



FINANCIAL PERFORMANCE EVALUATION – A CASE STUDY OF BHARAT HEAVY ELECTRICALS LIMITED

ABSTRACT

The present paper is an attempt to enlighten the financial soundness of the public sector undertaking i.e. Bharat Heavy Electricals Limited. To ascertain the financial position of a company, accounting ratios will be helpful in a greater manner. Various users like bankers, managements of the companies, creditors and investors etc. use these accounting ratios to analyze the financial position of a company for taking certain important decisions for their business. In order to analyze the financial soundness of the BHEL, ratios like Reserve to Equity Capital Ratio, Fixed Assets to Share holder's Funds, Return on Investment (ROI), and Productivity ratios etc were used. The entire study is based on the secondary data. The financial information has been collected from the printed annual reports of the company. The results show that the financial health of BHEL is not similar during the period of the study.

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EPIGRAMMATIC PREAMBLE OF BHEL

BHEL is one of the India's largest integrated engineering power plant equipment manufacturer engaged in the engineering, designing, testing, manufacturing, commissioning, etc. It is also offering its services to a broad range of products and or services for the core sectors of the economy, viz. Transmission, Power, Transportation (Railway), Renewable Energy, Oil & Gas, etc. The establishment of Bharat Heavy Electricals Limited in 1964 was a burst through for rise in India's Heavy Electrical Equipment industry. Unswerving performance in a highly competitive environment enabled the company to attain the coveted 'Maharatna' status in 2013.

BHEL as a part of Pt. Jawaharlal Nehru's vision was bestowed with the onus to make the country self reliant in manufacturing of heavy electrical equipment. Today, with 20,000 MW per annum capacity for power plant equipment manufacturing, BHEL's immense size of operations is evident from its widespread network of four

Regional Offices, 17 Manufacturing Units, , eight Service Centres, two Repair Units, eight Overseas Offices, fifteen Regional Marketing Centres, six Joint Ventures, and present project implementation at more than 150 project sites across different countries in the world. The total installed capacity base of BHEL supplied equipment -138 GW in India speaks volumes about the contribution made by BHEL to Indian power sector. BHEL's 57% share in India's total installed capacity and 65% share in the country's total generation from thermal utility sets (coal based) as of March 31, 2014 stand testimony to this. Since 1971-72 the company is earning profits continuously and paying dividends to its share holders. From 1976-77 there is a laudable performance by the company.

The high level of quality & reliability of BHEL products and systems is an outcome of strict adherence to international standards through acquiring and adapting some of the best technologies from leading OEM companies in the world together with technologies developed in our own R&D centres. Most of our



manufacturing units and other entities have been accredited to Quality Management Systems (ISO9001:2008), Environmental Management Systems (ISO14001:2004) and Occupational Health & Safety Management Systems (OHSAS18001:2007).

STATEMENT OF THE PROBLEM

Power plant equipment manufacturing is an important commodity in the present globalized era. Power plant equipment industry has experienced major changes in the recent years due to the implementation of modern technologies. BHEL is having its power plants nearing 10,000 MW in the countries like Oman, Iraq, Bhutan, and Egypt etc. BHEL is one of the major public-sector under taking in India. The increasing capacity of production will automatically affects the financial soundness of the company. Finance is the base for each and every activity of the business. So, it is very essential to analyze the financial position of the company.

OBJECTIVES OF THE STUDY

- ✧ To portray the brief profile of Bharat Heavy Electricals Limited (BHEL).
- ✧ To study the significance of financial soundness of the company by selecting a few imperative parameters such as Reserve to Equity Capital Ratio, Fixed Assets to Share holder’s Funds, and Return on Investment (ROI) etc.
- ✧ To assess the critical factors which affect the financial soundness of BHEL.
- ✧ To give some suggestions for the betterment of the financial position of the company on the basis of findings of the study, if necessary.

LIMITATIONS OF THE STUDY

- ✧ The study covers only 10 years period i.e. 2004-2005 to 2013-2014 for the financial analysis of BHEL.
- ✧ The secondary data used in this study have been taken from the published annual reports of the company.
- ✧ Only few ratios were used to analyze the financial soundness of the company.

RESEARCH DESIGN AND METHODOLOGY

In this study the sample unit named BHEL has been taken for analysis of financial performance.

The study is entirely based on the secondary data. The data has been gathered from the published annual reports of the company. The collected information has been classified, tabulated and edited as per the requirement of the financial analysis of the company. This study has covered 10 years data from 2004-2005 to 2013-2014 for the purpose of analyzing the financial soundness of BHEL.

HYPOTHESES OF THE STUDY

H₀: The financial health of BHEL is similar during the study period.

H₁: The financial health of BHEL is not similar during the study period.

