



A Study on Financial Performance of Bharat Heavy Electricals Limited

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Abstract: Manufacturing industries are described as the backbone of development in general and economic development. We know that India is an agricultural country and the growth that we see in manufacturing industries has modernized farming and it also helped in reducing the heavy dependency of people. Due to this, many employment opportunities were generated. In short, we can say that agriculture and industry both benefit from each other. As manufacturing industry helps the farmer by providing different farming machines, equipment, and more. Bharat Heavy Electrical Limited (BHARAT HEAVY ELECTRICALS LIMITED Ltd.) is a celebration of India's industrial achievements. It is established in 1946. It is among the largest engineering and manufacturing company in the energy and infrastructure sector and a leading power equipment manufacturer. In early days The Government under the leadership of Prime Minister, Pandit Jawaharlal Nehru realized that there should be a large manufacturing base and adequate technically qualified personnel for sustained economic growth. The company was registered as Heavy Electricals (India) Limited (HEIL) in the Public Sector under the Ministry of Industry and Commerce on 29th August, 1956. Government hold 63.17% stake in this company. BHARAT HEAVY ELECTRICALS LIMITED Ltd. is one of the largest engineering and manufacturing company in India. The study focuses on the financial performance of Bharat Heavy Electricals Limited.

Key Words: BHEL, HEIL, Government, Industry, Manufacturing Company.

1. INTRODUCTION:

Industry is defined definition of what makes in industry large scale or small scale but it is usually linked to the amount of employees that work for the company and the turn over generated each year. Large - scale and industry refer to the size of a firm in terms of the number of employees and sometimes the annual turnover, depending on the country and the industry, a large scale industry company employee more than 1000 people. Manufacturing industries are described as the backbone of development in general and economic development in particular; mainly because these industries not only help in modernizing agriculture but also reduce the heavy dependence of people on agriculture by providing them jobs in secondary and tertiary sectors. The manufacturing industries convert raw materials into finished products. It makes use of machinery or labour to manufacture the finished goods. The economic prevalence and stand of the nation are measured by the development of manufacturing industries. Industrial development is an important precursor for the eradication of poverty and unemployment in our country. Industries are important to bring down regional disparities by establishing industries in tribal and other backward areas. We know that India is an agricultural country and the growth that we see in manufacturing industries has modernized farming and it also helped in reducing the heavy dependency of people. Due to this, many employment opportunities were generated. In short, we can say that agriculture and industry both benefit from each other. Now India has agro-based industries in large numbers and agriculture plays an important role in the expansion of manufacturing industries. As manufacturing - industry helps the farmer by providing different farming machines, equipment, and more.

1.1. HISTORY OF BHARAT HEAVY ELECTRICALS LIMITED:

One of the greatest challenges before the Government of India on attaining freedom in 1947 was to provide a strong base in infrastructure and capital goods for economic and industrial development. The Government under the leadership of Prime Minister, Pandit Jawaharlal Nehru realized that there should be a large manufacturing base and



adequate technically qualified personnel for sustained economic growth. The country's planners recognized that adequate supply of electric power was a precondition for long term industrial growth. This could be sustained only with a strong domestic power equipment industry. Accordingly, the Planning Commission recommended initiating steps towards setting up a factory for the manufacture of all types of heavy electrical equipment required for various projects. As a result, the Government of India signed an agreement on 17th November, 1955, with Associated Electrical Industries (AEI), UK, for the establishment of a factory at Bhopal complete in all respects for the manufacture of heavy electrical equipment in India. The company was registered as Heavy Electricals (India) Limited (HE(I)L) in the Public Sector under the Ministry of Industry and Commerce on 29th August, 1956. Substantial increase in demand for power generating capacity was expected in the subsequent Five Year Plans being formulated by the Government of India, with the resolve to push the installed capacity in the country for power generation up to 1,00,000 MW by the turn of the century. Accordingly a decision was taken by the Government to set up three more plants for the manufacture of heavy electrical equipment. Then there was Bharat heavy electrical limited. The first one was at Tiruchirappalli (Tamil Nadu) for high pressure boilers, the second one at Hyderabad (Telangana) for steam turbo generators and high pressure pumps and compressors - both of these with collaboration from Czechoslovakia and the third plant at Haridwar (Uttarakhand) with erstwhile USSR collaboration for large steam turbo generating sets and motors and also hydro generating sets including turbines and generators. These three newly conceived projects were part of Heavy Electricals (India) Limited for which the work was initiated at Bhopal. All the initial preparatory work was carried out from Bhopal till November 1964. Government decided to create a separate corporation for setting-up and managing these three units. Thus Bharat Heavy Electricals Limited was born and formally incorporated on 13th November, 1964.

