital
2. Net Working Capital

B. Based on time period

1. Fixed Working Capital
2. Variable Working Capital

### **2.2.2 Importance of Gross Working Capital**

Investments in current assets must not be either excessive or inadequate as it can threaten the production capacity and the solvency of the company. It also undermines the profit of the business.

### **2.2.3 Importance of Net Working Capital**

Net working capital is crucial for maintaining a position of liquidity and to make sure that current assets exceed current liabilities. This is also the number that gives the creditor a clear picture into the financial soundness of your business.

#### **2.2.4 Estimating the working capital of your business**

- ❖ Unless it is specified otherwise, the calculation of stocks of the finished products and debts should be made at cost.
- ❖ Profits are to be ignored when calculating the working capital as profits may or may not be used as working capital and even in the scenario of it being used the amount will be reduced due to taxes, dividends, etc.
- ❖ Unless mentioned otherwise, take into consideration the 100 percent value of WIP.

**2.3 Natarajan Sundar (1980)** is of the opinion that working capital is important at both, the national and the corporate level. Control on working capital at the national level is exercised primarily through credit controls. The Tandon Study Group has provided a comprehensive operational framework for the same. In operational terms, efficient working capital consists of determining the optimum level of working capital, financing it imaginatively and exercising control over it. He concludes that at the corporate level investment in working capital is as important as investment in fixed assets. And especially for a company which is not growing, survival will be possible only so long as it can match increase in operational cost with improved operational efficiency, one of the most important aspects of which is management of working capital.

**2.4 Rao K.V. and Rao Chinta (1991)** observe the strong and weak points of conventional techniques of working capital analysis. The result has been obviously mixed while some of the conventional techniques which could comprehend the working capital behavior well; others failed in doing the job properly. The authors have attempted to evaluate the efficiency of working capital management with the help of conventional techniques i.e., ratio analysis.

**2.5 Hossain, Syed Zabid (1999)** throws light on the various aspects of working capital position. He has evaluated working capital and its components through the use of ratio analysis. For each aspect of analysis certain ratios are computed and then results are compared with the standard ratio or industry average.

**2.6 Smith Keith V. (1973)** believes that Research which concerns shorter range or working capital decision making would appear to have been less productive. The inability of financial managers to plan and control properly the current assets and current liabilities of their respective firms has been the probable cause of business failure in recent years. Current assets collectively represent the single largest investment for many firms, while current liabilities account for a major part of total financing in many instances. This paper covers eight distinct approaches to working capital management. The first three - aggregate guidelines, constraints set and cost balancing are partial models; two other approaches - probability models and portfolio theory, emphasize future uncertainty and interdependencies while the remaining three approaches - mathematical programming, multiple goals and financial simulation have a wider systematic focus.



**2.7 Batra G. S. and Sharma A. K. (1999)** analyze the working capital position of Goetze (I) Ltd. with the help of various ratios. They are of the view that the working capital position in the company is quite satisfactory although they have suggested a few measures for further improvement in management of working capital, like necessity of greater attention in the inventory control; active sales department, speedy dispatch of orders and reduction of dependency on trade creditors.

## **CHAPTER -3**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 INTRODUCTION**

Research design is the base on which researcher proceed toward the study of the problem after formulating hypothesis. It refers to the methodology used to conducting the research investigation. It is a process of making decisions before the situation arises in which the decision has to carried out. It is the blueprint of the detailed procedure of testing the hypothesis and analysis of the obtained data.

A research design in simple words is a plan of action, a plan for collecting and analyzing data in an economic, efficient and relevant manner.

The purpose of preparing research design could be either to test the hypothesis or to give a cause effect relationship to the given situation. A research design is the arrangement of conditions for collection and analysis data in a manner that aims to combine relevance to the research purpose with economy in procedure.

## **3.2 RESEARCH DESIGN**

The collection of essential information to prove their hypothesis is a significant and distinctive stage of research in any science. The sources of information are generally classified as primary data and secondary data.

### **3.2.1.Primary data**

Primary data are information collected or generated by the researcher for the purpose of the project immediately at hand.

When the data are collected for the first time, the responsibility for the processing of data also rest-with the original researcher.

The primary data are those which are collected a fresh and for the first time. This type of data is also called basic or original data. In other words the primary data refer to observations, measurements, answers, information which the researcher collect for the purpose of research.