RESULTS AND DISCUSSION

Return on Investment (ROI):-

Return on Investment (ROI) is a presentation appraisal used to assess the effectiveness of an investment. A towering ROI projects that the company is having a higher rate of revenue/profit as percentage of capital employed. The calculation procedure is as follows:

$$ROI = \frac{\text{Operating Profit}}{\text{Capital employed}} \times 100$$

Table - 1 Statement of Operating Profit to Capital Employed (Rs. in Crores)

Year	Net Operating Profit (Rs.)	Total Capital Employed (RS.)	Return of Investment (%)
2004-2005	9527	5950	160.11
2005-2006	13374	7001	191.02
2006-2007	17237	7640	225.61
2007-2008	19305	8873	217.57
2008-2009	26212	10091	259.75
2009-2010	32861	12968	253.40
2010-2011	41566	16391	253.59
2011-2012	47228	22651	208.50
2012-2013	47618	29161	163.29
2013-2014	38389	33139	115.84
Mean	29332	16435	204.86%

Source: Annual reports of BHEL from 2004-2005 to 2013-2014

The above table 1 indicates the relationship between Net Operating Profit before Interest and Tax as a percentage of Total Capital Employed. BHEL showed a fluctuating ROI throughout the years. The highest ROI of 259.75% was in the year 2008-2009 and the lowest ratio of 115.84 in the year 2013-2014. During the study period highest three ROCE was observed in the years 2008-2009, 2009-2010, and 2010-2011. The ROI showed a consistency of around 253% in the years 2009-2010, and 2010-2011. During the study period BHEL showed an average ROI of 204.86%.

Productivity Ratio:-

Productivity ratio (PR) is helpful to find out the profit-earning capacity of the organizations. This PR ratio designates that whether the profit earned is satisfactory or not looking to the total assets of the business. The procedure for calculation is as follows:

$$\text{PR} = \frac{\text{Gross Profit}}{\text{Total Assets}} \times 100$$

Table - 2 Statement of Gross Profit to Total Assets

(Rs. in Crores)

Year	Gross Profit (Rs.)	Total Assets (RS.)	Productivity Ratio (%)
2004-2005	1663	15010	11.07
2005-2006	2623	18180	14.42
2006-2007	3779	23214	16.27
2007-2008	4466	30892	14.45
2008-2009	4880	41421	11.78
2009-2010	6624	48467	13.66
2010-2011	9061	59260	15.29
2011-2012	10353	66776	15.50
2012-2013	9558	70128	13.62
2013-2014	5147	72791	7.07
Mean	5815.4	44613.9	13.31%

Source: Annual reports of BHEL from 2004-2005 to 2013-2014

The above table 2 indicates the relationship between Gross Profit as a percentage of Total Assets of the company. The highest productivity ratio of 16.27 was in the year 2006-2007 and the least ratio of 7.07 in the year 2013-2014. On an average the productivity ratios of the company throughout the study period are very nearer except the year 2013-2014. The ratio showed a decreasing trend towards the last two years.

Return on Net worth (RONW):-

It is also known as Return on Equity (ROE). ROE expresses the relationship between the Net Profit (after tax and Interest) with share holder's funds. This ratio is one of the most substantial ratios used for measuring the overall efficiency of a firm.

Net Profit after Interest and Tax

$$\text{ROE} = \frac{\text{Net Profit after Interest and Tax}}{\text{Net Worth}} \times 100$$

Table - 3 Statement of Net Profit to Net worth

(Rs. in Crores)

Year	Net Profit after Interest and Tax (Rs.)	Net Worth (RS.)	RONW (%)
2004-2005	953	6027	15.81
2005-2006	1679	7301	22.99
2006-2007	2415	8788	27.48
2007-2008	2859	10775	26.53
2008-2009	3138	12939	24.25
2009-2010	4311	15917	27.08
2010-2011	6011	20154	29.82.
2011-2012	7040	25373	27.74
2012-2013	6615	30444	21.72
2013-2014	3461	33047	10.47
Mean	3848.2	17076.5	19.97

Source: Annual reports of BHEL from 2004-2005 to 2013-2014

The above table 3 indicates the Net Profit as a percentage of Total Net Worth. The highest ratio of 29.82% was observed in the year 2010-2011 and the least of 10.47% in the year 2013-2014. From 2005-2006 to 2012-2013 period of study Return on Net Worth showed a minor degree of fluctuation. The average value of Return of Net Worth was 19.97%.