These three new plants went into production in the latter half of the sixties, focusing on generation equipment, in addition to the Bhopal plant, which had already been manufacturing thermal and hydro generator plants for customer orders from Electricity Boards. The plants under BHARAT HEAVY ELECTRICALS LIMITED also made rapid progress. However, there was considerable overlap as also complementarities in the product profile and technologies of the two corporations. There was urgent need for rationalization of product profile, standardization of designs and engineering practices. Integration of the corporations would result in synergy and optimal use of resources. The merged entity would also be better able to stand growing global competition. After due deliberations, Government of India in 1972, decided to merge the operations of the two corporations and create a truly modern global enterprise. Accordingly, (HE(I)L) and BHARAT HEAVY ELECTRICALS LIMITED formally merged in January 1974.

1.2. RECENT DEVELOPMENT OF BHEL:

BHARAT HEAVY ELECTRICALS LIMITED has won three prestigious 'SCOPE Awards' in the categories of R&D, Technology Development & Innovation, and Digitalisation. Bharat Heavy Electricals Limited (BHARAT HEAVY ELECTRICALS LIMITED) has won a prestigious order, under International Competitive Bidding (ICB), for setting up a 3x800 MW pithead, Greenfield Thermal Power Project, on Engineering, Procurement and Construction (EPC) basis, at Jharsuguda District in Odisha. Significantly, this is the largest power sector order won by BHARAT HEAVY ELECTRICALS LIMITED through competitive bidding. Reposing confidence in BHARAT HEAVY ELECTRICALS LIMITED's technological and project execution capabilities, NLC India Limited (NLCIL) has entrusted BHARAT HEAVY ELECTRICALS LIMITED with the contract for setting up the 2400 MW coal-based thermal power project with supercritical parameters. The comprehensive scope of the EPC contract includes engineering, manufacturing, supply, erection, and commissioning of crucial equipment such as boilers, turbines, generators, and other auxiliary systems for the 3x800 MW Thermal Power Project. The scope also includes boilers with biomass co-firing capability and highly efficient latest pollution control equipment to control SO_x, NO_x & particulate matter emissions for meeting MoEF&CC guidelines. The project will be commissioned within 64 months. On commissioning, this plant will contribute in meeting the future base load requirement of electricity in the country.

The major equipment will be manufactured at BHARAT HEAVY ELECTRICALS LIMITED's Trichy, Haridwar, Hyderabad, Jhansi, Bangalore, Ranipet, Bhopal, Rudrapur, and Varanasi plants, while the company's Power Sector – Southern Region will be responsible for the civil works, and erection and commissioning of the equipment. BHARAT HEAVY ELECTRICALS LIMITED has a long-standing partnership with NLCIL and has installed a significant 77% of the coal/lignite-based power stations of the Utility, totalling to 3,590 MW. These include lignite-based sets of 125 MW, 210 MW, 250 MW & 500 MW ratings. BHARAT HEAVY ELECTRICALS LIMITED is the largest manufacturer of power generation equipment in the country and has been a major partner in the country's vision to achieve self-reliance in energy. The company is the market leader in both the subcritical as well as the supercritical segments in the country. With this order, BHARAT HEAVY ELECTRICALS LIMITED has secured orders for 65 supercritical Steam Generators (SG) and 60 supercritical Steam Turbine Generators (STG) – the highest in the country



by any power equipment manufacturer. BHARAT HEAVY ELECTRICALS LIMITED is fully geared to meet India's future growing demand for power equipment with its state-of-the-art technology.

