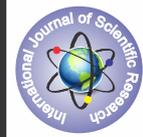


## A STUDY ON POSITION STATEMENT THROUGH RATIO ANALYSIS WITH REFERENCE TO BHARAT HEAVY ELECTRICALS LIMITED



Commerce

KEYWORDS:

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### ABSTRACT

*The position statement is a vital part of any business organization. This statement has to be compulsorily prepared as per various acts & enactments. The assets shows the economic resources which the business organization has, and from where these resources have come is represented in form of liabilities. The position statement gives information about nature and value of assets, nature and extent of liabilities as well as gives information whether the organization has sufficient assets to pay off the external liabilities or not. It also gives information whether the stability position of the organization is satisfactory or not. In this paper we have used fixed assets turnover ratio, total assets turnover ratio, solvency ratio & debt equity ratio for knowing the efficiency with which the fixed assets are used by the organization, knowing the efficiency with which the total assets is utilized, finding the interrelationship between the total assets & total outsiders liabilities & measuring the extent to which debt financing has been used in business this organization from 2010-11 to 2014-15.*

### CONCEPT

The Position Statement of a company is basically a synopsis of the financial balances of various business organizations which enables us to understand the risk and profitability of a concern through the analysis of reported financial information's. The position Statement of company provides a snapshot of a company's health. The position statement is an important consideration for the investors as it provides an insight of that the company owns and how much it owes. The main objective of analysis of position statement analysis is to provide information about the financial position, its performance which will be helpful in making suitable economic decision for the future. In this study we have used the fixed assets turnover ratios, total assets turnover ratio, debt equity ratio and solvency ratio to understand the solvency position of BHEL.

### REVIEW OF LITERATURE

One of the effective ways of communicating financial information about a business is through financial statements. Thus, the recording and summarizing of financial data are necessary part of accounting information system. However, no matter how well prepared and presented, financial statements need to be analyzed and interpreted to unveil the truths hidden in them and enhance decision-making. Interestingly, such analysis and interpretation can be made by means of ratios and comparisons. Therefore, in this part, expert opinion on the role of ratio analysis in business decisions with particular reference to financial statement analysis is reviewed.

**Myez (1984)** says financial statement analysis is largely a study of relationship among the various financial factors in a business, as disclosed by a single set of statements, and a study of the trends of these factors, as shown in a series of statements. **Kennedy and Muller (1989)** says that the analysis and interpretation of the financial statements are an attempt to determine the significance and meaning of financial statement data so that the forecast may be made of the prospects for future earnings, ability to pay interest and debt maturities (both current and long term) and profitability and sound dividend policy.

**Hermason et al. (1992:846)**, "financial analysis relies heavily on informed judgment. Percentages and ratios are guides to aid comparison and useful in uncovering potential strengths and weaknesses. However, the financial analysis should seek the basic causes behind and established trends". **Mario W.Cardulla (1996)282page**, the *financial analysis techniques* that are useful to a manager are some of the major *financial appraisal techniques* and not the total set of these *techniques*. A financial statement often referred to, as the trading and profit loss account, matching revenues against

expense to show the profitability or operational results of an enterprise over a period of time, such as a month or year. (**Hermanson et al.1992:25**).

According to **Needles et al. (1996:770)** financial statement analysis is used to achieve two basic objectives: (1) Assessment of past performance and current position, and (2) Assessment of future potential and related risks of a business. According to **Hermanson et al (1992:824)**, "financial statement analyses consist of applying analysis tools and techniques to financial statements and other relevant data to show important relationships and obtain useful information." Therefore, financial statement analysis can be defined as the breaking down, interpretation, and translation of data contained in financial statements to provide information and show important relationships among the items of financial statements and drawing conclusion about the past performance, current financial position, and future potentials of a business.

**Essien (2006:144)** observed: Financial statements carry lots of financial information that are hidden in the figures. The figures in financial statements become more useful when they are related to each other or to some other relevant financial data. Therefore, users of financial information go a further step to establish relationships (or ratios) among selected data in financial statements.

### OBJECTIVES OF STUDY

The study fulfils the following objectives:

- (i) To analyze the concept of fixed assets, total assets, total liabilities and debt & equity of BHEL.
- (ii) To identify the items responsible for changes in position statement of BHEL.