### **3.2.2.Secondary data**

Where by the analysis relies on already existing data that may be either published or unpublished. This source of data is updated source of information.

Researcher has collect data from books in university of Pune and libraries further Internet websites and published journals, which published by The Institute of Chartered Accountants of India.

### 3.3 QUESTANNARIE

#### BINARY QUESTIONS

Please tick ( v ) next to the appropriate answer:

Q1-There is no relationship between working capital management efficiency and profitability.

YES \_\_\_\_\_ NO \_\_\_\_\_

Q2-The proportions of working capital components affect the efficiency of the Working capital .

YES \_\_\_\_\_ NO \_\_\_\_\_

Q3-Profitability could be increased at the expense of liquidity.

YES \_\_\_\_\_ NO \_\_\_\_\_

Q4-Working capital. can be managed efficiently by maintaining optimum level of its components.

YES \_\_\_\_\_ NO \_\_\_\_\_

Q5- it is considered a good working capital management if current assets of the company are able to fulfill all its current liabilities.

YES \_\_\_\_\_ NO \_\_\_\_\_

Q6 - Cash position and bills receivable decide the liquidity of a firm

YES \_\_\_\_\_ NO \_\_\_\_\_

Q7- There is a negative relationship between liquidity of the company and its profitability.

YES \_\_\_\_\_ NO \_\_\_\_\_

Q8- Negligence in proper assessment of the working capital lead to cash crisis and ultimately to liquidation.

YES \_\_\_\_\_ NO \_\_\_\_\_

Q9- Efficient working capital management is expected to improve a company's profitability and liquidity.

YES \_\_\_\_\_ NO \_\_\_\_\_

Q10. Management of working capital by managing cash, debtors and creditors are important to the financial health of businesses.

YES \_\_\_\_\_ NO \_\_\_\_\_

## MULTIPLE CHOICE QUESTIONS

Q1. Working capital management plays an important role to increase;

- a) Profitability.
- b) Liquidity.
- c) Both.

Q2. Working capital can be optimized by

- a) Managing cash.
- b) Managing bills receivable and payables.
- c) Managing debtors and creditors.
- d) All of these.

Q3. Poor working capital management can lead to

- a) Over capitalization.
- b) Over trading.
- c) Both.

Q4. Working capital for the bank is calculated

- a) Weekly.
- b) Monthly.
- c) quarterly

d) Yearly.

Q5. Good working capital management help in

- a) Helping to earn interest or reducing interest payments over trading.
- b) Helping managers take financial responsibility.
- c) Helping managers to measure their own performance and the performance of their team.
- d) All of these.

Q6. For working capital assessment documents/papers required are

- a) Balance sheet.
- b) Profit & loss account.
- c) Both.



### **3.4 RESEARCH APPROACHES:**

Research can be approached in the following ways:-

- Quantitative/Qualitative
- Applied/Basic
- Deductive/Inductive

Many research projects combine a number of approaches, e.g. may use both quantitative and qualitative approaches.

#### **3.4.1 Quantitative Research**

The emphasis of Quantitative research is on collecting and analysing numerical data; it concentrates on measuring the scale, range, frequency etc. of phenomena. This type of research, although harder to design initially, is usually highly detailed and structured and results can be easily collated and presented statistically

#### **3.4.2 Qualitative Research**

Qualitative research is more subjective in nature than Quantitative research and involves examining and reflecting on the less tangible aspects of a research subject, e.g. values, attitudes, perceptions. Although this type of research can be easier to start, it can be often difficult to interpret and present the findings; the findings can also be challenged more easily.

### **3.4.3 Basic**

The primary aim of Basic Research is to improve knowledge generally, without any particular applied purpose in mind at the outset.

### **3.4.4 Applied Research**

Applied Research is designed from the start to apply its findings to a particular situation. Students at the school of Management are expected to engage with an applied research or problem solving research project.

## **CHAPTER-4**

### **DATA ANALYSIS AND INTERPRETATION**

#### **4.1 INTRODUCTION**

Analysis of data is the ordering of data into constituent parts in order to obtain answers to the research questions.

The first step in data analysis will depend on the amount of specified hypothesis the researcher have. In such a study the analysis is almost a mechanical procedure.

