*International Journal of Innovative Research in Management Studies (IJIRMS)*
*Volume 1, Issue 11, December 2016. pp.47-52.*

# A STUDY ON WORKING CAPITAL MANAGEMENT IN EXIDE INDUSTRIES LTD., HOSUR

**M.Lalitha[1], R.Guna[2] and K.Vijayakumar[3]**

[1]*MBA Student, Paavai Engineering College (Autonomous), Pachal, Namakkal*
[2]*MBA Student, Paavai Engineering College (Autonomous), Pachal, Namakkal*
[3]*MBA Student, Paavai Engineering College (Autonomous), Pachal, Namakkal*
*Email: [1]lallimurugesh27@gmail.com, [2]gunagold6@gmail.com, [3]vijaykumamba2015@gmail.com*

**Abstract—***This finance project report on working capital management is based on the study of working capital management in Exide batteries. An insight view of the project will encompass what it is all about, what it aims to achieve, what is its purpose and scope, the various methods used for collecting data and their sources, including literature survey done, further specifying the limitations of our study and in the last, drawing inferences from the learning so far. The working capital management refers to the management of working capital, or precisely to the management of current assets. A firm's working capital consists of its investments in current assets, which includes short-term assets-cash and bank balance, inventories, receivable and marketable securities.*

**Keywords—***Assets, Capital, Investment, Finance, Working Capital*

## INTRODUCTION

Capital required for a business can be classified under two main categories via,

1) Fixed Capital
2) Working Capital

Every business needs funds for two purposes of its establishment and to carry out its day-to-day operations. Long terms funds are required to create production facilities through purchase of fixed assets such as p&m, land, building, furniture, etc. Investments in these assets represent that part of firm's capital which is blocked on permanent or fixed basis and is called fixed capital. Funds are also needed for short-term purposes for the purchase of raw material, payment of wages and other day – to – day expenses etc.

These funds are known as working capital. In simple words, working capital refers to that part of the firm's capital which is required for financing short-term or current assets as cash, marketable securities debtors & inventories. Funds, thus, invested in current assets keep revolving fast and are being constantly converted in to cash and this cash flows out again in exchange for other current assets. Hence, it is also known as revolving or circulating capital or short term capital.

### Concepts of Working Capital:

There are two concepts of working capital:

- Gross Working Capital
- Net Working Capital

### Gross Working Capital:

Gross Working Capital refers to the firm's investment in current assets. Current assets are the assets, which can be converted into cash with in an accounting year and include cash, short-term securities, debtors, bills receivable and stock.

### Net Working Capital:

Net Working Capital refers to the difference between current assets and current liabilities. Current liabilities are the claims of outside which are expected to mature for payment with in an accounting year. It includes debtors, bills payable and outstanding expenses. Net working capital can be positive are negative. A positive working capital will arise when current assets exceed current liabilities and a negative exceeds current assets.

NET WORKING CAPITAL = CURRENT ASSETS – CURRENT LIABILITIES

**Classification of Working Capital**

Working capital may be classified in two ways

On the basis of concept.

On the basis of time

On the basis of concept working capital can be classified as gross working capital and net working capital. On the basis of time, working capital may be classified as:

1) Permanent or fixed working capital
2) Temporary or variable working capital

**Permanent or Fixed Working Capital**

Permanent or fixed working capital is minimum amount which is required to ensure effective utilization of fixed facilities and for maintaining the circulation of current assets. Every firm has to maintain a minimum level of raw material, work-in-process, finished goods and ash balance. This minimum level of current assets is called permanent or fixed working capital as this part of working is permanently blocked in current assets. As the business grow the requirements of working capital also increases due to increase in current assets.

**Temporary or Variable Working Capital**

Temporary or variable working capital is the amount of working capital which is required to meet the seasonal demands and some special exigencies. Variable working capital can further be classified as seasonal working capital and special working capital. The capital required to meet the seasonal need of the enterprise is called seasonal working capital. Special working capital is that part of working capital which is required to meet special extensive marketing for conducting research etc.