1.3. STATEMENT OF PROBLEM

The Comptroller and Auditor General of India have rapped Bharat Heavy Electricals Limited for not diversifying appropriately and losing out on revenue because of the same. The CAG has pointed out inadequacies of efforts for diversification, increasing competitiveness, and improper management of receivables at BHARAT HEAVY ELECTRICALS LIMITED. These discrepancies have been highlighted in the auditor's report. CAG also notes that BHARAT HEAVY ELECTRICALS LIMITED had fixed Strategic Plan targets from 2012 to 2017 with focus on diversification and innovation. But the public sector undertaking did not set any year wise milestones for implementation of the envisaged strategies. This resulted in BHARAT HEAVY ELECTRICALS LIMITED not achieving any of the strategic plan targets till 2015-2016 and the shortfall ranged between 23.33 per cent and 113.91 per cent against specific goals. It states the financial problems in the Bharat heavy electrical limited.

1.4. OBJECTIVE OF THE STUDY:

- To find out the financial performance of Bharat heavy electrical limited.
- To analyse the prospects and problems of Bharat heavy electrical limited.

1.5. LIMITATION OF THE STUDY:

This study is based on the published data for a specific selected period only. These data were taken from the balance sheet and annual report of the company.

2. REVIEW OF LITERATURE:

Rao (1993) discussed in his research about 'Financial appraisal of Indian Automotive Tyre Industry'. Main objective of study was intended to probe into the financial condition-financial strength and weakness-of the Indian tyre Industry. He has been measured and evaluates the financial performance through inter-company and inter-sector analysis for the period of 1981-1988. He has found that the fixed assets utilization in many of the tyre undertakings was not as productive as expected and inventory was managed fairly well. He has considered that the tyre industry's overall profit performance was subjected to inconsistency and ineffective. He has suggested some recommendations to improve financial performance.

Pai, Vadivel & Kamala (1995) have studied about the diversified companies and financial performance. Main purpose of research was found out the relationship between diversified firms and their financial performance. For the Purpose of research, they have selected seven large firms and analysed those firm which having different products-both related and otherwise-in their Portfolio and operating in diverse industries. In this study, a set of performance Measures / ratios was employed to determine the level of financial performance and variation in performance from one firm to another has been observed and statistically established. They revealed that the diversified firms studied have been healthy financial performance.

Dhankar (1998) has studied about the criteria of performance measurement for business enterprises in India study of public sector undertakings. The author gives a new model for measuring the performance of a business enterprise in India, wherein, the basis is to compare its actual rate of return with its expected risk adjusted rate of return. Realizing the importance and controversy of public sector in India, an attempt was made to measure the performance of all public sector undertakings, which were started up to 1964 and were in operation until 1983. It is shocking to know that half of them on an average want to talk of making excess returns, have not been able to earn equal to their cost of capital.

3. RESEARCH METHODOLOGY:

The study is based on the secondary data. The secondary data were collected from the annual reports of Bharat heavy electrical limited. A period of Twenty two years from 2001-2002 to 2022-2023 was taken as the study period. The secondary data that were taken the published sources like balance sheet and annual reports. Were analysed by using percentage, relevant ratios, annual growth rate, compound growth rate were analysed in descriptive manner. Following statistical formula ratio are used.

4. ANALYSIS AND INTERPRETATION:

Current assets:

The Current Assets account is a balance sheet line item listed under the Assets section, which accounts for all company-owned assets that can be converted to cash within one year. Assets whose value is recorded in the Current



Assets account are considered current assets. Current assets include cash, cash equivalents, accounts receivable, stock inventory, marketable securities, pre-paid liabilities, and other liquid assets. Current Assets may also be called Current Accounts.

