An Analysis of Financial Statements-Measurement of Performance and Profitability (With Reference to BHEL, Haridwar)

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Abstract-

The main goal of the accounting department in the company is to prepare the reliable financial statements in order to make their valid balance sheets, income statements and cash flow statements. This paper attempts to analyze the financial statements and measure the performance in terms of assets utilization and profitability. In detail the research methodology used is exploratory research for the study that has focused on the past and present performance of Heavy Electrical Equipment Plant (HEEP), Ranipur (Haridwar). The study purely relies on secondary data, which were collected for a period of seven years (2007-2013) from the audited annual reports of the company and the data provided for the purpose of effective periodical analysis.

To achieve the research goal five categories of the financial ratios were utilized for testing the study's hypothesis. Profitability ratios, leverage ratios, Profit margin ratios, Return on Investment, Return on equity. This study reveals that financial strength and weakness of the HEEP,over the connected period there were gray areas took place in June 2007 to June 2009, which resulted in decline of all the concerned profitability ratios and subsequently the performance of HEEP, during the two years. At the same time there is weak relationship between profitability and liquidity.

Keywords-Profitability, Accounting ratios, Performance, Financial Statements, HEEP, Liquidity.

1. Introduction:

The financial statement analysis generally involves common size analysis, ratio analysis (liquidity, turnover, profitability, etc.), trend analysis and industry comparative analysis. Financial statements are prepared primarily for decision making. They play a dominant role in setting the framework of managerial decisions. But the information provided in the financial statement is not an end in itself as no managerial can be drawn from these statement alone. However, the information provided in the financial statement is of immense use in making decision through analysis and interpretation of financial statements. Financial Analysis is the process of assessing the financial position of a company by analyzing its stability, viability and profitability. Profitability and financial performance could be defined as a measurement of the results of a firm's polices and operations in monetary terms. These are descriptive and analytical measures of financial position and performance. That includes current assets, current liabilities, total assets, stockholders equity, total revenues, total expenses and net income. And analytical measures of financial position and performance could include profitability measures. Thus, we would like to investigate and study the financial statements of HEEP, its profitability and performance. This study is organized as follows: section two gives the theoretical foundations, while section three puts forward the related literature. The fourth section presents research methodology and data collection, meanwhile, the fifth section summaries the results of financial analysis, seventhly, the profitability and measurement of performance, and, lastly, the findings and conclusions.

2. Theoretical Foundation: Financial ratios drawn from annual financial reports have been used extensively in prior research for various purposes such as corporate predictions, acquisitions, liquidations, rating decisions, etc.

2.1-Objectives of Study: 1-To analyze the financial statement of the company for seven years by applying financial ratios. 2-To identifying the financial strength and weakness of the company.3-To measure the performance in terms of assets utilization and profitability.4-To understand the functioning of the finance department.

2.2-Company Profile:

BHEL is India's largest engineering company and one of its kinds in this part of the hemisphere. It manufactures wide range of state of the art power generation equipment and systems besides equipment for industry, transmission, defence, telecommunication and oil business. The first plant of BHEL was set up in Bhopal in 1956, which signaled the dawn of the heavy electrical industry in India.BHEL's global references are spread across over 76 countries across all the six continents of the world. BHEL's investment in R&D is amongst the largest in the corporate sector in India. During the year 2012-13, the company invested about Rs. 1,252 Crore on R&D efforts, which corresponds to nearly 2.50% of the turnover of the company. Significantly, BHEL is one of the only four Indian companies and the only Indian Public Sector Enterprise figuring in 'The Global Innovation 1000' of Booz & Co., a list of 1,000 publicly traded companies which are the biggest spenders on R&D in the world. Today BHEL, is one of India's seven largest Public Sector Undertakings or PSUs, known as the *Maharatnas* or 'the seven jewels' The old village of Ranipur still exists at the edge of the township, just at the entrance of Rajaji National Park. BHEL Haridwar has a campus of 7,000 acres (28 km^2), now 2,034 acres (8.23 km^2) of which is inhabited by 200 companies like many more in the nearby SIDCUL (State Industrial Development Corporation of Uttarakhand) industrial area.BHEL Haridwar plant itself consists of two plants namely HEEP (Heavy Electricals Equipment Plant) & CFFP (Central Foundry & Forge Plant). CFFP has one of the heaviest forge machines in India.