Temporary working capital differs from permanent working capital in the sense that is required for short periods and cannot be permanently employed gainfully in the business.

**OBJECTIVES OF THE STUDY**

- To analyse the changes in the working capital of Exide battery industry, for period of five years.
- To analyse the financial performance of the company using ratios.
- To identify the liquidity position of the company.
- To suggest suitable measure so as to improve the working capital position.
- To study the need and importance of working capital.

**SCOPE OF THE STUDY**

- The analysis is mainly carried out to find out the working capital management of The Exide industry battery.
- Food industry is a seasonal agricultural based industry in which the working capital management plays an important role.
- Study is conducted to review the performance of the working capital management of the company for a period of five years.
- The study would also attempt to identify the various sources available for financing of working capital It also provides suitable suggestions and conclusions based on the findings.

**LIMITATIONS OF THE STUDY:**

- Financial analysis is based upon monetary information.
- As the financial statements are prepared on the basis of a going concern, it does not give exact position.
- The accounting concepts and conversion cause a serious limitation to financial analysis.
- Working capital management is a wide term and the study is limited to the time available.
- External factors that affect the financial performance of company have not given much importance.

**RESEARCH METHODOLOGY**

Primary data aim of this battery is to investigate the impact working capital management on profitability of Exide industry battery. This is achieved by developing a similar empirical frame work first used by Exide industries Ltd (1916) and the Exide insurance (2013). This study focus exclusively on the Exide industries limited. The data reported batteries were collected for a period 2012 to 2016. As a part of study as designed to analyse profitability working capital management from financial reports. The primary data was collected by means of personal visits to the manufacturing unite and having private interview which the officials concerned and the secondary data constitutes audited financial statement broachers, bulletins, strategically returns and company profile

**TOOLS USED FOR ANALYSIS DATA**

The collection data were tabulated and presented in appropriate places of various chapters. The performance of the business was evaluated by analysing and interpreting the financial statements of The Exide Industries Ltd., Hosur with the help of Ratio Analysis.

**RATIO ANALYSIS**

The short-term creditors of a company are primarily interested in knowing the company's ability meet its current or short-term obligations as and when these become due. A firm must ensure that it does not suffer from lack of liquidity or capacity to pay its current obligation which is a will to the company. And this can be known by liquidity position This paper deals with a critical evaluation and analytical interpretation of the financial performance of Houser Exide industry batteries Ltd and Amarraj industry battery Ltd comparative study relating to short-term solvency for the study period from 2011 to 2016. This study of solvency is now analyse by adopting short term liquidity position.

A ratio is a simple arithmetic expression one number to another. Ratio analysis is a technique of ratio analysis can be employed for measuring short term liquidity or working capital position of a firm. The following ratio can be calculated for these purposes-

Three steps involved in ratio analysis are:

- Current ratio.
- Quick ratio.
- Absolute liquid ratio
- Inventory turnover.
- Receivables turnover.
- Payable turnover ratio.
- Working capital turnover ratio.
- Working capital leverage.
- Ratio of current liabilities to tangible net worth

**SHORT TERM LIQUIDITY POSITION**

**WORKING CAPTIAL TURNOVER RATIO**

Working capital of a concern is directly related to sales (i.e.) the current assets like debtors, bills receivables, cash, stock etc., and change with the increase (or) decrease in sales.