Table I: Table Showing the Current Assets of Bharat Heavy Electrical Limited in India for the period 2001-2002 to 2022-2023

Year	Amount (in crores)	AGR(in percentage)
2001-2002	7055.01	
2002-2003	7397.74	4.86
2003-2004	9385.5	26.87
2004-2005	12113.28	29.06
2005-2006	15130.9	24.91
2006-2007	19922.1	31.67
2007-2008	26518.38	33.11
2008-2009	34477.4	30.01
2009-2010	40121.14	16.37
2010-2011	48257.43	20.28
2011-2012	19365.75	-59.87
2012-2013	50959.46	163.14
2013-2014	52018.78	2.08
2014-2015	48537.76	-6.69
2015-2016	47015.26	-3.14
2016-2017	42893.96	-8.77
2017-2018	43188.39	0.69
2018-2019	38372.09	-11.15
2019-2020	32703.53	-14.77
2020-2021	28334.02	-13.36
2021-2022	27861.98	-1.67
2022-2023	30082.28	7.97
	CGR=6.74	

Source: Annual Report of BHEL

The above table shows the current assets of Bharat heavy electrical limited. The current assets is increasing from 7055.01 in the year 2001-2001 to 48277.43 crores in the year 2010-2011 and it is fluctuated over the study period. Highest was 52018.78 in the year 2013-2014 and lowest was 7055.01 in the year 2001-2002. Annual growth was calculated and highest was 163.14% in the year 2012-2013 and lowest was -59.87 % in the year 2011-2012. Compound growth rate was 6.74 times during the study period.

Current liabilities

Current liabilities are a company's short-term financial obligations that are due within one year or within a normal operating cycle. Current liabilities are typically settled using current assets, which are assets that are used up within one year. Examples of current liabilities include accounts payable, short-term debt, dividends, and notes payable as well as income taxes owed.

Table II: Table Showing the Current Liabilities of Bharat Heavy Electrical Limited in India for the period 2001-2002 to 2022-2023

Year	Amount (in crores)	AGR(in percentage)
2001-2002	646.98	
2002-2003	3696.3	471.32
2003-2004	5196.91	40.60
2004-2005	7120.44	37.01
2005-2006	8807.74	23.70
2006-2007	11897.87	35.08
2007-2008	16576.45	39.32



2008-2009	23357.32	40.91
2009-2010	28023.74	19.98
2010-2011	31346.57	11.86
2011-2012	19365.7	-38.22
2012-2013	27821.66	43.66
2013-2014	25542.75	-8.19
2014-2015	22207.48	-13.06
2015-2016	21432.02	-3.49
2016-2017	20125.67	-6.10
2017-2018	22250.23	10.56
2018-2019	23030.27	3.51
2019-2020	22647.41	-1.66
2020-2021	20321.66	-10.27
2021-2022	21371.15	5.16
2022-2023	23351.44	9.27
	CGR=17.51	

Source: Annual Report of BHEL

The above table shows the data of current liabilities of Bharat heavy electrical limited. It was found that current liabilities increase from 646.98 crores in the year 2001-2002 to 31346.58 crores in the year 2010-2011. After that the value of current liabilities were fluctuated, Highest value was 31346.57 crores in the year 2010 - 2011 and lowest was 646.98 crores in the year 2001-2002. Annual growth rate was fluctuated over the study period, highest value was 471.32 % in the year 2002-2003 and lowest was -38.22% in the year 2011-2012. Compound growth rate was 17.51 times during the study period.

Net worth:

Net worth is the value of all the non-financial and financial assets owned by an individual or institution minus the value of all its outstanding liabilities. Financial assets minus outstanding liabilities equal net financial assets, so net worth can be expressed as the sum of non-financial assets and net financial assets. This concept can apply to companies, individuals, governments, or economic sectors such as the financial corporation's sector, or even entire countries.