Analysis consists of organization data in a particular manner. Then it is the interpretation idea that governs this task. Without interpretation coming into play the task of analysis will not be complete . Interpretation is the research operation, which is geared to exposing or bringing to light the broader meaning of the research findings or conclusions by linking them to other available knowledge or established theories and principles. It helps to understand what the given research findings really mean.

It can be descriptive or analytical or it can be from a theoretical standpoint . Negative results are much harder to interpret than positive results . Interpretation consists of the conclusion the researcher has reached. Positive results are evidence of the fact that methodology, the measurement and the analysis are satisfactory.

## **4.2 PROFILE OF BERGER PAINTS PVT LTD**

The name Berger or Lewis Berger is today synonymous with colour worldwide. But actually the origin of the name dates back to over two & a half centuries in England in 1760, when a young colour chemist named Lewis Berger, started manufacturing in Europe, 'Prussian blue' using a secret process that every designer and householder coveted. Mr. Berger perfected this process & art of the blue colour, which was the colour of most military uniforms of that time. Enriched by the imagination of Lewis Berger, the unending quest for creation and innovation in the world of colour & paints still continues.

The history of Berger Paints India Limited as a company started in 1923 as Hadfield's (India) Limited which was a small colonial venture producing ready-mixed stiff paints, varnishes and distempers setup on 2 acres of land in one of India's first industrial towns close to Kolkata in Howrah, Bengal. Subsequently in 1947, British Paints (Holdings) Limited, an international consortium of paint manufacturing companies bought over Hadfield's (India) Limited and thus the name changed to British Paints (India) Ltd. The gentleman who took over, as its first managing director was Mr. Alexander Vernon Niblet, an Englishman who was later on followed by Mr. Alfred Godwin in 1962.

Further in the year 1965, the share capital of British Paints (Holdings) Limited was acquired by Celanese Corporation, USA and the controlling interest of British Paints (India) Ltd was acquired by CELEURO NV, Holland, a Celanese subsidiary.

### 4.3 VISION

To be the most admired indian paints and coating solutions company with globally recognised competencies.

### 4.4 MISSION

To maximise shareholder value by developing and delivering innovative and best solutions for our customers , consistently outperforming our peers and providing a dynamic and challenging work environment our employees.

### 4.5 ADVANTAGES

With the company, you are assured of several unmatched advantages. These include:

- ❖ **Aesthetic appeal:** Its decorative paints are available in a wide range of elegant and contemporary colors and textures. They are perfect for creating your dream home.
- ❖ **Durability:** Both, its exterior and interior paints are designed to withstand a lot of wear and tear and to resist fading due to UV exposure. They are also low maintenance.
- ❖ **Ease of application:** Its decorative paints and finishes ensure a very easy and hassle free application. They also dry fairly quickly, so you can apply more coats in less time.
- ❖ **Affordability:** They offer the most cost effective paints, especially if you consider the other great benefits they offer.

## 4.6 ANALYSIS OF QUESTIONNAIRE

**1. Question:** There is no relationship between working capital management efficiency and profitability .

**Answer:** No there is relationship between working capital management efficiency and profitability as the efficient working capital management increases the profitability.

**2. Question:** The proportions of working capital components affect the efficiency of the working capital management.

**Answer:** Yes the proportions of working capital components affect the efficiency of the working capital management.

**3. Question:** Profitability could be increased at the expense of liquidity.

**Answer:** Yes profitability Increases at the expenses of liquidity as there is negative relationship between liquidity and profitability any increase in profitability there is decrease in liquidity and any decrease in profitability there is increase in liquidity.

**4. Question:** Working capital can be managed efficiently by maintaining optimum level of its components.

**Answer:** Yes working capital can be managed efficiently by maintaining optimum level of its components (cash, marketable securities .... etc)

**5. Question:** It is considered a good working capital management if current assets of the company are able to fulfill all its current liabilities.

**Answer:** Yes if the current assets are able to fulfill all its current liabilities the working capital in this case is good because current assets more than current liabilities.

**6. Question:** Cash position and bills receivable decide the liquidity of firm.

**Answer:** Yes Cash position and bills receivable decide the liquidity of a firm.

**7. Question:** There is a negative relationship between liquidity of company and its profitability.

**Answer:** Yes there is a negative relationship between liquidity of company and its profitability any increase in profitability there is decrease in liquidity and any decrease in profitability there is increase in liquidity.