**Working capital = Current Assets - Current liabilities**

This excess of current assets over current liabilities is referred to as net working capital. Working capital turnover ratio indicated the velocity of the utilization of net working capital. This ratio indicated the number of times the working capital is turned over in the course of a year. A higher ratio indicates efficient utilization of working capital and a low ratio indicated otherwise.

$$\textbf{WORKING CAPITAL TURNOVER RATIO} = \frac{\textbf{Sales}}{\textbf{Working capital}}$$

**TABLE 1: WORKING CAPITAL TURNOVER RATIO**

| *Year* | *Sales (In lakhs)* | *Networking capital (In lakhs)* | *Ratio (Rs in Cr)* |
|---|---|---|---|
| 2011-12 | 5668.52 | 509.51 | 11.12 |
| 2012-13 | 6071.37 | 730.28 | 8.31 |
| 2013-14 | 6754.77 | 715.45 | 9.44 |
| 2014-15 | 7655.42 | 986.13 | 7.76 |
| 2015-16 | 7727.35 | 400.75 | 19.28 |

Source: Secondary data

From the above table shows that the working capital turnover ratio is 11.12 in 2011-12 and decreased to 8.31 in 2012-13 and increased 9.44 in 2013-14 and decreased to 2014-15 in 2014-15and increased to 19.28 in 2015-16. This shows working capital turnover ratio is fluctuating.

**INVENTORY TURNOVER RATIO**

Inventory turnover ratio implicates the number of times the stock has been turned over during the period and evaluates the efficiency with which a firm is able to manage its inventory.

$$\textbf{INVENTORY TURN OVER RATIO} = \frac{\textbf{Cost of goods sold}}{\textbf{Average stock}}$$

$$\textbf{Average Stock} = \frac{\textbf{Opening stock + closing Stock}}{\textbf{2}}$$

**TABLE 2: INVENTORY TURNOVER RATIO**

| *Year* | *Cost of goods sold (In lakhs)* | *Average stock (In lakhs)* | *Ratio (Rs in Cr)* |
|---|---|---|---|
| 2011-12 | 5668.52 | 913.53 | 6.20 |
| 2012-13 | 6071.37 | 1067.61 | 5.68 |
| 2013-14 | 6754.77 | 1176.33 | 5.74 |
| 2014-15 | 7655.42 | 1354.16 | 5.65 |
| 2015-16 | 7727.35 | 1328.13 | 5.81 |

Source: Secondary data

The above table shows that the inventory turnover ratio from 2011-12 to 2015-16. The ratio shows increasing trend during the study period. The ratio shows highest as 6.20 at 2011-12 and shows lowest as 5.68 at 2012-13. The ratio indicates at the year 2011-12 the company performs better of inventory and at the year 2015-16 the company performs low level of inventory.

**DEBTORS TURNOVER RATIO**

The liquidity position of a concern to pay its short term obligations in time depends upon the quality of its debtors. Debtors turn ratio indicates the velocity of debtor’s collection firm (i.e.) it indicates the number of times average debtors are turned over during a year.

$$\textbf{DEBTORS TURN OVER RATIO} = \frac{\textbf{Sales}}{\textbf{Average Debtors + Bills Receivable}}$$

**TABLE 3: DEBTORS TURNOVER RATIO**

| *Year* | *Sales (In lakhs)* | *Average Debtors (In lakhs)* | *Ratio (Rs in Cr)* |
|---|---|---|---|
| 2011-12 | 5668.52 | 384.26 | 14.75 |
| 2012-13 | 6071.37 | 455.74 | 13.32 |
| 2013-14 | 6754.77 | 512.91 | 13.16 |
| 2014-15 | 7655.42 | 535.83 | 14.28 |
| 2015-16 | 7727.35 | 581.26 | 13.29 |

Source: Secondary data

From the above table shows that the Debtors turnover ratio lies within its upper limit and also maintains a reasonable level which is useful for the liquidity of the firm. The ratio shows lowest as 13.29 at 2015-16 and shows highest as 14.75 at 2011-12 and there is no standard norm for Debtors turnover ratio.

