



## Analysis of Profitability of Paper Industry in Uttarakhand

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### ABSTRACT

This study examines profitability of the five selected paper companies of Uttarakhand. Profitability is considered as a measure of success of a business, its survival and growth. Hence, overall profitability analysis of selected paper companies on the basis of their profitability ratio has been done to compare the success and growth of these companies. The study covers the period of 5 years, from 2010-11 to 2014-15. Companies included in the study are selected by following random sampling method. Statistical tools i.e. mean, standard deviation, co-efficient of variation, etc. have been used. One way ANOVA and Post hoc test have been worked out to find the significant difference, if any, between the companies, regarding their Profitability. Results show that, Gross Profit Ratio, Net Profit Ratio, Operating Profit Ratio and Return on capital employed of selected paper companies differ significantly. Findings also show that, there is no significant difference between selected companies for Return on their Net Worth.

**Keywords---** Paper Industry, Profitability, ANOVA, Post hoc test.

### I. INTRODUCTION

The most important element of any business is the amount of Profitability it is making. The ability to earn profit from all the activities of an enterprise is termed as Profitability. It is an indicator of the well-being of an enterprise and shows how well the resources have been utilized by the management in the generation of earning in the firm.

The Word 'profitability' is composed of two words 'profit' and 'ability'. The word 'profit' represents the absolute figure of profit but an absolute figure alone does not give an exact idea of the adequacy or otherwise of increase or change in performance as shown in the financial statement of the enterprise. The word 'ability' reflects the power of an enterprise to earn more and more profits by utilization of the resources in the best way possible; it is also called the firms earning performance. Earning is an essential requirement to continue the business. No business can survive without earning profit because it is essential for both survival and growth of the

firm. So we can say that a healthy enterprise is that which has good profitability. From the available information and appearance it seems that, paper industry in uttarakhand is striving for its growth. Many of the paper companies are running in losses.

The present study has been undertaken to examine the profitability of paper industry in uttarakhand so that we can come to know the growth of the industry and can also compare the profitability of the industry.

### II. REVIEW OF LITERATURE

**Arun Reddy (1983)** analyzed the "Profitability of Indian Paper Industry with reference to the Financial Statistics of Joint Stock Companies in India "during the period of 1950-51 to 1973-74. The major objective of the study was to examine the relationship between growth and profitability. He concluded that the paper industries exhibited a strong positive correlation between growth and profitability by using regression models and compound growth rate.

**Dr. Nabi Rasool et al. (2013)** in their study identified that Net profit; EPS and Return on total assets are the responsible factors which will have significant influence on ROE of the companies.

**Usman Dawood (2014)** in his research paper on factors influencing profitability of commercial banks believe that there no relationship between the cost efficiency and profitability but observes that capital adequacy and deposits do support in profitability where as size of the bank doesn't help in profitability. However, studies have been conducted in paper industry, but very few studies have been conducted in Uttarakhand in this field. The present study has attempted to bridge this gap.

### III. OBJECTIVES OF THE STUDY

Following are the major objectives of this study:

1. To compare profitability position of selected companies for the past five years.

2. To measure the growth of companies, on the basis of sales and profitability.

### III. HYPOTHESES OF THE STUDY

Following hypotheses has been set and tested:

**H<sub>01</sub>:** "There is no significant difference in Gross Profit ratio of five companies."

**H<sub>02</sub>:** "There is no significant difference in operating ratio of five companies."

**H<sub>03</sub>:** "There is no significant difference in net profit ratio of five companies."

**H<sub>04</sub>:** "There is no significant difference in return of capital employed of five companies."

**H<sub>05</sub>:** "There is no significant difference in return on net worth of five companies."

### IV. RESEARCH METHODOLOGY

#### Universe of study

The universe of this study consists of all the Paper companies working in Uttarakhand since last five years.

#### Sampling Design

We have randomly selected 5 companies as sample for this study. The sample has been selected considering the following factors:-

1. The data which are available for the period of study i.e.

From 2010-2011 to 2014-2015.

2. The companies, which are engaged in cultivation and Production of Paper.

- 3 The company should be organized by private sector.