Proprietary Ratio:-

Proprietary ratio (PR) is also known as equity ratio or net worth ratio. This ratio is used to measure the soundness of the capital structure of an organization. PR is computed by dividing the share holder's funds by total assets.

$$PR = \frac{\text{Share holder's funds or Net worth}}{\text{Total Assets}} \times 100$$

Table - 4 Statement of Share holder's Funds to Total Assets (Rs. in Crores)

Year	Shareholder's Funds (Rs.)	Total Assets (RS.)	Proprietary Ratio (%)
2004-2005	6027	15010	40.15
2005-2006	7301	18180	40.15
2006-2007	8788	23214	37.85
2007-2008	10775	30892	34.87
2008-2009	12939	41421	31.23
2009-2010	15917	48467	32.84
2010-2011	20154	59260	34.00
2011-2012	25373	66776	37.99
2012-2013	30444	70128	43.41
2013-2014	33047	72791	45.39
Mean	17076.5	44613.9	37.78

Source: Annual reports of BHEL from 2004-2005 to 2013-2014

Table 4 expresses the relationship between share holder's funds to total assets. During the study period the highest ratio was observed in the year 2013-2014 and the least was 31.23 in the year 2008-2009. A high proprietary ratio indicates the strong financial position of the company and a better security for creditors. From the above analysis it is clear that the stock holders contribution is less than 50% throughout the study. BHEL proprietary ratio (PR) is low and it is not utilizing the debt financing facility properly for its operations that it is not a good sign for the stock holders.

Fixed Assets to Share holder's Funds:-

This ratio measures the contribution of share holders and the contribution of debt sources in the fixed assets of the company. It is calculated by dividing the fixed assets by the proprietor's funds.

$$\text{Fixed assets to share holder's funds} = \frac{\text{Fixed Assets}}{\text{Proprietor's funds}} \times 100$$

Table - 5 Statement of Fixed Assets to Proprietor's Funds (Rs. in Crores)

Year	Fixed Assets	Proprietor's Funds (RS.)	FATSHFs Ratio (%)
2004-2005	1044	6027	17.32
2005-2006	982	7301	13.45
2006-2007	989	8788	11.25
2007-2008	981	10775	9.10
2008-2009	1471	12939	11.36
2009-2010	2415	15917	15.17
2010-2011	3401	20154	16.87
2011-2012	4297	25373	16.93
2012-2013	4458	30444	14.64
2013-2014	4693	33047	14.20
Mean	2473.1	17076.5	14.02

Source: Annual reports of BHEL from 2004-2005 to 2013-2014

Table 6 shows the relationship between fixed assets to share holder's funds. From the above information it is observed that the stock holder's equity is more than the fixed assets. It projects that stock holder's equity is financing not only the fixed assets but also a part of working capital. During the entire study the company's proprietary ratio is not in a satisfied manner.

Debt to Assets Ratio:-

Debt to Assets Ratio measures the percentage of a company's assets that have been financed with debt (both short-term and long-term). Higher ratio indicates a superior degree of leverage, and consequently, financial risk.

$$\text{Debt to Assets Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}} \times 100$$

Table - 6 Statement of Debt to Assets

Year	Total Liabilities	Total Assets (RS.)	Debt to Assets Ratio (%)
2004-2005	8983	15010	59.84
2005-2006	10879	18180	59.84
2006-2007	14426	23214	62.14
2007-2008	20117	30892	65.12
2008-2009	28482	41421	68.76
2009-2010	32570	48467	67.20
2010-2011	39106	59260	65.99
2011-2012	41403	66776	62.00
2012-2013	39684	70128	56.58
2013-2014	39744	72791	54.60
Mean	27539.4	44613.9	62.20

Source: Annual reports of BHEL from 2004-2005 to 2013-2014

The desirable norm of this ratio is 1.5:1. Ratio less than 1 indicates that the company may not be putting itself at risk of not being able to pay back its debts. During the study period i.e. from 2004-2005 to 2013-2014 the ratio is less than 1 indicating that the bulk of asset funding is coming from equity. The financial risk of the company is very low due to its proprietary ratio and it is a good sign to the company as well as to its stock holders.

SUMMARY AND CONCLUSION

The company's return on investment is in a highly satisfied manner as its average ROI is 204.86%. Productivity ratio was not positive throughout the study period. It means company is not utilizing their total assets during the study period and the average of this ratio is only 13.31%. So, that the company is suggested to utilize their total assets in a proper manner in the coming years. The ROE of the company was in a satisfied manner with an average of 19.97%; where as the desirable norm for this ratio is 12-15%. During the entire study period this ratio was good except in the year 2013-2014. The proprietary ratio indicates that the company is heavily depending on debts for its operations. An outsized share of debts in the overall capital will boost the interest expenses and also the risk of insolvency/bankruptcy. Fixed assets to equity ratio of the company was not good because

in any year it does not reach the standard norm i.e. 60 to 70%, which indicates that the fixed assets are less than stockholders' equity. Hence the Company was suggested to make certain changes in order to improve its ratio. From the above information it is clear that the financial soundness of the company was not similar throughout the study period. Hence we may reject the null hypothesis and we have to accept alternate hypothesis.

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