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A STUDY ON ANALYSIS OF WORKING CAPITAL MANAGEMENT IN BHEL, TRICHY

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Abstract—*This study focused on the working capital management of the Bharat Heavy Electricals Limited (BHEL) company which is located in Trichy. The day to day expenses is most important aspects in any business, a company will maintain the fluctuation related to their sales because excess working capital causes no profit and the shortage of working capital cause rate of return on investment. The paper is used to determine how the working capital is maintain, to know how the working capital is being financed and understanding how efficiently it managed, to identify five years of the debtor, creditor, inventory and working capital turnover ratio and finally make the recommendation and suggestion for the better working capital management in BHEL. These are the things are attached as below for improving the organization and moving without any distraction or deviation towards the goal.*

Keywords—*Awareness, Cash Management, Goodwill, Inventory Management, Profit, Working Capital Management.*

INTRODUCTION

BHEL produce a transmission equipments and electric power generation. BHEL, a public-sector industry under in the country. The industry manufacturing power generating equipment under one roof. Existing technology should upgrade by this industry but now taking turnkey contract for export market. Performance of the power sector and the development of the Indian heavy electrical machinery linked together in India. To growth of the industry is depends upon the better power supply. If focus on the capacity expansion in the power sector is increase, then the heavy electrical machinery manufacturing industry also expanding.

Working capital management is the most important aspects of the financial statements. It means managing all the aspects of the working capital (i.e., current assets and current liabilities). It is process of planning, directing and controlling the current assets of the industry and also it involves managing the relationship between the industries short term assets and short term liabilities. Working capital management helps to maintain the solvency of the business. Solvency is an ability of a firm to meet its long term financial statements. Working capital makes a security environment, create a confidence and also the overall efficiency of the business. It can arrange the loans from bank and make others on easy and favorable terms.

Working capital is used to maintain the goodwill for the business concern. It can able to face the business concern in emergencies such as depression. To managing the working capital (i.e., current assets and current liabilities) is used to maintaining the satisfactory level of working capital (i.e., neither excessive nor inadequate working capital). Profitability of the firm may improve while the working capital is converted into too small.

Funds required for two purpose (i.e, investment in fixed assets and investment in current assets) and cash may be the source of three things (i.e., raw material, labour cost and other expenses). These three are combined and generate work in progress, which is converted into finished goods. Working capital is need for managing the sales activities. If the working capital is not maintaining properly, then the firm will not able to manage the sales activity, to purchase raw material, pay wages and day- to- day requirements.

OBJECTIVES

- To study in general working capital management in BHEL and to determine how it is financed.
- To know how the working capital is being maintained.
- To know the inventory and receivable management and also the cash management performance.
- To know the sales turnover, gross margin, purchases of the company for previous five year of data.
- To make recommendations and give suggestions for better working capital management in BHEL.

LIMITATIONS OF THE STUDY

- Time restriction of project work is only two months in the organization.
- Due to the frequent changes in price level, the analyzation may differ from the actual and the calculated performance.
- Certain information is restricted which are shown in the report.
- It was not possible to make an exhaustive study on working capital management of BHEL in a limited duration.
- Due to the restrictions in the policy of BHEL some of the information are not revealed.
- Shortage of working capital reduces the rate of return on investment.
- Excess working capital gives the results as overall efficiency in an organization.
- Inadequate working capital cannot pay the short-term liabilities in the correct time.

RESEARCH MEHODOLOGY

Research methodology is used to getting pure information about the firm, predict the nature of the problem and solve it, using possible decision alternatives and relevant variables that need to be considered. The information collected by the source of secondary data using company's annual report. Annual report contains the balance sheet and the statement of profit and loss of the company. To determine the working capital management of the BHEL company and the data were analysed the ratio and the changes in working capital between 2011- 2016 using MS- Excel 2010. Charts and tables are also prepared.

LITERATURE REVIEW

Niranjana Devi. K (Oct 2010), to working dimension of the industries. It represents four goals. They are factors determines the working capital, the structure and utility of working capital, types of working capital policies and also impacts of working capital on profitability were analysed.

Kushwah, Mathur & Ball (2009), describes based on the analyse the source used by the industry to finance their working requirements and also evaluate the working capital management. It is also analysed the liquidity position of the industry using collection of five company's secondary data.

Arindham Ghosh (2007), to examine the efficiency of working capital management and impact of working capital ratios on profitability in Indian cement Industry. It is also analysed 20 large cement industry operating in India.

P.K.Singh (2004), describes the importance of the management of working capital based on working capital ratio and the operating cycle. Liquidity position of the company is very good because the current assets is high which is examined by analysed seven years of data.