### HYPOTHESIS

In order to achieve these objectives, the following null hypothesis is framed for testing:

Ho: There is no significant difference in the solvency position of BHEL during the period of study.

### METHODOLOGY

For the study, data has been collected from the annual reports published periodically by the company. The statistical techniques like percentage, averages, coefficient of correlation, coefficient of variation, T-test have also been applied. For proper analysis and evaluation, the individual items of profit and loss accounts and balance sheet have also been regrouped.

**LIMITATIONS**

(i) The conclusion drawn on the basis of ratio analysis can have different opinions about the solvency position, Debt Equity position etc.

(ii) The interpretations of ratio may not produce fair result as no considerations are made to the change in the price levels.

(iii) There are different types of ratio's that are used by us, but there are no standard rules for interpretations hence the conclusions may be basically clues.

(iv) The financial accounting records are historical in nature hence the interpretation made may not show the exact or correct picture or position for the future years.

**POSITION STATEMENT ANALYSIS OF BHEL**

For analyzing the position statement of BHEL from the year 2010-11 to 2014-15 we have used the fixed assets turnover ratios, total assets turnover ratio, debt equity ratio, solvency ratio etc.

**1. FIXED ASSETS TURNOVER RATIO**

The fixed assets turnover ratio represents the utilization of fixed assets by the organization and it helps in knowing the efficiency with which the fixed assets are used by the organization. Higher the ratio higher would be the efficiency of the fixed assets. Whereas, if this ratio is low it indicates inefficiency of utilization of fixed assets. The formula for calculating fixed assets turnover ratio is:

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{Net Sales}}{\text{Fixed Assets}}$$

**TABLE NO. 1: Statement Showing fixed assets turnover ratio (Rs. In Crores)**

Year	Fixed Assets	Net sales	fixed assets turnover ratio
2010 - 11	16029	30147	1.88
2011-12	18339	38848	2.12
2012-13	20341	48106	2.36
2013-14	22846	47598	2.08
2014-15	21847	41854	1.92
Mean	19880.40	41310.60	2.07
SD	2452.90	6583.23	0.17
CV %	12.34	15.94	8.33
Growth %	36.30	38.83	1.86
Average Annual Growth	7.26	7.77	0.37

Source: Compiled from Annual report of the BHEL

**INTERPRETATION**

As per table number 1, the fixed assets turnover ratio is showing an increasing trend till 2012-13. Initially it was at 1.88 times and it got increased to 2.36 times by 2012-13. There was a decrease in this ratio in the next two years and it got reduced to 1.92 times by 2014-15. The mean was at 2.07 times where as the co-efficient of variance was at 8.33 %. The growth reflected at 1.86% and the average growth was at 0.37%.

**2. TOTAL ASSETS TURNOVERRATIO**

The total assets turnover ratio represents the utilization of the total assets by the organization and it helps in knowing the efficiency with which the total assets is utilized. If this ratio is low it indicates inefficiency of utilization of total assets and vice a versa. The Total Assets turnover ratio is calculated by the following formula.

$$\text{Total Assets Turnover Ratio} = \frac{\text{Net Sales}}{\text{Total Assets}}$$

**TABLE NO. 2: Statement Showing Total assets turnover ratio (Rs. In Crores)**

Year	Total Assets	Net sales	Total assets turnover ratio
2010 - 11	59617	30147	0.51
2011-12	67430	38848	0.58
2012-13	71752	48106	0.67
2013-14	75244	47598	0.63
2014-15	70888	41854	0.59
Mean	68986.20	41310.60	0.60
SD	5303.40	6583.23	0.06
CV %	7.69	15.94	9.34
Growth %	18.91	38.83	16.76
Average Annual Growth	3.78	7.77	3.35

Source: Compiled from Annual report of the BHEL

**INTERPRETATION**

As per table number 2, the total assets turnover ratio is showing an increasing trend till 2012-13. Initially it was at 0.51 times and it got increased to 0.67 times by 2012-13. There was a decrease in this ratio in the next two years and it got reduced to 0.59 times by 2014-15. The mean was at 0.60 times where as the co-efficient of variance was at 9.34 %. The growth reflected at 9.34% and the average growth was at 3.35%.

