

A COMPARATIVE STUDY OF FINANCIAL PERFORMANCE ELECTRICITY COMPANY IN GUJARAT STATE

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ABSTRACT

A management control system (MCS) is a system which gathers and uses information to evaluate the performance of different organizational resources like human, physical, financial and also the organization as a whole considering the organizational strategies. Finally, MCS influences the behavior of organizational resources to implement organizational strategies. MCS might be formal or informal. The principal objective of the study is to analyze the financial management control in selected units of DGVCL, MGVCL, PGVCL and UGVCL during the study period of 2010-11 to 2013-14. Ratio analysis technique has applied to analyze financial performance of selected units. ANOVA test has been applied to test the hypothesis of the study. The result shows that there is no significance difference in profitability performance of selected units during the study period.

Key Words: Management Control System, Financial performance, Efficiency management

INTRODUCTION:

Financial performance is a close and a critical study of various measures observed in the operation of business organization. The concept of human body is similar to the concept and case of a business organization. Human body requires medical checkup and examination for maintaining fitness of body; similarly, the financial performance of a business organization has got to be assessed periodically. Erich A. Helfert stated, "The person analyzing business performance has clearly in mind which tests should be applied and for what specific reasons. One must define the view point to be taken, the objectives of the analysis and possible standard comparison".

Financial Efficiency is a measure of the organization's ability to translate its financial resources into mission related activities. Financial Efficiency is desirable in all organizations regardless of individual mission or structure. It measures the intensity with which a business uses its assets to generate gross revenues and the effectiveness of producing, purchasing, pricing, financing and marketing decisions. At the micro level, Financial Efficiency refers to the efficiency with which resources are correctly allocated among competing uses at a point of time. Financial Efficiency is a measure of how well an organization has managed certain tradeoffs in the use of its financial resources. Financial Efficiency is regarded efficiency and is a management guide to greater efficiency the extent of profitability, productivity, liquidity and capital strength can be taken as a final proof of financial efficiency.

OVERVIEW OF POWER SECTOR IN INDIA:

Power Sector is at a crucial juncture of its evolution from a controlled environment to a competitive, market driven regime which endeavors to provide affordable, reliable and quality power at reasonable prices to all sectors of the economy. The Gross Domestic Product (GDP) of our country has been growing at the rate of about 8% for the last several years. The liberalization and globalization of the economy is leading to an increased tempo in industrial and commercial activities and this, coupled with penetration of technology and I.T. in the day-to-day life of the common man, is expected to result in a high growth in power demand. It is accordingly essential that development of the Power Sector shall be commensurate with the overall economic growth of the nation.

The Indian power sector is one of the most diversified in the world. Sources for power generation range from commercial sources like coal, lignite, natural gas, oil, hydro and nuclear power to other viable non-conventional sources like wind, solar and agriculture and domestic waste. The demand for electricity in the country has been growing at a rapid rate and is expected to grow further in the years to come. In order to meet the increasing requirement of electricity, massive addition to the

installed generating capacity in the country is required. While planning the capacity addition programme, the overall objective of sustainable development has been kept in mind.

REVIEW OF LITERATURE:

In this study an attempt has been made to briefly review the work already undertaken and methodology employed. A brief review of selected studies has been presented as below:

- **MALLICK AND SUR (1998)** made an attempt to analyze the impact of working capital management on profitability in Indian Tea industry with the help of some statistical tools and techniques. The study revealed that, out of the nine ratios relating to working capital management five ratios registered positive association and the remaining four ratios showed negative correlation with the profitability indicator. Rao & Rao (1999) undertook a similar type of study where ten ratios relating to working capital management were selected. Out of these indicators, positive association was noticed only in three.
- **DR SANJAY BHAYANI (2003)** published a book, "Practical financial statement analysis" The study covered 16 public limited cement companies in private sector. He made study of analysis of profitability, working capital, capital structure and activity of Indian cement industry. In his research he revealed various problems of cement industries and suggested remedies for the problems .He also suggested for the improvement of profitability and techniques of cost control.
- **NAIB, (2003)** compared efficiency of 26 enterprises (13 public and 13 private) for a 12 year period from 1988-89 to 1999- 2000. The results indicated that both public and private firms experienced modest positive average annual growth rate during this period. Thus this study also revealed that at the enterprise level there is little empirical justification for general presumption in favour of either type of ownership and a case by case examination may be more revealing. Thus for the present study case study method has been taken. The present study is a case of Bharat Heavy Electricals Limited (BHEL), which is a multi-product, multi division, Public Sector Company operating in highly competitive environment.
- **CHEAKRABORTY (2008)** evaluated the relationship between working capital and profitability of 25 selected companies in the Indian pharmaceutical industry during the period 1996-97 to 2007-08. Inadequacy of working capital may lead to the firm to insolvency, whereas excessive working capital implies idle funds which earns no profits. Therefore, efficient management of working capital is an integral part of the overall corporate strategy to improve corporate profitability. The partial regression coefficients shown in the multiple regression equation of ROCE on CR, ITR and DTR fitted in this study revealed that the liquidity management, inventory management and credit management made positive contribution towards improvement of the corporate profitability.
- **AUBRY LYIMO, DR.REUBENJ.L MWAMAKIMBULLAH KIKO F.S.HAMZA, (2010)** they found costs resulting from poles being rejected, reworked or down-graded was the highest at the study mill. The cost of quality were so high and as a result they negatively affect the financial performance of the mill.-cost of quality and its effect on company's profitability, the amount accrued from costs of quality was too high to reject the null hypothesis which claimed that costs of quality impacts negatively the profitability of the company.
- **NANDI (2011)** made an attempt to examine the influence of working capital management on corporate profitability. For assessing impact of working capital management on profitability of National Thermal Power Corporation Ltd. during the period of 10 years i.e., from 1999-2000 to 2008-09 Pearson's coefficient of correlation and multiple regression analysis between some ratios relating to working capital management and the impact measure relating to profitability

ratio (ROI) had been computed and applied. An attempt had been undertaken for measuring the sensitivity of return of investment (ROI) to changes in the level of working capital leverage (WCL) of the studying company.

- **DR. SHAILESH N. RANSARIYA (2015)** made an attempt to analyze the profitability performance of top 5 BSE index companies. The purpose of this research paper is to analyze the profitability performance of the BSE index companies, expressed in terms operating profit, gross profit, net profit, return on capital employed, return on net worth as the key financial indicators. The secondary data of the selected units was used for the period 2008-09 to 2012-13 for five BSE Index companies viz., ONGC Ltd., TCS Ltd., Reliance Industry Ltd., ITC Ltd. and Coal India Ltd. These are considered as the representatives of the industry due to high market share. For the data analysis and testing of hypothesis, ANOVA is used to check the significance of differences in the profitability performance of selected units during the study period. The results suggest that the profitability performance of ITC Ltd. is very good than the other selected units. But there is no significant difference in profitability performance of the selected units during the study period

OBJECTIVES OF THE STUDY:-

The principal objective of the study is to analyze the financial management control in selected units under the study period.

SELECTION OF SAMPLES:

The study has been carried out on the micro-level, as it is not possible for the researcher to conduct it on the macro-level. As the study is to be carried out by the individual researcher it is not easy to select all the companies as the samples for the study. So, the convenient random sampling has been done. As such the universe of the study is Indian Industries; the researcher has selected 4 companies as mentioned below:

1. DAKSHIN GUJARAT VIJ COMPANY LIMITED
2. MADHYA GUJARAT VIJ COMPANY LIMITED
3. PASCHIM GUJARAT VIJ COMPANY LIMITED
4. UTTAR GUJARAT VIJ COMPANY LIMITED

DATA COLLECTION: -

The source of data for this study was predominantly from secondary sources. i.e. study is mainly based on the secondary data taken from the annual reports of selected units and Accord data base website. And all the data relating to history, growth and development of Industries have been collected mainly from the books and magazine relating to the industry and published paper, report, article and from the various news papers, bulletins and other various research reports published by industry and research organization and websites of the selected units.

PERIOD OF THE STUDY:

The present study is mainly intended to examine the operating and financial performance of the selected units for the study period of 2010-11 to 2013-14.

HYPOTHESIS OF THE STUDY: -

On the basis of data collection, the researcher has identified the following broader hypothesis for the study:

Null Hypothesis:

1. There would be no significant difference in means score of profitability indicators in selected units during the study period.

Alternate Hypothesis:

1. There would be significant difference in means score of profitability indicators in selected units during the study period.

TOOLS OF ANALYSIS:

For the analysis of financial performance of selected units profitability ratios, mean, standard deviation, ANOVA test have been applied.