D.Raghunatha Reddy and P.Kameshwari (2004), to reveals the company invests its funds for both long term and short term operation. Fixed and variable entities are highlighted in this case and also depends on the gross and net working capital. Discussed about length of the operating cycle, liquidity position, working capital ratios.

Dr. Subash Chandder and kumar (2004), describes based method which help to find the working capital requirements in the industry and also revealed the bank finance depends on the periodical financial performance statement.

Sivarama Prasad.R (2001), to indicate a sub- optimum utilization of working capital. The result of the paper is rate of return on current assets was negative, shortage of working capital and also the company were not able service their debts properly.

Joginder Singh Dutta (2001), explanation regarded as working capital which plays a vital role in keeping the wheels of business for running. It is used to maintain a satisfactory level of working capital. If any adequate of working capital then it causes a business failure. Dumped stocks, inefficient storekeeping, excess receivable can be controlled by working capital.

Harinath (2000), to examine working capital structure and control the working capital by preparing production and sales budget. The gap between cash working capital and the balance sheet working capital led to be the insufficient working finance and the industry enhances the profitability.

Dutta (2000), to evaluate the working capital management by analysed the financing pattern. It determines the huge loss of firm holding large inventory and failed to trade-off between profitability and liquidity and the result is not important correlation between sales and gross working capital.

Hyon- Han Shin and LUC Somen (1998), to identified the strong negative relationship between the length of the company, Net Trade Cycle and profitability. Stortage of Net Trade Cycle cause high risk adjusted stock returns.

Swamy (1997), to revealed the major problem of working capital management by balancing liquidity and profitability. The company suffered from low profitability due to high interest burden and financing working capital requirement through borrowing in the form of deposits.

Sur (1997), to assess the efficiency of working capital by calculating working capital ratio, ratio of assets to total assets, ratio of inventory to sales, composition of working capital. Author recommended for managing inventories which constituted the highest part of current assets.

Smith (1997), to focused on difference between traditional and alternative method of working capital liquidity and also the Return of Investment. Chi- square and step wise forward regression were applied that measures the working capital liability segmented by gross fund flow lead towards the improvement of Return on Investment.

Rao (1997), to indicates the six companies overtraded with insufficient working capital, forecasting, planning and control. The company failed to ensure the effective collection mechanism and did not follow the liberal credit policy. Current ratio and liquidity ratio were determined to low liquidity crunch.

Anjan Kumar Ghatak and Rathindra Nath Mukharjee (1996), to determine the increased proportion of long term finance attracted high cost and the result inventory financing policy was less than optimum level. The short term financial risk did not earn profit and suggested reoriented approach in financial inventory.

Vijayakumar and Venkatachalam (1995), to indicated the empirical analysis in working capital and profitability. The analysis can be executed in liquidity ratio, inventory turnover ratio, receivable turnover ratio and cash turnover ratio which is used to measure the imoact of the profitability.

Siddharth and Das (1994), to based on the overall analysis of the ten years' data indicated the selected company did very well in terms of employment of working capital. And also determine the working capital turnover ratio.

Jain (1993), to represents the current ratio differences between public sector and the private sector. When comparing private sector, the working capital is good in public sector and the study mentioned the importance of effective management of working capital.

Rao and Rao (1991), to revealed the investment working capital is high comparing total investment. So, they determine the working capital planning and control is to be disorderly and ineffective, suggested focus on working capital management is important.