**3. DEBT -EQUITY RATIO**

The Debt -Equity ratio is calculated to measure the relative claims of outsiders and the owners against the firm's assets. The relationship between the external equities and the internal equities is found through this ratio. This ratio helps in measuring the extent to which debt financing has been used in a business enterprise.

$$\text{Debt - Equity Ratio} = \frac{\text{Debt}}{\text{Equity}}$$

Where, Debt includes all debts & liabilities payable to outsiders and Equity includes share capital, reserves, accumulated profits, capital reserves etc.

**TABLE NO. 3: Statement Showing Debt-Equity Ratio (Rs. In Crores)**

Year	Debt	Equity	Debt-Equity Ratio
2010 - 11	14205	20155	0.70
2011-12	12866	25403	0.51
2012-13	13002	30352	0.43
2013-14	16071	33156	0.48
2014-15	13862	34206	0.41
Mean	14001.20	28654.40	0.51
SD	1151.70	5230.26	0.11
CV %	8.23	18.25	20.95
Growth %	-2.41	69.71	-42.50
Average Annual Growth	-0.48	13.94	-8.50

Source: Compiled from Annual report of the BHEL

**INTERPRETATION**

As per the above table no. 3, the debt equity ratio of this organization seems to be decreasing. Initially it was at 0.70:1 and it got decreased to 0.48:1 by 2013-14. There was a further decrease in this ratio as it was at 0.41:1 by 2014-15. The mean was at 0.51: 1 where as the co-efficient of variance was at 20.95 %. The growth reflected at - 42.50% and the average growth was at - 8.50%.

**4. SOLVENCY RATIO**

The solvency ratio finds the interrelationship between the total assets & total outsiders liabilities. If this ratio is high this means more satisfactory is the solvency position of the organization and in case of lower ratio it indicates less stability of long term solvency position of

the organization.

$$\text{Solvency Ratio} = \frac{\text{Total Assets}}{\text{Total Outsider's Liabilities}}$$

**TABLE NO. 4: Statement Showing Solvency Ratio (Rs. In Crores)**

Year	Total Assets	Total outsiders liabilities	Solvency Ratio
2010 - 11	59617	39462	1.51
2011-12	67430	42027	1.60
2012-13	71752	41220	1.74
2013-14	75244	42088	1.79
2014-15	70888	36682	1.93
Mean	68986.20	40295.80	1.72
SD	5303.40	2040.49	0.15
CV %	7.69	5.06	8.54
Growth %	18.91	-7.04	27.92
Average Annual Growth	3.78	-1.41	5.58

Source: Compiled from Annual report of the BHEL

**INTERPRETATION**

As per the above table no.4, the solvency ratio of this organization seems to be increasing. Initially it was at 1.51:1 and it got increased to 1.79: 1 by 2013-14. There was a further increase in this ratio as it was at 1.93: 1 by 2014-15. The mean was at 1.72: 1 where as the coefficient of variance was at 8.54%. The growth reflected at 27.92% and the average growth was at 5.58%.

**TESTING OF HYPOTHESIS**

In this study the hypothesis has been analyzed by t-test.

**Null hypothesis H<sub>0</sub>**, There is no significant difference in the solvency position of BHEL for the years 2010-11 to 2014-15.

**Interpretation of t-test**

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Debt	14001.20	5	1287.64	575.85
	Equity	28654.40	5	5847.60	2615.13

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Debt &	5	.292	.633

Paired Samples Test									
		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Debt - Equity	-14653.20	5607.93	2507.94	-21616.37	-7690.03	-5.843	4	.004

**Interpretation**

$$t = -5.843, t_{0.05} = 2.776$$

$$t < t_{0.05}$$

When degree of freedom (df) is 4 and level of significance is 5%, the critical value is 2.776. Since the calculated value of t is -5.843 which less than the table value, we conclude that there is no significant difference in the solvency position of BHEL for the years 2010-11 to 2014-15. Hence, null hypothesis is accepted.

**Suggestions**

- For the betterment of solvency the company should try to reduce its outsider's liabilities.
- The company should try to improve its debt equity position of the organization as it was less than 1: 1 during the study period.

- The fixed assets of the company were not properly utilized as the ratio was decreasing during the last two years during the study period hence company should try to utilize its fixed assets efficiently.
- The company should try to effectively utilize its total assets hence the company should have better policies to increase its assets and turnover.
- The company should improve the composition of the current assets like inventories, debtors, loans & advances, other current assets & cash and bank balances.

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