2.3-Significance of the Study:The analysis and interpretation of financial statements is very essential to measure the efficiency, profitability, financial soundness and future prospects of the business units. Financial analysis serves the following purposes: Measuring the profitability, indicating the trend of achievements, assessing the growth potential of the business**,** Comparative position in relation to other firms, assess overall financial strength assess solvency of the firm

2.4-Scope and purpose of the study: The scope of this study extends to a number of areas, by taking the help of ratio analysis, the financial strength and weakness of the firm was identified. Ratio analysis is an excellent tool to find out what went wrong or what the company is doing right; therefore, the company can take actions.

Its main aim is to measure the firm's liquidity, profitability and other indications that business is conducted in a rational and orderly way. The study aims at analyzing the profitability and overall performance of the company by using ratio analysis. Here the study is for a period of seven years, from 2007 to 2013. The future plans of HEEP should be laid down in view of the firm's financial strength and weakness by properly establishing relationship between the items of the Balance Sheet and Profit and Loss account (income statement).

2.5-Hypothesis of the study:

H1: The financial statement analysis has a significant impact on the profitability.

H0: The financial statement analysis has not an impact on the profitability

2.6-Limitation of the study: The study suffers from certain limitations: **1-**It's exclusively depending on the published financial data, so it is subject to all limitations that are inherent in the condensed published financial statements. **2-**As the financial statements are prepared on the basis of a going concern, it does not give exact position. Thus accounting concepts and conventions cause a serious limitation to financials analysis.**3-**It took a lot of time in collection of data as the data available in BHEL Haridwar is so wide and covers great deal of extensive information.

3. **Literature Review:**The survey of related literature covers many studies that were done nationally and at the international levels, here, this study covers some of them as follows:The study of Laitinen (2006) presents a framework for the financial statement analysis of a network of small and medium-sized enterprises. The objective is to make an approach towards a systematic network financial statement analysis. The data for the study are drawn from the public financial statements of the partner firms. The proportion of income statement items and balance sheet items is traced by a simple estimation to the resources used by the network and identified by each firm. Virtual network income statement and balance sheet are made up of the allocated proportions. The paper is focused on eight measurement objects that are

causally related to form a strategic map: resources; growth; concentration; productivity; profitability; mutual flows; risk and value; and, several measures for each object are suggested.The study that has been done by Al-Aameri and Alrikabi (2007) was focusing on one of the important techniques in financial analysis, namely, the financial ratios, for the purpose evaluating the performance of petroleum projects company, and to find out the main strength and weakness points, so as to suggest the remedial actions for treatment of negative points and enhance the positive one. The paper's contains detail study for the data included in financial statements to explain the financial performance of the company, and that will help the management for planning the future according to the previous performance, and also contain the converting process of the data of financial statements to meaningful information through several techniques, the financial statement analysis among them.Maggina (2008) used the financial ratios so as to investigate the distributional properties of financial ratios with the literature.Gangadevi (2008) studied the leverage and financing decision for the selected 30 electronic companies for the five years period ranging from1998 to 2003. In his study he found that the company has a high operating leverage should kept low financial leverage and vice-versa. So, it is desirable that a company has low operating leverage and a high financial leverage

4.Research Methodology and Data Collection:

Research Design: The research design of this project is exploratory.The present study is designed to measure the profitability and performance of BHEL in terms of various financial characteristics embodied in the accounting ratios.

Data Collection: The evaluation of profitability and financial performance was for period of seven years from 2007 to 2013. Necessary secondary data was obtained from the audited annual reports, namely financial statements, and other records of the company given for the purpose of effective periodical analysis.

Methods of Analysis and Interpretation: The following are the tools that are used for analyzing the financial position of the company: (i) Ratio Analysis (ii) SWOT Analysis