Table III: Table Showing the Net Worth of Bharat Heavy Electrical Limited in India for the period 2001-2002 to 2022-2023

Year	Amount (in crores)	AGR(in percentage)
2001-2002	4220.3	
2002-2003	4708.2	11.56
2003-2004	5278.1	12.10
2004-2005	6026.9	14.19
2005-2006	7301.4	21.15
2006-2007	8788.3	20.36
2007-2008	10774	22.59
2008-2009	12939	20.09
2009-2010	15917	23.02
2010-2011	20154	26.62
2011-2012	25373	25.90
2012-2013	30444	19.99
2013-2014	33047	8.55
2014-2015	34085	3.14
2015-2016	32257	-5.36
2016-2017	32399	0.44
2017-2018	32662	0.81
2018-2019	31573	-3.33
2019-2020	28766	-8.89



2020-2021	28756	-0.03
2021-2022	26971	-6.21
2022-2023	27262	1.08
	CGR=8.75	

Source: Annual Report of BHEL

The above table shows the net worth of the Bharat heavy electrical limited. It was found that net worth was increasing from 4220.3 crores in the year 2001-2002 to 34085 crores in the year 2014-2015. After that net worth was declined to 27262 crores in the year 2022-2023. Annual growth rate was calculated and highest value was 26.62% in the year 2010-2011 and lowest was -8.89% in the year 2019-2020. Compound growth rate was 8.75 times during the study period.

Current ratio:

The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It tells investors and analysts how a company can maximize the current assets on its balance sheet to satisfy its current debt and other payables.

Table IV: Table Showing the Current Ratio of Bharat Heavy Electrical Limited in India for the period 2001-2002 to 2022-2023

Year	Amount (in crores)	AGR(in percentage)
2001-2002	1.7	
2002-2003	1.8	5.88
2003-2004	1.7	-5.56
2004-2005	1.6	-5.88
2005-2006	1.6	0.00
2006-2007	1.5	-6.25
2007-2008	1.4	-6.67
2008-2009	1.3	-7.14
2009-2010	1.32	1.54
2010-2011	1.32	0.00
2011-2012	1.43	8.33
2012-2013	1.64	14.69
2013-2014	1.76	7.32
2014-2015	1.78	1.14
2015-2016	1.75	-1.69
2016-2017	2.13	21.71
2017-2018	1.93	-9.39
2018-2019	1.67	-13.47
2019-2020	1.44	-13.77
2020-2021	1.39	-3.47
2021-2022	1.3	-6.47
2022-2023	1.29	-0.77
	CGR=1.23	

Source: Annual Report of BHEL

The above table shows the current ratio of Bharat heavy electrical limited. The current ratio is fluctuated over the study period. Highest value of current ratio is 2.13 in the year 2016-2017 and the lowest was 1.29 in the year 2022-2023. Annual growth rate was calculated, in it highest was 14.69 % in the year 2012-2013 and lowest was -13.77% in the year 2019-2020. Compound growth rate was -1.23 times during the study period.

5. FINDINGS:

- The above table shows the current assets of Bharat heavy electrical limited. The current assets is increasing from 7055.01 in the year 2001-2001 to 48277.43 crores in the year 2010-2011 and it is fluctuated over the study period. Highest was 52018.78 in the year 2013-2014 and lowest was 7055.01 in the year 2001-2002.



Annual growth was calculated and highest was 163.14% in the year 2012-2013 and lowest was -59.87 % in the year 2011-2012. Compound growth rate was 6.74 times during the study period.

- It was found that current liabilities increase from 646.98 crores in the year 2001-2002 to 31346.58 crores in the year 2010-2011. After that the value of current liabilities were fluctuated, highest value was 31346.57 crores in the year 2010 -2011 and lowest was 646.98 crores in the year 2001-2002
- It was found that net worth was increasing from 4220.3 crores in the year 2001-2002 to 34085 crores in the year 2014-2015. After that net worth was declined to 27262 crores in the year 2022-2023.
- The current ratio is fluctuated over the study period. Highest value of current ratio is 2.13 in the year 2016-2017 and the lowest was 1.29 in the year 2022-2023.

6. SUGGESTIONS:

- During the study period it was observed that the net worth was decreasing in the last few years in Bharat heavy electrical limited. It is suggested to take measures to increase it.
- Current liabilities of Bharat heavy electrical limited is increasing over the study period, due to lack of financial position. Therefore Bharat heavy electrical limited has to reduce their liabilities by improving financial specialities.

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