#### Types of Data

Data used in the study are secondary in nature and collected from the annual reports of the selected companies.

#### Tools Used for Data Analysis

Mean, Standard Deviation, coefficient of variance, minimum, maximum, etc. have been calculated under descriptive statistics. One Way ANOVA with post hoc test has been worked out to compare mean of the groups-selected companies.

### V. RESULT AND DISCUSSION

#### 1. Gross Profit Ratio

2. "The excess of the net revenue from sales over the cost of Merchandise sold is called gross profit, gross profit on sales or gross margin." It is a ratio expressing relationship between Gross Profit earned and Net Sales. It is a useful indication of the profitability of business.

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Sale}} \times 100$$

**Table 1: Gross Profit Ratio of Selected Companies of paper industry in Uttarakhand**

S.NO	C	2010-11	2011-12	2012-13	2013-14	2014-15	AVG	S.D	C.V	Min	Max.
1	C1	10.01	7.61	8.95	13.1	14.36	10.80	2.84	26.25	7.61	14.36
2	C2	12.56	9.46	12.98	11.04	7.56	10.72	2.25	20.95	7.56	12.98
3	C3	13.58	-3.45	-0.05	-1.1	3.02	2.4	6.67	277.84	-3.45	13.58
4	C4	-2.21	6	4.15	5.78	3.86	3.51	3.34	94.97	-2.21	6.00
5	C5	3.42	-3.1	1.16	-2.04	2.4	0.36	2.82	767.35	-3.10	3.42
Average		7.47	3.30	5.43	5.35	6.24	5.56	1.52	27.36	3.30	7.47

Sources: Prepared by authors with the help of annual reports of the paper companies.

These ratios have been compared using One Way ANOVA. As our data show normality that motivated us to apply One Way ANOVA, which is a parametric test. It has been hypothesized that "there is no significant difference in Gross Profit ratio of

five companies."

The above set hypothesis has been tested at 5 percent level of significance. Results are presented in the table 1, 2 and 3 respectively.

**Table 2: Descriptive statistics of ANOVA for Gross Profit Ratio**

Company	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
C1	5	10.8060	2.83664	1.26858	7.2838	14.3282	7.61	14.36
C2	5	10.7200	2.24548	1.00421	7.9319	13.5081	7.56	12.98
C3	5	2.4000	6.66805	2.98204	-5.8795	10.6795	-3.45	13.58
C4	5	3.5160	3.33929	1.49337	-.6303	7.6623	-2.21	6.00
C5	5	.3680	2.82385	1.26286	-3.1383	3.8743	-3.10	3.42
Total	25	5.5620	5.71197	1.14239	3.2042	7.9198	-3.45	14.36

**Table 3: ANOVA for Gross Profit Ratio**

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	476.332	4	119.083	7.765	.001
Within Groups	306.707	20	15.335		
Total	783.039	24			

The result shows that calculated value of ANOVA is 7.65 which is greater than the critical value 2.87 at 5 percent level of significance. Calculated P value is 0.001 which is less than 0.05. Both values reject our null hypothesis and accept to our alternative hypothesis. It shows gross profit ratio of selected companies in this study differs significantly.

However, result of One Way ANOVA shows that there is a significance difference between at

least two groups out of total 10 groups but it does not show between which two group this difference does exist. This limitation of ANOVA motivates us to conduct Post Hoc Test. The result of **Post Hoc Test** is given in the following table. The table shows that there is a significance difference between company C1 and C3, C1 and C5, C2 and C3, C2 and C5.

**Table 4: Multiple Comparisons of Gross Profit Ratio: Tukey HSD**

(I) COMP	(J) COMP	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
C1	C2	.08600	2.47672	1.000	-7.3253	7.4973
	C3	8.40600*	2.47672	.021	.9947	15.8173
	C4	7.29000	2.47672	.055	-.1213	14.7013
	C5	10.43800*	2.47672	.003	3.0267	17.8493
C2	C1	-.08600	2.47672	1.000	-7.4973	7.3253
	C3	8.32000*	2.47672	.023	.9087	15.7313
	C4	7.20400	2.47672	.059	-.2073	14.6153
	C5	10.35200*	2.47672	.004	2.9407	17.7633
C3	C1	-8.40600*	2.47672	.021	-15.8173	-.9947
	C2	-8.32000*	2.47672	.023	-15.7313	-.9087
	C4	-1.11600	2.47672	.991	-8.5273	6.2953
	C5	2.03200	2.47672	.921	-5.3793	9.4433
C4	C1	-7.29000	2.47672	.055	-14.7013	.1213
	C2	-7.20400	2.47672	.059	-14.6153	.2073