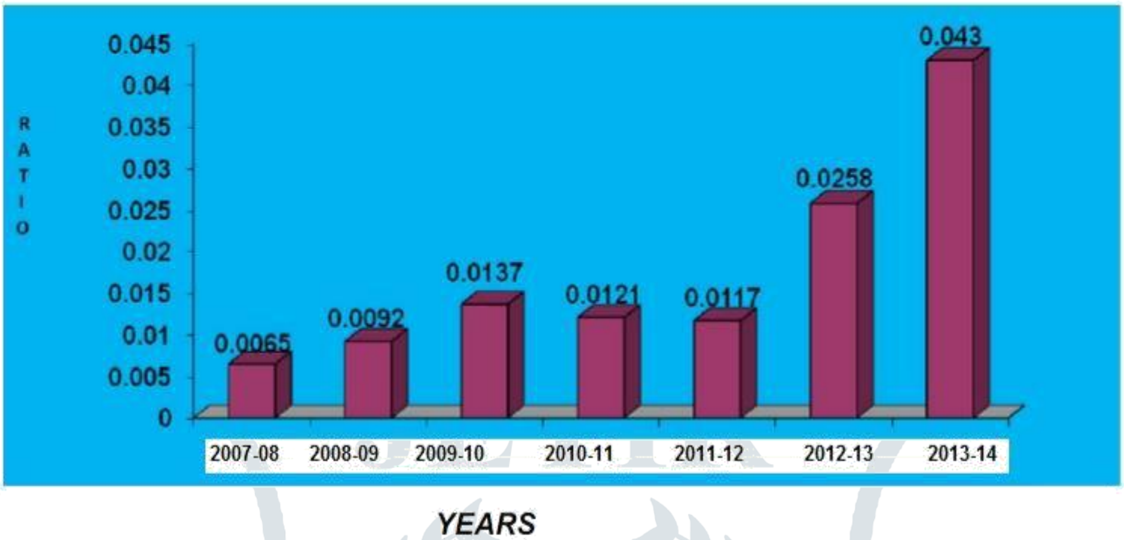
Statistical Tools Used: Bar Charts

5. Ratio and Analysis: To measure this performance the study focused on profitability and efficiency ratios which enable evaluation of the sources and magnitude of the firm's profit. There are a number of ratios for measuring performance of firms, but the present study has zeroed in on the most popular accounting ratios used for the purpose to make the analysis more meaningful and manageable. The interpretation of data is extremely important financial tool for each of the activities performed within the organization.

LEVERAGE RATIOS:

Debt Ratio = Total Debt/Capital Employed

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Total Debt	238	308	447	364	499	899	1291
Capital Employed	36601	33302	32557	30011	42641	34763	29969
Ratio	0.0065	0.0092	0.0137	0.0121	0.0117	0.0258	0.0430



Debt Equity Ratio = Total Debt/Net Worth

INFERENCE: The Debt Equity Ratio describes the lender's contribution for each rupee of owner's contribution. The Debt Equity Ratio of HEEP Haridwar for last 7 years forms a fluctuating trend with 0.44% in the year 2007-08 to 0.80% in year 2013-14. An average DE Ratio of these 7 years is 0.005 which implies that lenders have contributed Rs. 0.005 for each rupee contributed by owners.

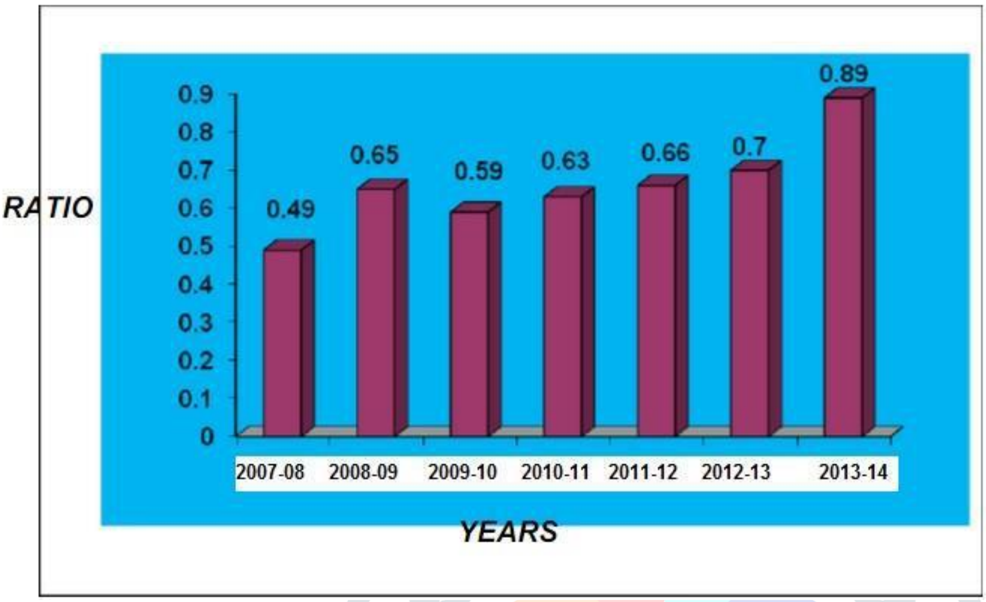
This generates a greater claim of owners than creditors which is a satisfactory situation from creditors' point of view, since, a high proportion of equity provides greater margin of safety for them.