DATA ANALYSIS AND INTERPRETATION

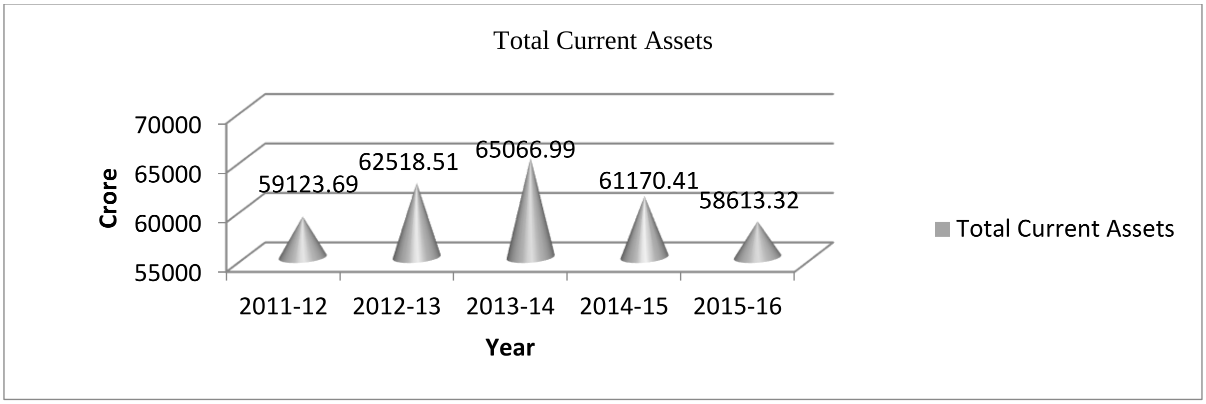
Table 1: Total Current Assets

Financial Year	*Inventory*	*Sundry debtors*	*Cash and Bank*	*Other current assets*	*Loans & Advance*	*Total Current Assets*
2011-12	13548.73	35740.55	6671.98	150.61	3011.82	59123.69
2012-13	11763.83	39888.21	7732.05	199.98	2934.45	62518.51
2013-14	9797.55	39952.99	11872.93	252.52	3191.00	65066.99
2014-15	10105.10	37637.32	9812.70	175.03	3440.26	61170.41
2015-16	9637.39	35603.05	10085.99	122.08	3164.81	58613.32

Source: Secondary data collected using MS-Excel 2010

Total Current assets = Inventory + Sundry debtors + Cash and Bank + Other current assets + Loans and Advances

Chart 1: Total Current Assets



Source: Secondary data collected using MS-Excel 2010

From the above table 1 and chart 1 shows comparing previous five years of data, 2013- 2014 year has the best because Total current asset is high in year than the other four years. This shows that the company had earned high sales than the others.

Last year, the company has low total current assets. So surely sales also should become low. Next year the company have to increase the sales.

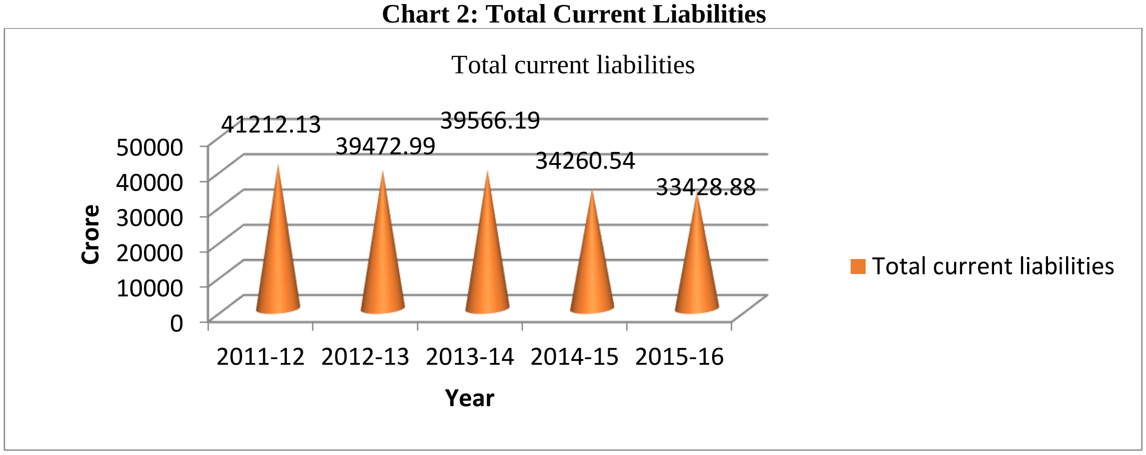
Table 2: Total Current Liabilities

Financial Year	*Current liabilities*	*Provisions*	*Total current liabilities*
2011-12	33570.76	7641.37	41212.13
2012-13	30530.86	8942.13	39472.99
2013-14	29240.17	10326.02	39566.19
2014-15	23220.10	11040.44	34260.54
2015-16	21988.09	11440.79	33428.88

Source: Secondary data collected using MS-Excel 2010

Current liabilities = Current liabilities + Provisions

Chart 2: Total Current Liabilities



Source: Secondary data collected using MS-Excel 2010

From the above table 2 and chart 2 comparing the five years of data, 2011-2012 has the high current liabilities but last year the current liabilities reduced. Debts is not good for company, if the company have the low debt the risk to become low.

