

CURRENT RATIO ANALYSIS OF HEAVY ELECTRICAL INDUSTRIES IN INDIA (A Comparative Study between BHEL and Crompton Greaves)

Vineet Singh and Abhinna Srivastava

Assistant Professor, Dept. of Commerce,
Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh.



Abstract:-

Current ratio is the ratio of current assets of a company to its current liabilities and is used to assess the firm's ability to meet its short-term liabilities on time. The present study is an attempt to analyze the current ratio of Bharat Heavy Electricals Limited (BHEL). For providing a suitable insight into the study a comparison is made between current ratio of BHEL and Crompton Greaves (C.G). Further t-test is applied in order to find out whether there is a significant difference between quick ratio of BHEL and C.G or not.



Vineet Singh

Assistant Professor, Dept. of Commerce,
Guru Ghasidas Vishwavidyalaya, Bilaspur,
Chhattisgarh.

Keywords:

BHEL, Crompton Greaves, Current Ratio.

INTRODUCTION

Current ratio is the ratio of current assets of a company to its current liabilities. Current assets are the assets which can be converted into cash easily within one year such as debtors, bills receivables, inventory etc. On the other hand current liabilities are the liabilities which are payable within a short period of time normally one year like creditors, bills payable, dividend etc. An ideal current ratio should be 2:1, which means that current assets must be twice the current liabilities. Current ratio is used to assess the firm's ability to meet its short-term liabilities on time.

BHEL stands for *Bharat Heavy Electricals Limited*, is presently India's largest engineering and manufacturing project in the energy-related infrastructure sector with a credit of manufacturing over 180 products under 30 major product groups. It gratifies to foundation sectors of the Indian Economy such as Power Generation and Transmission, Renewable Energy, Transportation, Telecommunication, etc. Company's strong point is its highly trained and dedicated team of more than 6,748 employees where every employee is given an identical opportunity to build up and grow. Incessant training and retraining, well managed career planning, a encouraging work culture and participative approach of management have stimulated enlargement of a committed and motivated workforce setting new benchmark in terms of productivity, quality and responsiveness.

C.G stands for Crompton Greaves, on the other hand, is known as largest private sector enterprise in India especially in the walk of heavy electrical industry. C.G is mainly involved in designing, manufacturing and marketing of sophisticated electrical products and services, which are primarily related to power generation, transmission and distribution process. The company was established in India in the year 1937, since then the company has preserved its leadership in the field of application and effective management of electrical energy. Power systems, industrial systems as well as consumer products are the three central strategic business segments of Crompton Greaves.

OBJECTIVE OF STUDY:

- (i) To estimate the current ratio of BHEL during 2002-2003 to 2011-2012.
- (ii) To estimate the current ratio of C.G during 2002-2003 to 2011-2012.
- (iii) To compare the current ratio of BHEL and C.G during 2002-2003 to 2011-2012.
- (iv) To test whether there is a significant difference between current ratio of BHEL and C.G with the help of t test during 2002-2003 to 2011-2012.

HYPOTHESIS:

Present study is based on following two hypotheses;

H₀ = There is no significant difference between current ratio of BHEL and C.G

H₁ = There is a significant difference between current ratio of BHEL and C.G

RESEARCH METHODOLOGY:

The study is primarily based on secondary data and the relevant information in this regard has been collected from various sources like annual reports and websites of BHEL and Crompton Greaves for the period 2002-2003 to 2011-2012. In addition, various sources have been used to collect the relevant data such as materials from journals, articles, textbooks, working papers and reference books from libraries. The analysis is mainly carried out through various statistical measures like percentage, average, t test etc.

ANALYSIS AND INTERPRETATION:

To make an analysis, current ratio of BHEL and C.G has been calculated by following tables and graphical representation, followed by a comparative study.

Table 1: Current Ratio (BHEL)

Year	Current Assets (BHEL)	Current Liabilities (BHEL)	Current Ratio (BHEL)
2002-2003	8348.40	4756.06	1.76
2003-2004	10424.70	6336.85	1.65
2004-2005	13342.98	8445.89	1.58
2005-2006	16330.78	10320.02	1.58
2006-2007	21062.97	14420.11	1.46
2007-2008	27704.72	19820.84	1.40
2008-2009	36901.07	28332.90	1.30
2009-2010	42934.81	32441.72	1.32
2010-2011	51494.74	38943.37	1.32
2011-2012	48714.94	28722.93	1.70
Average	27726.01	19254.07	1.51

Current Liabilities = Current Liabilities + Provisions

Fig1: Current Ratio (BHEL)