Proprietor Ratio Or (Share Holder Equity Ratio)=Net Worth / Total Assets

The Proprietor Ratio for last 7 years for HEEP, Hardwar has been calculated as under.

(Figures are in Rs/ Lacs)

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Net Worth	53697	62410	67756	82644	102423	130005	160836
Total Assets	108243	94678	114753	129401	153564	184819	179861
Ratio	0.49	0.65	0.59	0.63	0.66	0.70	0.89



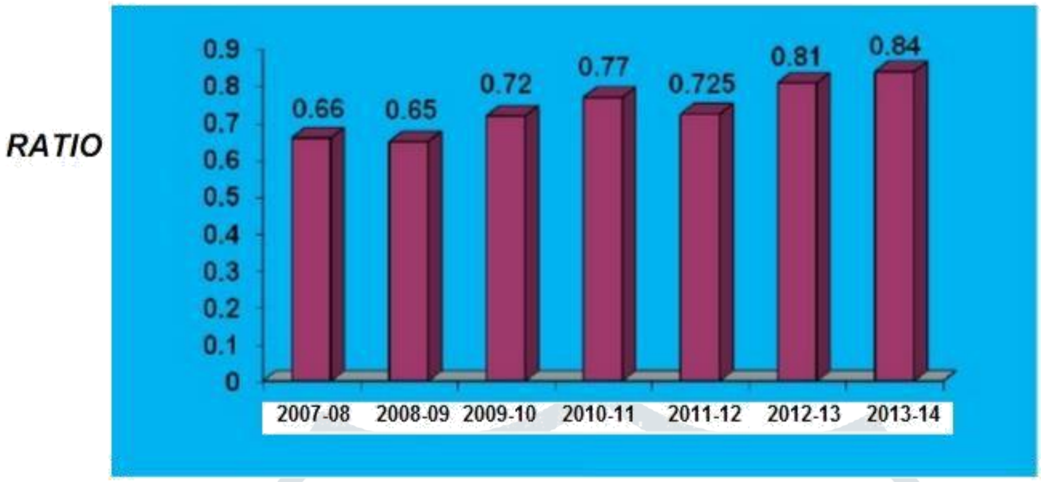
INFERENCE:

There is increase in shareholders fund but there is no fresh investment in FA is made and this may affect future profitability of the company.

Total Liabilities to Total Assets Ratio= **Total Liabilities /Total Assets**

(Figures are in Rs/ Lacs)

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Total Liabilities	71945	61683	82643	99754	111422	150955	151183
Total Assets	108243	94678	114753	129401	153564	184819	179861
Ratio	0.66	0.65	0.72	0.77	0.725	0.81	0.84



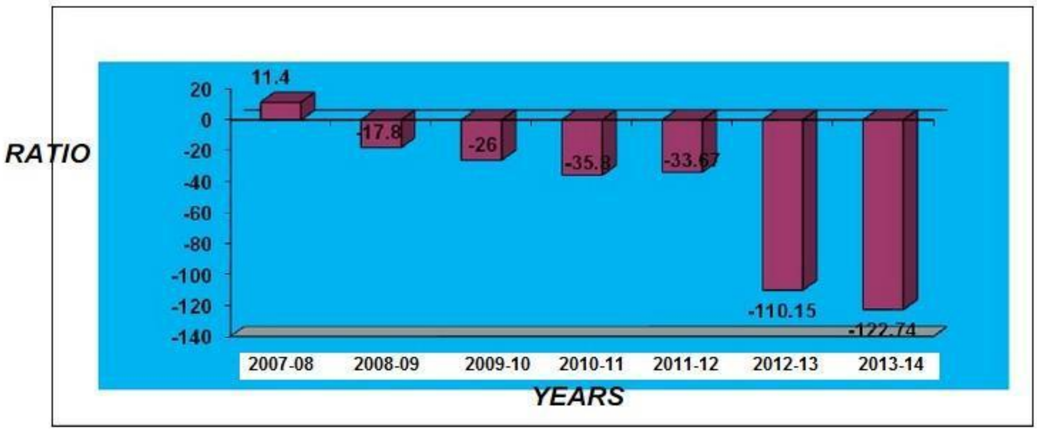
INFERENCE:

Here from the data and the ratio of last 7 years it is clear that the company's financial position is sound and is capable of meeting its liabilities out of its total assets. From the last five years data we see that the solvency ratio is increasing slowly and it has increased from 0.66 in 2007-08 to 0.84 in 2013-14. But it indicating a sound financial position of the company.

Interest Coverage Ratio = Profit before interest and tax / Interest

are in Rs/ Lacs)

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
PBIT	7205	11083	12324	22338	31552	42957	50324
Interest	632	-622	-474	-623	-937	-390	-410
Ratio	11.4	-17.8	-26	-35.8	-33.67	-110.15	-122.74



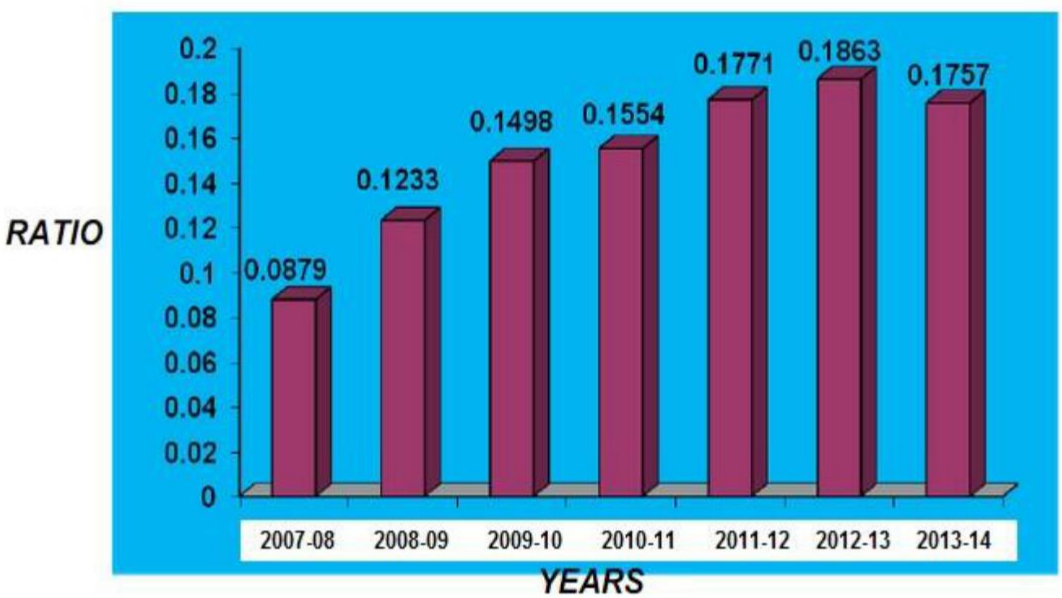
INFERENCE: Interest Coverage Ratio had increased in 2007-08 while after that it is decreasing year by year as it shows negative. It is clear that there is no risk for lenders and share holders

PROFITABILITY RATIOS:

Gross Profit Ratio =Gross Profit / Net Sales

(Figures are in Rs/ Lacs)

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Profit	10487	14260	17176	25901	35329	48196	50324
Net Sales	119298	115596	114608	166598	199388	258690	286264
Ratio	0.0879	0.1233	0.1498	0.1554	0.1771	0.1863	0.1757