ANALYSIS OF FINANCIAL PERFORMANCE:

for the analysis of financial performance following profitability ratios have been calculated and analyzed by the researcher:

(1) Operating Profit Ratio:

Table No. 1

Operating Profit Ratio of selected units (percentage)

Name of the company	Years				Average Ratio
	2010-11	2011-12	2012-13	2013-14	
DGVCL	5.03	4.49	3.64	4.06	4.305
MGVCL	6.26	5.93	5.08	5.89	5.79
PGVCL	5.54	4.94	5.45	6.76	5.6725
UGVCL	4.36	3.73	4.23	5.15	4.3675

Source: Calculate from financial statements of the selected units

Analysis:

The above table No. 1 shows the operating profit ratio of selected units during the study period of 2010-11 to 2013-14. The average operating profit ratio was the highest in MGVCL with 5.79% and it was the lowest in DGVCL with 4.305% during the study period. It shows the mixed trend during the study period in all the selected units. In DGVCL it is the highest in the year 2010-11 and the lowest in the year 2012-13. In MGVCL it is the highest in the year 2010-11 and the lowest in the year 2012-13. In PGVCL it is the highest in the year 2013-14 and the lowest in the year 2011-12. . In UGVCL it is the highest in the year 2013-14 and the lowest in the year 2011-12.

Hypothesis Testing:

The hypothesis of the ratio is:

- H₀ : There is no significance difference in means score operating profit ratio in selected units during the study period
- H₁ : There is significance difference in means score operating profit ratio in selected units during the study period

For the testing of hypothesis ANOVA test has been applied as under:

Table No. 1 – ANOVA test analysis

Source of Variance	S.S.	d.f.	M.S.	F ratio	5% Limit (From F Table)
Between Sample	2.0478	3	0.683	0.787	3.49
Within Sample	10.4125	12	0.868		
	12.4603	15	1.551		

H₀ = u₁ = u₂

H₁ = u₁ ≠ u₂

5% level of significance table value of F = 3.49

The calculated value of F is 0.787 and table value of F is 3.49 (at 5% level of significance). Hence,

$$F_C < F_T$$

The calculated value of 'F' is less than the table value. The Null Hypothesis is accepted. The results are as per the expectation.

(2) Net Profit Ratio:

Table No. 2

Net Profit Ratio of selected units (percentage)

Name of the company	Years				Average Ratio
	2010-11	2011-12	2012-13	2013-14	
DGVCL	1.20	1.24	0.37	0.69	0.875
MGVCL	0.76	0.93	0.49	0.47	0.6625
PGVCL	0.05	0.11	0.11	0.10	0.0925
UGVCL	0.23	0.19	0.18	0.19	0.1975

Source: Calculate from financial statements of the selected units

Analysis:

The above table No. 2 shows the net profit ratio of selected units during the study period of 2010-11 to 2013-14. The average net profit ratio was the highest in DGVCL with 0.875% and it was the lowest in PGVCL with 0.0925% during the study period. It shows the mixed trend during the study period in all the selected units. In DGVCL it is the highest in the year 2011-12 with 1.24% and the lowest in the year 2012-13 with 0.37%. In MGVCL it is the highest in the year 2011-12 with 0.93% and the lowest in the year 2013-14 with 0.47%. In PGVCL it is the highest in the year 2011-12 and 2012-143 with 0.11% and the lowest in the year 2010-11 with 0.05% . In UGVCL it is the highest in the year 2010-11 with 0.23% and the lowest in the year 2012-13 with 0.18%.

Hypothesis Testing:

The hypothesis of the ratio is:

- H₀ : There is no significance difference in means score net profit ratio in selected units during the study period
- H₁ : There is significance difference in means score net profit ratio in selected units during the study period

For the testing of hypothesis ANOVA test has been applied as under:

Table No. 2 – ANOVA test analysis

Source of Variance	S.S.	d.f.	M.S.	F ratio	5% Limit (From Table)
Between Sample	0.2961	3	0.098	0.577	3.49
Within Sample	2.0524	12	0.171		
	2.3485	15	0.269		

$$H_0 = u_1 = u_2$$

$$H_1 = u_1 \neq u_2$$

5% level of significance table value of F = 3.49

The calculated value of F is 0.577 and table value of F is 3.49 (at 5% level of significance).

Hence,

$$F_C < F_T$$

The calculated value of 'F' is less than the table value. The Null Hypothesis is accepted. The results are as per the expectation.