	C3	1.11600	2.47672	.991	-6.2953	8.5273
	C5	3.14800	2.47672	.711	-4.2633	10.5593
C5	1	-10.43800*	2.47672	.003	-17.8493	-3.0267
	2	-10.35200*	2.47672	.004	-17.7633	-2.9407
	3	-2.03200	2.47672	.921	-9.4433	5.3793
	4	-3.14800	2.47672	.711	-10.5593	4.2633

\*The mean difference is significant at the 0.05 level.

### 1. OPERATING RATIO:

This ratio shows the relationship between operating profit and net sales in the form of percentage. Operating profit that is (profit before depreciation and taxes) arrived at by adjusting all non-operating expenses

$$\text{Operating Profit Ratio} = \frac{\text{Operating Profit}}{\text{Net Sale}} \times 100$$

The paper companies show fluctuating trend during the study period. The average ratio of paper industry fluctuates 5.72 in the year 2011-12 to 10.28 in the year 2010-11. The average of average ratio was 8.03

and incomes in net profit. If the ratio is consistently high it tells us the effective and efficient operation of the business. Operating profit ratios have been calculated using the following formula:

percent. The paper companies such as Century paper mill and Siddheshwari Paper Udyog Ltd shows the higher than the average ratio i.e. 13.38 and 13.06 respectively.

**Table 5: Operating Ratio of Selected Companies of paper industry in Uttarakhand**

S.NO	C	2010-11	2011-12	2012-13	2013-14	2014-15	AVG	S.D	C.V	Min	Max.
1	C1	12.38	9.97	11.54	15.96	17.05	13.38	3.01	22.46	9.97	17.05
2	C2	14.8	11.67	15.17	13.42	10.26	13.06	2.08	15.96	10.26	15.17
3	C3	17.13	-0.55	2.91	1.5	5.46	5.29	6.97	131.77	-0.55	17.13
4	C4	2.53	9.69	7.9	9.38	6.25	7.15	2.92	40.86	2.53	9.69
5	C5	4.55	-2.18	2	-1.16	3.23	1.29	2.87	222.80	-2.18	4.55
Average		10.27	5.72	7.90	7.82	8.45	8.03	1.63	20.29	5.72	10.28

Sources: Prepared by authors with the help of annual reports of the paper companies.

Other companies, Cheema Papers Ltd., Banwari Paper Mills Ltd., Vishvakarma Paper & Boards Ltd., had the lower ratio from the average ratio of paper companies, the ratio of these companies was 5.29, 7.15, and 1.29 respectively

Further, these ratios have been compared using One Way ANOVA. As our data show normality that

motivated us to apply One Way ANOVA, which is a parametric test. It has been hypothesized that "there is no significant difference in operating ratio of five companies"

The above set hypothesis has been tested at 5 percent level of significance. Results are presented in the Table 6 and 7.

Table 6: Descriptive statistics of ANOVA Operating Profit Ratio								
Company	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
C1	5	13.3800	3.00579	1.34423	9.6478	17.1122	9.97	17.05
C2	5	13.0640	2.08455	.93224	10.4757	15.6523	10.26	15.17
C3	5	5.2900	6.97045	3.11728	-3.3650	13.9450	-0.55	17.13
C4	5	7.1500	2.92153	1.30655	3.5224	10.7776	2.53	9.69
C5	5	1.2880	2.86961	1.28333	-2.2751	4.8511	-2.18	4.55
Total	25	8.0344	5.96325	1.19265	5.5729	10.4959	-2.18	17.13

**Table 7: ANOVA for Operating Profit Margin**

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	538.501	4	134.625	8.549	.000
Within Groups	314.949	20	15.747		
Total	853.450	24			

The result shows that calculated value of ANOVA is 8.54 which is greater than the critical value 2.87 at 5 percent level of significance. Calculated P value is 0.000 which is less than 0.05. Both values reject our null hypothesis and accept to our alternative hypothesis. It shows operating profit ratio of selected companies in this study differs significantly.