**8. Question:** Negligence in proper assessment of the working capital lead to cash crisis and ultimately to liquidation.

**Answer:** Yes negligence in proper assessment of the working capital lead to cash crisis and ultimately to liquidation.

**9. Question:** Efficient working capital management is expected to improve a company's profitability and liquidity.

**Answer:** Yes efficient working capital management is expected to improve a company's profitability and liquidity.

**10.Question:** Management of working capital by managing cash, debtors and creditors are important to the financial health of businesses.

**Answer:** Yes management of working capital by managing cash, debtors and creditors are important to the financial health of businesses

**MCQs (Answers)**

1. (c)

2. (d)

3. (c)

4. (d)

5. (d)

6. (a)



## 4.7 CASH FLOW STATEMENT

<b>Berger Paints India</b>		Previous Years »				
Cash Flow	----- in Rs. Cr. -----					
	Mar '19	Mar '18	Mar '17	Mar '16	Mar '15	
	12 mths	12 mths	12 mths	12 mths	12 mths	
<b>Net Profit Before Tax</b>	<b>692.26</b>	<b>661.81</b>	<b>0.00</b>	<b>537.00</b>	<b>396.25</b>	
Net Cash From Operating Activities	495.01	399.43	0.00	0.00	312.01	
Net Cash (used in)/from Investing Activities	-369.97	-168.92	0.00	0.00	-168.71	
Net Cash (used in)/from Financing Activities	-158.96	-195.04	0.00	0.00	-165.22	
<b>Net (decrease)/increase In Cash and Cash Equivalents</b>	<b>-33.92</b>	<b>35.47</b>	<b>0.00</b>	<b>-32.17</b>	<b>-21.92</b>	
Opening Cash & Cash Equivalents	61.16	25.69	0.00	62.06	163.07	
Closing Cash & Cash Equivalents	27.24	61.16	0.00	29.89	141.15	

### Notes :

- The above Cash Flow Statement has been prepared under the 'Indirect Method' as set out in the Indian Accounting Standard 7 (Ind AS -7) "Statement of Cash Flow".
- Cash comprises cash on hand and current accounts with banks. Cash equivalents are short-term balances (with an original maturity of three months or less from the date of acquisition), current investments that are convertible into known amounts of cash and which are subject to insignificant risk of changes in value.

## **CHAPTER- 5**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 CONCLUSIONS**

Working Capital is the prime and most important requirement for carrying out the day to day operations of the business. Working Capital gives the muchneeded liquidity to the business. Working Capital Finance reduces the overall fund requirement, required to build up the Current Assets, which in turn help you improve your Turn over Ratio..

Thus in my project I tried to give brief outline of ratio analysis (i.e. How to analyze the facts and figures given in the financial statements) from the angle of all stake holders.

On basis of the above information, we may further conclude that these results (findings) can be further strengthened if the companies manage their working capital in ways that are more efficient. Management of working capital means "management of current assets and current liabilities, and financing these current assets".

If those companies properly manage their cash, accounts receivables and inventories in a proper way, this will ultimately increase profitability of those companies.

## 5.2 RECOMMENDATIONS AND SUGGESTIONS

1) Establish systems to measure working capital. Check whether levels of working capital can be measured accurately and regularly, ideally on a daily basis, and certainly on a weekly basis.

It needs system that will allow the company to state the, amount of cash, bills receivable, bills payable, debtors and creditors.

2) Record past and current levels of working capital knowing the point. This helps in setting a realistic budget and will enable the company to establish times of the month/year when elements of working capital are higher/lower.

3) Management of cash is one of the most important areas in the management of working capital in company.

Managing cash should involves the following issues:

- a. The preparation and use of cash budget.
- b. Management of short-term cash investment.
- c. Use of cash management models.

4) companies should determine how much working capital should be invested and how should the investment in working capital be financed.

5) The decision regarding the level of overall investment in working capital is a cost/benefit trade-off between Liquidity & profitability, or Cash flow & profits.