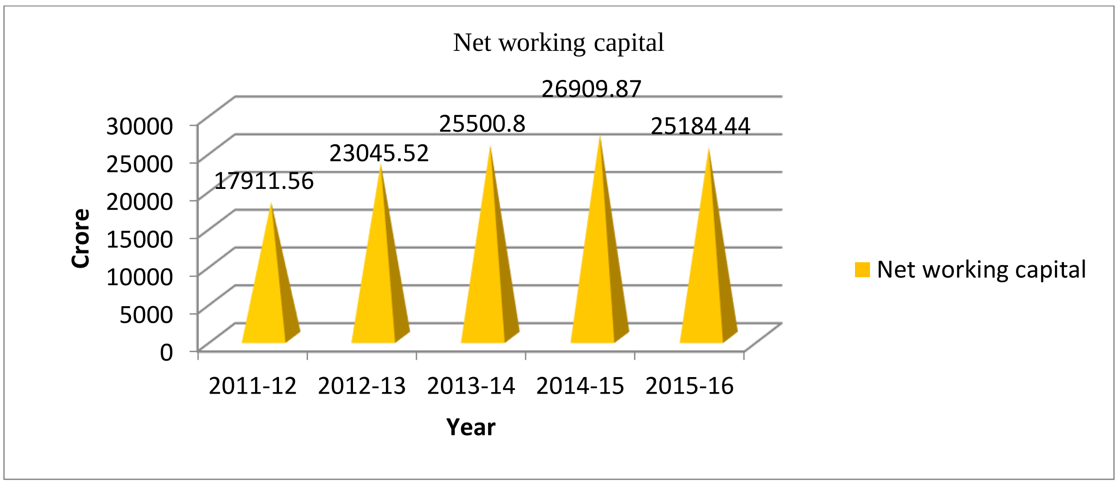
Table 3: Net Working Capital

Financial Year	*Total current assets*	*Total current liabilities*	*Net working capital*
2011-12	59123.69	41212.13	17911.56
2012-13	62518.51	39472.99	23045.52
2013-14	65066.99	39566.19	25500.80
2014-15	61170.41	34260.54	26909.87
2015-16	58613.32	33428.88	25184.44

Source: Secondary data collected using MS-Excel 2010

Net working capital = Total current assets – Total current liabilities

Chart 3: Net Working Capital



Source: Secondary data collected using MS-Excel 2010

From the above table 3 and chart 3, the working capital turnover measures the efficiently with the working capital is being used by a firm. A high ratio indicates utilization of working capital and a low ratio indicates otherwise.

But a very high working capital turnover ratio must create a lack of sufficient working capital which is not in a good situation. From the above chart the net working capital is decreased in the year 2015-2016 but compare all the year 2014-2015 has the high net working capital.

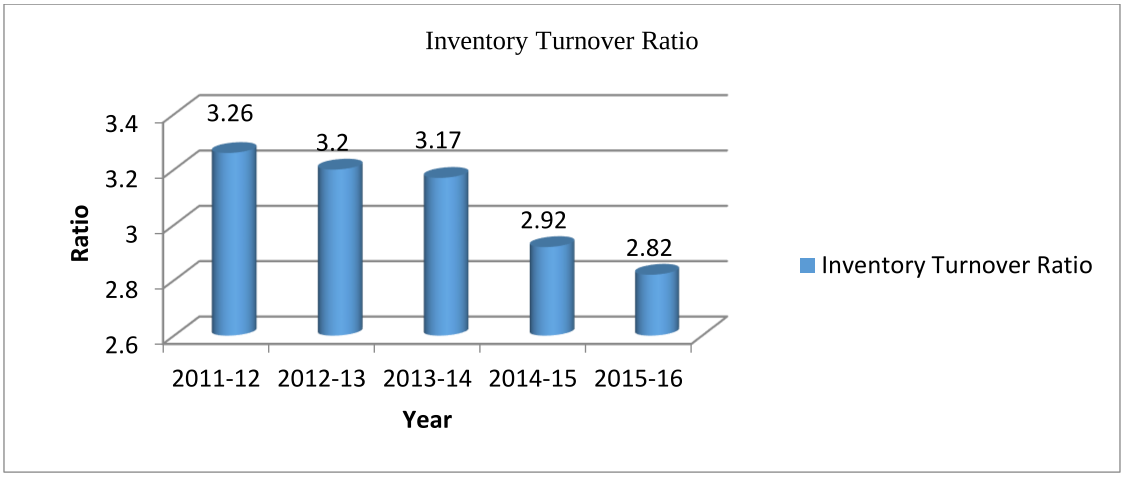
Table 4: Inventory Turnover Ratio

Financial Year	*Cost of Goods Sold w/o WIP/FG*	*Average Inventory*	*Inventory Turnover Ratio*
2011-12	39979.44	12255.88	3.26
2012-13	40482.56	12656.28	3.20
2013-14	34137.34	10780.69	3.17
2014-15	29053.42	9951.33	2.92
2015-16	27825.9	9871.25	2.82

Source: Secondary data collected using MS-Excel 2010

Inventory turnover ratio = Cost of Goods Sold/ Average inventory

Chart 4: Inventory Turnover Ratio



Source: Secondary data collected using MS-Excel 2010

From the above table 4 and chart 4 shows, this ratio indicates whether the investments in current assets or net current assets (i.e., working capital) have been properly utilized. In other words, the chart shows the relationship between turnover and working capital.