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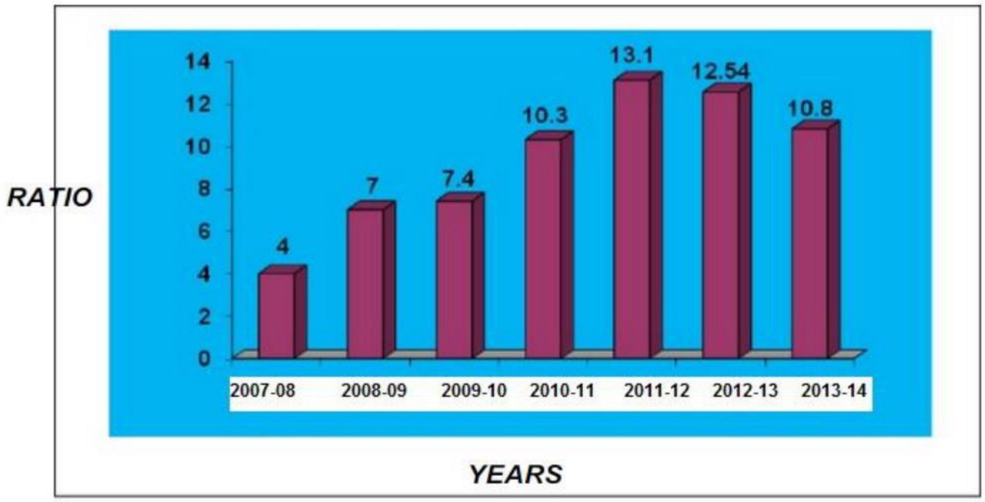
Net Profit Margin = Profit After Tax / Net Sales×100

(Figures are in Rs/ Lacs)

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
PAT	4354	7078	7248	13726	21553	26400	30933
Net Sales	119298	115596	114608	166598	199388	258690	286264
Ratio	4	7	7.4	10.3	13.1	12.54	10.8



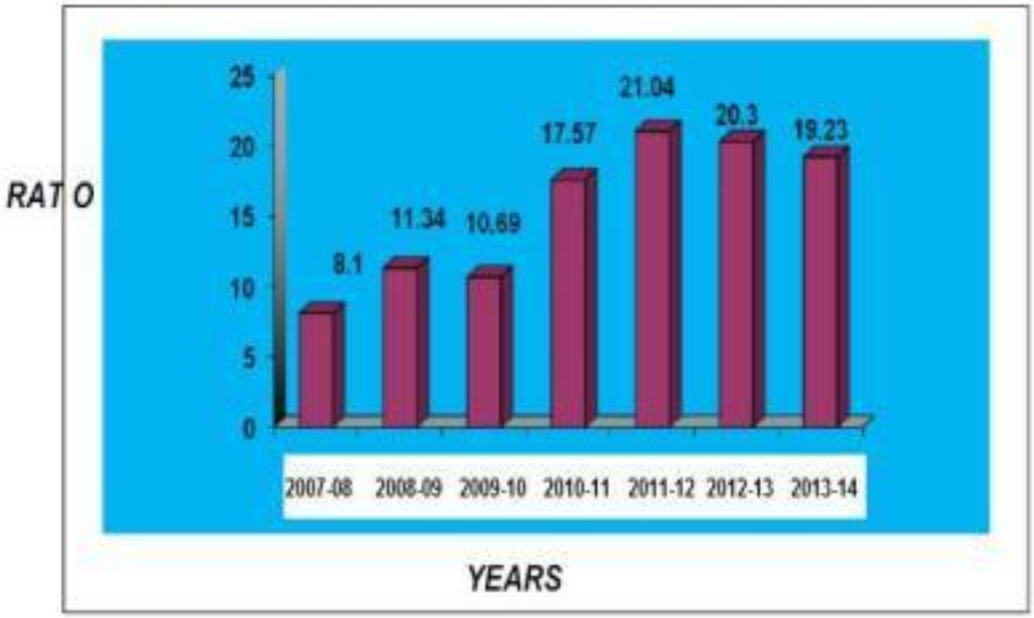
INFERENCE:

Net profit of last six years is continuously increasing indicating a good operating efficiency of the company. The average of net profit ratio comes out to be9.07% which means that for every Rs. 100 of net sales profit margin is of Rs 9.07 and this is a satisfactory position for the company and also indicates that Managerial skills are efficient. The company's performance is good.