## **CHAPTER-6**

### **BIBLIOGRAPHY**

- ❖ Batra G. S., and Sharma A. K., (1999), Working Capital Management in Corporate Sector, Working Capital Management, Edited by Rao Mohana D and Pramanik Alok Kumar, Deep and Deep Publications Pvt. Ltd., New Delhi, pp. 51-64
- ❖ Hossain, Saiyed Zabid, and Akon, Md. Habibur Rahman, (1997), Financing of Working Capital: Case Study of Bangladesh Textile Mills Corporation, Journal of Financial Management and Analysis, Vol.10, No. 2, pp. 37-43
- ❖ Natarajan, Sundar, (1980), Working Capital Management and Finance, Economic and Political Weekly, Vol.15 No.8, pp. M25+M27-M31
- ❖ Rao, K.V. and Rao, Chinta. (1991), Evaluating Efficiency of Working Capital Management – Are the Conventional Techniques Adequate? Decision, Vol.18 No. 2, pp. 81-97
- ❖ Smith, Keith V., (1973), State of the Art of Working Capital Management, Financial Management, Vol. 2 No. 3, pp. 50-55

## APPENDICES

### BALANCE SHEET OF BERGER PAINTS INDIA LTD

<b>Berger Paints India</b>	<b>Previous Years »</b>				
<b>Consolidated Profit &amp; Loss account</b>	----- in Rs. Cr. -----				
	<b>Mar '20</b>	<b>Mar '19</b>	<b>Mar '18</b>	<b>Mar '17</b>	<b>Mar '16</b>
	12 mths	12 mths	12 mths	12 mths	12 mths
<b>Income</b>					
Sales Turnover	6,365.82	6,061.86	5,282.12	5,050.45	4,683.85
Net Sales	6,365.82	6,061.86	5,282.12	5,050.45	4,683.85
Other Income	68.52	57.85	47.05	97.05	34.10
Stock Adjustments	18.80	173.95	99.97	125.09	19.62
<b>Total Income</b>	<b>6,453.14</b>	<b>6,293.66</b>	<b>5,429.14</b>	<b>5,272.59</b>	<b>4,737.57</b>
<b>Expenditure</b>					
Raw Materials	3,744.61	3,884.98	3,119.62	2,725.38	2,496.04
Power & Fuel Cost	0.00	59.13	48.27	43.79	42.15
Employee Cost	452.50	408.51	356.58	306.72	273.50
Selling and Admin Expenses	0.00	201.75	248.73	241.34	207.77
Miscellaneous Expenses	1,126.52	799.87	675.08	633.37	578.52
Total Expenses	5,323.63	5,354.24	4,448.28	3,950.60	3,597.98
	<b>Mar '20</b>	<b>Mar '19</b>	<b>Mar '18</b>	<b>Mar '17</b>	<b>Mar '16</b>
	12 mths	12 mths	12 mths	12 mths	12 mths
<b>Operating Profit</b>	<b>1,060.99</b>	<b>881.57</b>	<b>933.81</b>	<b>1,224.94</b>	<b>1,105.49</b>
PBDIT	1,129.51	939.42	980.86	1,321.99	1,139.59
Interest	47.04	32.33	24.55	16.22	27.28
PBDT	1,082.47	907.09	956.31	1,305.77	1,112.31
Depreciation	191.01	137.77	124.21	108.05	98.65
Profit Before Tax	891.46	769.32	832.10	1,197.72	1,013.66
PBT (Post Extra-ord Items)	891.46	769.32	832.10	1,197.72	1,013.66
Tax	227.06	273.15	243.91	229.42	188.62
<b>Reported Net Profit</b>	<b>664.40</b>	<b>498.76</b>	<b>460.19</b>	<b>463.61</b>	<b>364.87</b>
Minority Interest	-1.71	0.00	0.00	0.00	0.00
Share Of P/L Of Associates	8.30	0.90	-0.64	-10.05	-5.69
Net P/L After Minority Interest & Share Of Associates	657.81	497.45	587.65	935.84	831.31
Total Value Addition	1,579.02	1,469.26	1,328.66	1,225.22	1,101.94
Equity Dividend	0.00	174.78	169.93	97.09	90.14
Corporate Dividend Tax	0.00	35.93	34.59	19.76	18.35
<b>Per share data (annualised)</b>					
Shares in issue (lakhs)	9,712.00	9,711.30	9,710.31	9,709.87	6,934.78