Higher the ratio indicates lower the investment in working capital and higher is the profitability. But nowadays profitability is decrease in BHEL company as per the above chart.

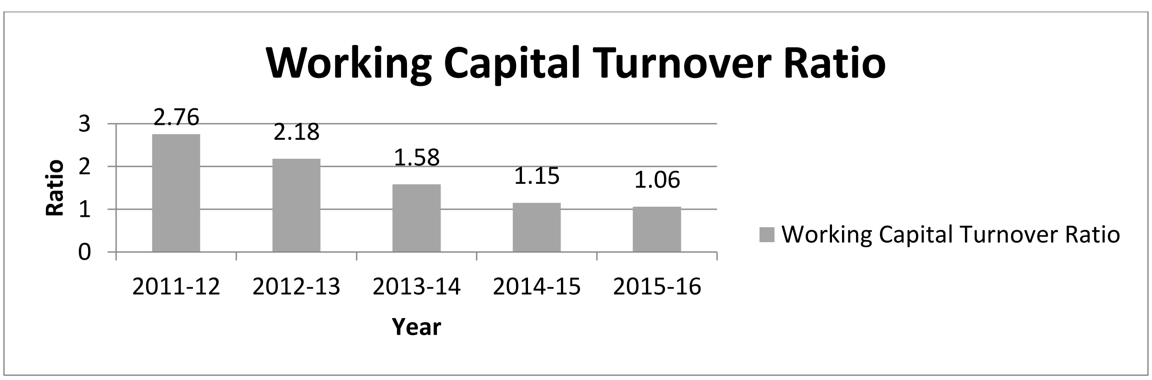
Table 5: Working Capital Turnover Ratio

Financial Year	*Sales*	*Net Working Capital*	*Working Capital Turnover Ratio*
2011-12	49509.78	17911.56	2.76
2012-13	50156.48	23045.52	2.18
2013-14	40337.92	25500.80	1.58
2014-15	30947.04	26909.87	1.15
2015-16	26586.51	25184.44	1.06

Source: Secondary data collected using MS-Excel 2010

Working capital turnover ratio = Sales/ Net working capital

Chart 5: Working Capital Turnover Ratio



Source: Secondary data collected using MS-Excel 2010

From the above table 5 and chart 5, the working capital turnover ratio measures the efficiently with the working capital is being used by a firm. A high ratio indicates utilization of working capital and a low ratio indicates otherwise.

But a very high working capital turnover ratio must create a lack of sufficient working capital which is not in a good situation. From the above chart the working capital turnover ratio is decreased in the year 2015-2016.

Table 6: Statement of Working Capital

Particulars	*2011-12*	*2012-13*	*2013-14*	*2014-15*	*2015-16*
Current assets					
Inventories	13548.73	11763.82	9797.55	10105.10	9637.39
Sundry Debtors	35740.55	39888.21	39952.99	37637.32	35603.05
Cash & Bank	6671.98	7732.05	11872.93	9812.70	10085.99
Other current assets	150.61	199.98	252.52	175.03	122.08
Loans & Advances	3011.82	2934.45	3191.00	3440.26	3164.81
Total Current Assets	**59123.69**	**62518.51**	**65066.99**	**61170.41**	**58613.32**
Current liabilities					
Current liabilities	33570.76	30530.86	29240.17	23220.10	21988.09
Provisions	7641.37	8942.13	10326.02	11040.44	11440.79
Total Current Liabilities	**41212.13**	**39472.99**	**39566.19**	**34260.54**	**33428.88**
Net Working Capital	**17911.56**	**23045.52**	**25500.80**	**26909.87**	**25184.44**

FINDINGS, RECOMMENDATIONS AND CONCLUSION

It is found by this study the volume growth appears to be satisfactory. BHEL is having short term solvency. Net working capital is satisfactory level in BHEL. Working capital management is an important yardstick to measure a company's operational thinking. Efforts of employees should constantly be creating to improve the working capital position of BHEL. This will yield greater efficiently and improve customer satisfaction. Continuous efforts to be put to efficient management of working capital.

The day to day expenses is most important aspects in any business, a company will maintain the fluctuation related to their sales because excess working capital causes no profit and the shortage of working capital cause rate of return on investment. BHEL company is a profit earned company, as per the charts and tables working capital is maintained properly which makes benefit to the company.

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