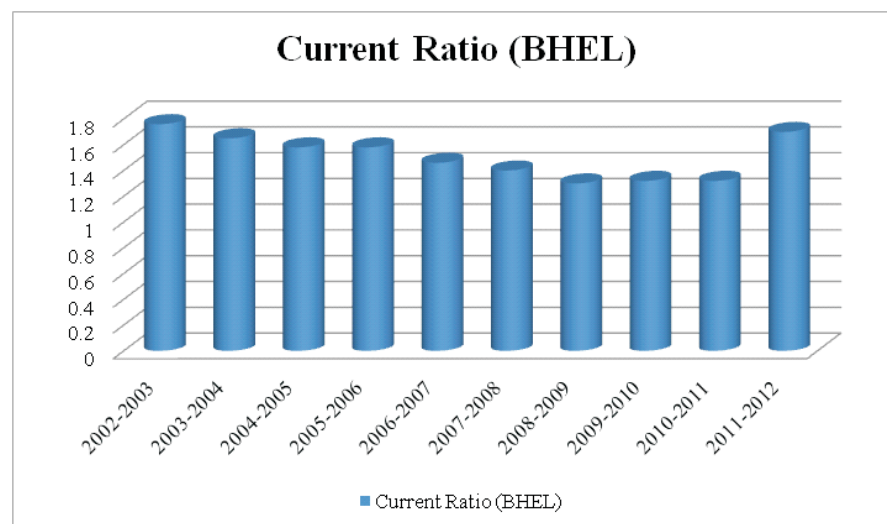


Table 1 reveals the current assets and current liabilities of BHEL during the period of 2002-2003 to 2011-2012 which is helpful in estimating the current ratio of the concern. The current ratio of BHEL stood at an average of 1.51:1 during the study period of 2002-2003 to 2011-2012. In the year 2002-2003 the current assets in BHEL amounted to Rs. 8348.40 crores and current liabilities amounted to Rs. 4756.06 crores which has resulted in current ratio of 1.76:1. In 2003-2004 current assets stood at Rs. 10424.70 crores and current liabilities amounted to Rs. 6336.85 crores which has resulted in current ratio of 1.65:1. In 2004-2005 the current ratio of BHEL stood at 1.58:1, in the same year current assets of BHEL amounted to Rs. 13342.98 crores and current liabilities amounted to Rs. 8445.89 crores. In the year 2005-2006 the current assets amounted to Rs. 16330.78 crores and current liabilities amounted to Rs. 10320.02 crores which has resulted in current ratio of 1.58:1. In the year 2006-2007 the current ratio stood at 1.46:1, in the same year current assets amounted to Rs. 21062.97 crores and current liabilities amounted to Rs. 14420.11 crores. Further in the year 2007-2008 the current assets in BHEL amounted to Rs. 27704.72 crores and current liabilities amounted to Rs. 19820.84 crores which has resulted in current ratio of 1.40:1. In 2008-2009 current assets stood at Rs. 36901.07 crores and current liabilities amounted to Rs. 28332.90 crores which has resulted in current ratio of 1.30:1. In 2009-2010 the current ratio of BHEL stood at 1.32:1, in the same year current assets of BHEL amounted to Rs. 42934.81 crores and current liabilities amounted to Rs. 32441.72 crores. In the year 2010-2011 the current assets amounted to Rs. 51494.74 crores and current liabilities amounted to Rs. 38943.37 crores which has resulted in current ratio of 1.32:1. In the year 2011-

2012 the current ratio of BHEL stood at 1.70:1, in the same year current assets of BHEL amounted to Rs. 48714.94 crores and current liabilities amounted to Rs. 28722.93 crores. *BHEL, Crompton Greaves, Current Ratio.*

Table2: Current Ratio (C.G)

Year	Current Assets (C.G)	Current Liabilities (C.G)	Current Ratio (C.G)
2002-2003	856.43	573.91	1.49
2003-2004	894.26	648.25	1.38
2004-2005	890.83	587.23	1.52
2005-2006	1133.69	802.37	1.41
2006-2007	1460.84	1047.42	1.39
2007-2008	1656.23	1295.30	1.28
2008-2009	2085.99	1515.69	1.38
2009-2010	2220.19	1600.17	1.39
2010-2011	2384.99	1698.62	1.40
2011-2012	2818.39	1804.20	1.56
Average	1640.18	1157.32	1.42

Current Liabilities = Current Liabilities + Provisions

Fig2: Current Ratio (C.G)