(3) Return on Capital Employed:

Table No. 3

Return on Capital Employed Ratio of selected units (percentage)

Name of the company	Years				Average Ratio
	2010-11	2011-12	2012-13	2013-14	
DGVCL	10.76	10.16	6.53	7.29	8.685
MGVCL	6.94	7.64	5.76	6.03	6.5925
PGVCL	7.17	7.20	9.15	8.44	7.99
UGVCL	7.42	6.89	9.41	8.68	8.1

Source: Calculate from financial statements of the selected units

Analysis:

The above table No. 3 shows the return on capital employed ratio of selected units during the study period of 2010-11 to 2013-14. The average return on capital employed ratio was the highest in DGVCL with 8.68% and it was the lowest in PGVCL with 6.59% during the study period. It shows the mixed trend during the study period in all the selected units. In DGVCL it is the highest in the year 2010-11 with 10.76% and the lowest in the year 2012-13 with 6.53%. In MGVCL it is the highest in the year 2011-12 with 7.64% and the lowest in the year 2012-13 with 5.76%. In PGVCL it is the highest in the year 2012-13 with 9.15% and the lowest in the year 2010-11 with 7.17%. In UGVCL it is the highest in the year 2012-13 with 9.41% and the lowest in the year 2011-12 with 6.89%.

Hypothesis Testing:

The hypothesis of the ratio is:

- H_0 : There is no significance difference in means score return on capital employed ratio in selected units during the study period
- H_1 : There is significance difference in means score return on capital employed ratio in selected units during the study period

For the testing of hypothesis ANOVA test has been applied as under:

Table No. 3 – ANOVA test analysis

Source of Variance	S.S.	d.f.	M.S.	F ratio	5% Limit (From Table)
Between Sample	0.5630	3	0.1877	0.0726	3.49
Within Sample	31.0008	12	2.5834		
	31.5638	15	2.7711		

$$H_0 = u_1 = u_2$$

$$H_1 = u_1 \neq u_2$$

5% level of significance table value of $F = 3.49$

The calculated value of F is 0.0726 and table value of F is 3.49 (at 5% level of significance).

Hence,

$$F_C < F_T$$

The calculated value of 'F' is less than the table value. The Null Hypothesis is accepted. The results are as per the expectation.

(4) Earning Per Share:

Table No. 4

Earning Per Share of selected units (Rs.)

Name of the company	Years				Average Ratio
	2010-11	2011-12	2012-13	2013-14	
DGVCL	2.34	2.85	0.95	1.90	2.01
MGVCL	1.01	1.48	0.86	0.78	1.0325
PGVCL	0.07	0.20	0.14	0.08	0.1225
UGVCL	0.53	0.52	0.57	0.51	0.5325

Source: Calculate from financial statements of the selected units

Analysis:

The above table 4 shows the Earning per share ratio of selected units during the study period of 2010-11 to 2013-14. The average earning per share ratio was the highest in DGVCL with Rs.2.01 and it was the lowest in PGVCL with Rs.0.1225 during the study period. It shows the fluctuated trend during the study period in all the selected units. In DGVCL it is the highest in the year 2011-12 with Rs.2.85 and the lowest in the year 2012-13 with Rs.0.95. In MGVCL it is the highest in the year 2011-12 with Rs.1.48 and the lowest in the year 2013-14 with Rs.0.78. In PGVCL it is the highest in the year 2011-12 with Rs.0.20 and the lowest in the year 2010-11 with Rs.0.07. In UGVCL it is the highest in the year 2012-13 with Rs.0.57 and the lowest in the year 2013-14 with Rs.0.51.

Hypothesis Testing:

The hypothesis of the ratio is:

- H_0 : There is no significance difference in means score Earning per share ratio in selected units during the study period
- H_1 : There is significance difference in means score Earning per share ratio in selected units during the study period

For the testing of hypothesis ANOVA test has been applied as under:

Table No. 4 – ANOVA test analysis

Source of Variance	S.S.	d.f.	M.S.	F ratio	5% Limit (From Table)
Between Sample	0.8656	3	0.2885	0.7756	3.49
Within Sample	9.3392	12	0.7783		
	31.5638	15	2.7711		

$$H_0 = u_1 = u_2$$

$$H_1 = u_1 \neq u_2$$

5% level of significance table value of F = 3.49

The calculated value of F is 0.7756 and table value of F is 3.49 (at 5% level of significance).

Hence,

$$F_C < F_T$$

The calculated value of 'F' is less than the table value. The Null Hypothesis is accepted. The results are as per the expectation.

LIMITATIONS OF THE STUDY:-

Every live and non live factor has its own limitations which restrict the usability of that factor. The same rule applies to this research work. The major limitations of this study are as under:

1. This study is mainly based on secondary data derived from the annual reports of industry. The reliability and the finding are contingent upon the data published in annual report.
2. The study is limited to four years only.
3. The researcher has also modified some of the formula used in the study. The arbitrariness, if any, in the modification of the formula will also influence the results of study.
4. Accounting ratios have its own limitation, which also applied to the study.
5. As, the study is conducted on micro level with the samples of 4 units, the generalization of results cannot not be made to whole Indian corporate world.

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