Return on Investment = Profit After Tax/Share Holder Funds×100

(Figures are in Rs/ Lacs)

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Profit After Tax	4354	7078	7248	14523	21553	26400	30933
Share Holder Funds	53697	62410	67756	82644	102423	130005	160836
Ratio	8.10	11.34	10.69	17.57	21.04	20.30	19.23

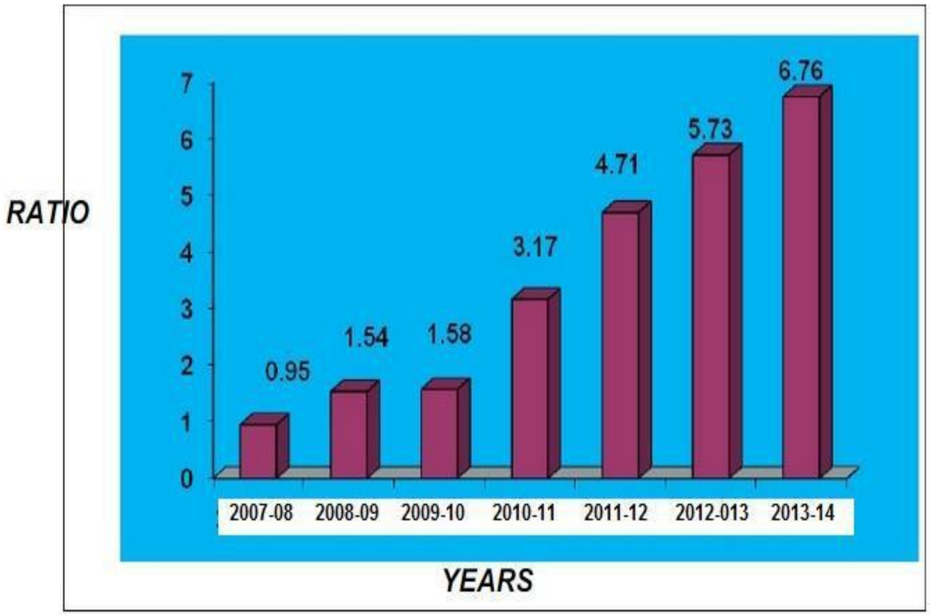


INFERENCE: Return on investment is increasing year by year that is 8.11 in year 2001-02 and it increased to 20.25 in year 2012-13. it is indicating that the capital employed in the business is used effectively and the performance of the company is increasing hence, company should not invest in the fixed assets and R & D expenditures.

Return On Equity = PAT / Average Equity

(Figures are in Rs/ Lacs)

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-013	2013-14
PAT	4354	7078	7248	14523	21553	26400	30933
AVG. EQUITY	4570	4570	4570	4570	4570	4570	4570
RATIO	0.95	1.54	1.58	3.17	4.71	5.73	6.76



6.Profitability and Measurement of Performance: Performance measure work best when applied to a total business entity, where, investment, operations, and financing collectively controlled and managed by a management team..

SWOT ANALYSIS

STRENGTH (S): -•Low cost producer of quality equipment due to cheap labour and fully depreciated plants. Flexible manufacturing set up. Entry barrier due to high replacement cost of its manufacturing facilities.

WEAKNESSES (W): -•High working capital requirement due to its exposure to cash starved SEBs (State electricity boards) and High WIP.•Inability to provide project financing.

OPPORTUNITIES(O):-•High-expected growth in power sectors

(7000 MW/p.a.needs to beaded)•High growth forecast in India's

index of industrial production would increase demand for industrial equipment such as motors and compressors.

THREATS (T): -•Technical suppliers are becoming competitors with the opening up of the Indian economy. Fall in global power equipment prices can effect profitability

7.Findings and Conclusion: On seeing the liquidity position of BHEL. I conclude that it is not very good as the current assets are in the form of inventories and debtors. The debt collection period is high and inventories are least liquid current assets. So maintaining the inventories are relatively costly affair for the company and the management must have to investigate properly. It is very necessary so that fund should not be blocked unreasonably. Efficient inventory management is required in BHEL.

On seeing the leverage position of the BHEL, I conclude that it is very good as the stake of owners in company is continuously increasing and its long term debt continuously decreasing it means that company is paying its debt promptly and creditors will not face any risk in investing in BHEL as also BHEL is giving assured ROI.

On seeing turnover, fixed assets and current assets turnover of company is increasing which is a good indicator as it brings commensurate gain and also the average collection goes on decreasing but management should take more efficient steps to reduce it. On seeing the profitability of the BHEL its overall performance is very good. A continuous increase in the values of Earning per share and Dividend Per Share results, investors feel safe to invest money in BHEL.

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