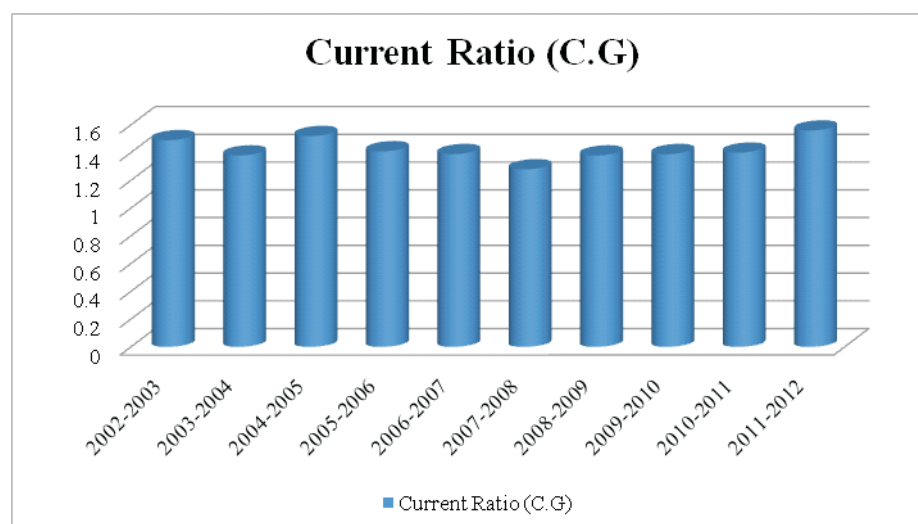


Table 2 exhibits the current assets and current liabilities of C.G during the period of 2002-2003 to 2011-2012 which is helpful in estimating the current ratio of the enterprise. The current ratio of C.G stood at an average of 1.42:1 during the study period of 2002-2003 to 2011-2012. In the year 2002-2003 the current assets in C.G amounted to Rs. 856.43 crores and current liabilities amounted to Rs. 573.91 crores which has resulted in current ratio of 1.49:1. In 2003-2004 current assets stood at Rs. 894.26 crores and current liabilities amounted to Rs. 648.25 crores which has resulted in current ratio of 1.38:1. In 2004-2005 the current ratio of C.G stood at 1.52:1, in the same year current assets of C.G amounted to Rs. 890.83 crores and current liabilities amounted to Rs. 587.23 crores. In the year 2005-2006 the current assets amounted to Rs. 1133.69 crores and current liabilities amounted to Rs. 802.37 crores which has resulted in current ratio of 1.41:1. In the year 2006-2007 the current ratio stood at 1.39:1, in the same year current assets amounted to Rs. 1460.84 crores and current liabilities amounted to Rs. 1047.42 crores. Further in the year 2007-2008 the current assets in C.G amounted to Rs. 1656.23 crores and current liabilities amounted to Rs. 1295.30 crores which has resulted in current ratio of 1.28:1. In 2008-2009 current assets stood at Rs. 2085.99 crores and current liabilities amounted to Rs. 1515.69 crores which has resulted in current ratio of 1.38:1. In 2009-

2010 the current ratio of C.G stood at 1.39:1, in the same year current assets of C.G amounted to Rs. 2220.19 crores and current liabilities amounted to Rs. 1600.17 crores. In the year 2010-2011 the current assets amounted to Rs. 2384.99 crores and current liabilities amounted to Rs. 1698.62 crores which has resulted in current ratio of 1.40:1. In the year 2011-2012 the current ratio of C.G stood at 1.56:1, in the same year current assets of C.G amounted to Rs. 2818.39 crores and current liabilities amounted to Rs. 1804.20 crores. Current ratio of C.G during the study period has also been shown with the help of Figure 2.

Table3: Current Ratio (BHEL and C.G)

Year	Current Ratio (BHEL)	Current Ratio (C.G)
2002-2003	1.76	1.49
2003-2004	1.65	1.38
2004-2005	1.58	1.52
2005-2006	1.58	1.41
2006-2007	1.46	1.39
2007-2008	1.40	1.28
2008-2009	1.30	1.38
2009-2010	1.32	1.39
2010-2011	1.32	1.40
2011-2012	1.70	1.56
Average	1.51	1.42

Fig3: Current Ratio (BHEL and C.G)