**GROSS PROFIT RATIO**

The gross profit ratio is also known as gross margin ratio, trading margin ratio etc., it is expressed as a “percent ratio”. The different between net sales and cost of goods sold is known as gross profit.

$$\textbf{GROSS PROFIT RATIO} = \frac{\textbf{Gross profit / Loss}}{\textbf{Net Sales}}$$

**TABLE 4: GROSS PROFIT RATIO**

| *Year* | *Gross Profit / Loss (In lakhs)* | *Net Sales (In lathes)* | *Ratio (Rs in Cr)* |
|---|---|---|---|
| 2011-12 | 745.85 | 5107.04 | 0.14 |
| 2012-13 | 855.76 | 6071.37 | 0.15 |
| 2013-14 | 848.68 | 5964.24 | 0.14 |
| 2014-15 | 938.01 | 6874.21 | 0.14 |
| 2015-16 | 1066.42 | 6809.18 | 0.16 |

Source: Secondary data

The above table shows that the gross profit ratio. This ratio is an indicator of the firm's ability to meet its current obligations. The lowest ratio 0.14) was obtained during the period 2011-12 and the highest ratio (0.16) value obtained during the period 2015-16.

**NET PROFIT RATIO**

It establishes a relationship between net profit (after tax) and sales. It is determined by dividing the net income after tax to the sales for the period and measures the profit per rupee of sales.

$$\textbf{NET PROFIT RATIO} = \frac{\textbf{Net profit / Loss}}{\textbf{Net Sales}} \times 100$$

**TABLE 5: NET PROFIT RATIO**

| *Year* | *Net Profit / Loss (In lakhs)* | *Net Sales (In lakhs)* | *Ratio (%) (Rs in Cr)* |
|---|---|---|---|
| 2011-12 | 461.17 | 5107.04 | 9.03 |
| 2012-13 | 522.78 | 6071.37 | 8.61 |
| 2013-14 | 487.08 | 5964.24 | 8.16 |
| 2014-15 | 545.87 | 6874.21 | 7.94 |
| 2015-16 | 622.77 | 6809.18 | 9.14 |

Source: Secondary data

The above table shows that the Net profit ratio from 2011-12 to 2015-16. The ratio shows that (7.94) at 2014-15 and increased to 9.14) at 2015-16 and again it was continuously flexible to year by year.

**FINDINGS**

1. The working capital turnover ratio is 11.12 in 2011-12 and decreased to 8.31 in 2012-13 and increased 9.44 in 2013-14 and decreased to 2014-15 in 2014-15 and increased to 19.28 in 2015-16. This shows working capital turnover ratio is fluctuating.
2. The inventory turnover ratio indicates at the year 2011-12 the company performs better of inventory and at the year 2015-16 the company performs low level of inventory.
3. The Debtors turnover ratio lies within its upper limit and also maintains a reasonable level which is useful for the liquidity of the firm. The ratio shows lowest as 13.29 at 2015-16 and shows highest as 14.75 at 2011-12 and there is no standard norm for Debtors turnover ratio.
4. This gross profit ratio is an indicator of the firm's ability to meet its current obligations. The lowest ratio 0.14) was obtained during the period 2011-12 and the highest ratio (0.16) value obtained during the period 2015-16.
5. The Net profit ratio from 2011-12 to 2015-16. The ratio shows that (7.94) at 2014-15 and increased to 9.14) at 2015-16 and again it was continuously flexible to year by year.

**CONCLUSION**

"Cash is the life blood of business" is the maximum amongst financial managers. Working capital management refers to the management of current of short-term assets and short-term liabilities with its sound financial position. It is important that Exide industries Ltd by produce working capital management and however it facts problems in respect of collecting does from its customers like central and stare government owned public sector units. In recent years by implementing all the latest technology and techniques in all areas and employing all the control measures its efficiency in managing working capital is improving every year. Overall the profitability of the company is good.

## BIBLIOGRAPHY

[1] Ambrish Gupta (2009). Financial Accounting for Management. Third Edition. Dorling Kindersley (India) Pvt. Ltd., New Delhi.
[2] Gerald I. White et al (2007). The Analysis and Use of Financial Statements. Third Edition. Wiley India (P) Ltd., New Delhi.

*****