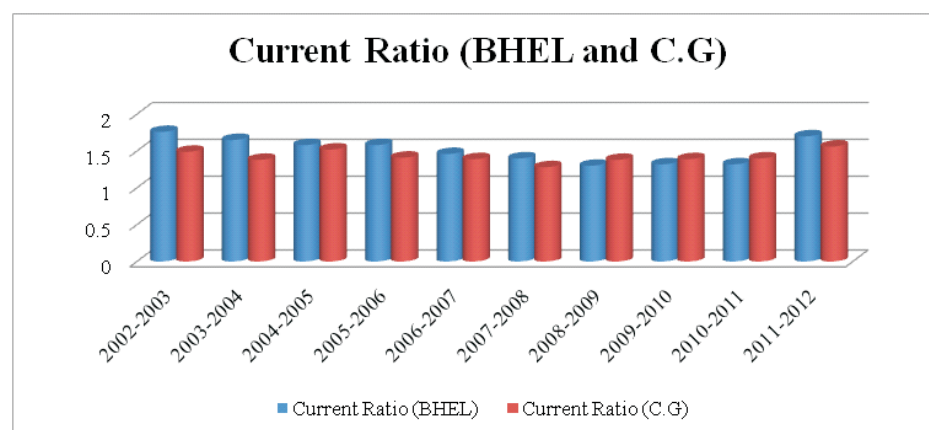


Table 3 exhibits current ratio of both the concerns. The current ratio of BHEL and C.G stood at an average of 1.51:1 and 1.42:1 respectively during the study period of 2002-2003 to 2011-2012. In the year 2002-2003 the current ratio of BHEL stood at 1.76:1 where as the current ratio of Crompton Greaves stood at 1.49:1. In the year 2003-2004 the current ratio of BHEL and Crompton Greaves stood at 1.65:1 and 1.38:1 respectively. BHEL has a current ratio of 1.58:1 where as Crompton Greaves has a current ratio of 1.52:1 in 2004-2005. In the year 2005-2006 the current ratio of BHEL stood at 1.58:1 where as the current ratio of Crompton Greaves stood at 1.41:1. In the year 2006-2007 BHEL has a current ratio of 1.46:1 where as Crompton Greaves has current ratio of 1.39:1. Further in the year 2007-2008 the current ratio of BHEL and Crompton Greaves stood at 1.40:1 and 1.28:1 respectively. BHEL has a current ratio of 1.30:1 where as Crompton Greaves has a current ratio of 1.38:1 in 2008-2009. In the year 2009-2010 the current ratio of BHEL stood at 1.32:1 where as the current ratio of Crompton Greaves stood at 1.39:1. In the year 2010-2011 BHEL has current ratio of 1.32:1 where as Crompton Greaves has a current ratio of 1.40:1. In the year 2011-2012 the current ratio of BHEL and Crompton Greaves stood at 1.70:1 and 1.56:1 respectively. Current ratio of both the concerns during the study period has also been shown with the help of Figure 3.

HYPOTHESIS TESTING ON CURENT RATIO (BHEL and C.G)

To test whether there is a significant difference between current ratio of BHEL and C.G the following hypothesis is framed and tested through t-test at 95 % confidence level:

H_0 There is no significant difference between current ratio of BHEL and C.G

H_1 There is a significant difference between current ratio of BHEL and C.G

Table 4: t-Test: Two-Sample Assuming Unequal Variances

t-Test: Two-Sample Assuming Unequal Variances		
PARAMETERS	CURRENT RATIO BHEL	CURRENT RATIO C.G
Mean	1.506527249	1.420498821
Variance	0.027911099	0.006707387
Observations	10	10
Hypothesized Mean Difference	0	
df	13	
t Stat	1.462136604	
P(T<=t) one-tail	0.083727262	
t Critical one-tail	1.770933383	
P(T<=t) two-tail	0.167454525	
t Critical two-tail	2.160368652	

Since the calculated value of t one tail at .05 level of significance is less than the table value of t, null hypothesis is accepted that there is no significant between current ratio of BHEL and C.G and alternative hypothesis is rejected.

CONCLUSION:

On the basis of above analysis it can be concluded that BHEL is maintaining current ratio at an average of 1.51:1 where as C.G is maintaining current ratio at an average of 1.42:1 during the study period of 2002-2003 to 2011-2012. An ideal current ratio is said to be 2:1. So, it can be concluded that both the companies are not able to maintain a satisfactory level of current assets in order to meet their current liabilities. However, BHEL is able to maintain a better current ratio as compared to C.G during the study period. In addition the above analysis also reveals that that the main hypothesis H_0 is accepted and alternate hypothesis H_1 is rejected. Thus it can be concluded that there is no significant difference between current ratio of BHEL and Crompton Greaves.

REFERENCES:

1. Annual Reports of Bharat Heavy Electricals Limited (BHEL)
2. Annual Reports of Crompton Greaves (C.G)
3. <http://www.cgglobal.com/frontend/Crompton.aspx?cnl2=U9Q15+7swRk=>
4. <http://www.bheltdg.com/aboutbhel>
5. Pandey, I.M, Vikas Publishing House Pvt. Ltd, 2009
6. Paul Barnes; The Analysis And Use Of Financial Ratios: A Review Article, Journal of Business Finance & Accounting, Volume 14, Issue 4, December 1987
7. Insan, Pinki; Warne, D. P.; Asia Pacific Journal of Research in Business Management; Aug2011, Vol. 2 Issue 8
8. BHEL official site; <http://www.bhel.com/about.php>