However result of One Way ANOVA shows that there is a significance difference between at least two groups out of total 10 groups but it does not show between which two group this difference does

exist. This limitation of ANOVA motivates us to conduct Post Hoc Test. The result of Post Hoc Test is given in the following table. The table shows that there is a significance difference between company C1 and C3, C1 and C5, C2 and C3, C2 and C5.

## 2. NET PROFIT MARGIN:

Net profit ratio is valuable for the purpose of ascertaining the over-all profitability of business and shows the efficiency of operating the business. It is calculated by using following formula:

$$\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Net Sale}} \times 100$$

**Table 8: Net Profit Ratio of Selected Companies of paper industry in Uttarakhand**

S.NO	C	2010-11	2011-12	2012-13	2013-14	2014-15	AVG	S.D	C.V	Min	Max.
1	C1	5.37	4.65	5.21	9.63	10.13	7.00	2.65	37.87	4.65	10.13
2	C2	6.53	4.96	7.85	6.41	3.77	5.90	1.57	26.62	3.77	7.85
3	C3	8.52	-2.53	0.26	-1.71	1.15	1.14	4.38	385.12	-2.53	8.52
4	C4	-6.67	0.29	-5.19	1.73	0.29	-1.91	3.75	-196.50	-6.67	1.73
5	C5	1.77	-3.37	-0.99	-3.53	-0.24	-1.27	2.23	-175.34	-3.53	1.77
Average		3.10	0.8	1.42	2.50	3.02	2.17	1.02	46.82	.80	3.10

Sources: Prepared by authors with the help of annual reports of the paper companies.

The paper companies show fluctuating trend during the study period. The average ratio of paper industry fluctuates 0.80 in the year 2011-12 to 3.10 in the year 2010-11. The average of average ratio was 2.17 percent. The paper companies such as Century paper mill and Siddheshwari Paper Udyog Ltd shows the higher than the average ratio ie. 7 and 5.90 percent respectively. Other companies, Cheema Papers Ltd., Banwari Paper Mills Ltd., Vishvakarma Paper & Boards Ltd., had the lower ratio from the average ratio of paper

companies, the ratio of these companies was 1.14, minus1.91, and minus1.27 respectively.

Further, these ratios have been compared using One Way ANOVA. As our data show normality that motivated us to apply One Way ANOVA, which is a parametric test. It has been hypothesized that "there is no significant difference in net profit ratio of five companies."

The above set hypothesis has been tested at 5 percent level of significance. Results are presented in the table 9 and 10.

**Table 9: Descriptive statistics of ANOVA for Net Profit Ratio**

Company	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		

C1	5	6.9980	2.65034	1.18527	3.7072	10.2888	4.65	10.13
C2	5	5.9040	1.57162	.70285	3.9526	7.8554	3.77	7.85
C3	5	1.1380	4.38264	1.95998	-4.3038	6.5798	-2.53	8.52
C4	5	-1.9100	3.75319	1.67848	-6.5702	2.7502	-6.67	1.73
C5	5	-1.2720	2.23039	.99746	-4.0414	1.4974	-3.53	1.77
Total	25	2.1716	4.67755	.93551	.2408	4.1024	-6.67	10.13

Table 10: ANOVA for Net Profit Ratio

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	334.056	4	83.514	8.743	.000
Within Groups	191.052	20	9.553		
Total	525.107	24			

The result shows that calculated value of ANOVA is 8.74 which is greater than the critical value 2.87 at 5 percent level of significance. Calculated P value is 0.000 which is less than 0.05. Both values reject our null hypothesis and accept to our alternative hypothesis. It shows net profit ratio of selected companies in this study differs significantly.

However result of One Way ANOVA shows that there is a significance difference between at least two groups out of total 10 groups but it does not

show between which two group this difference does exist. This limitation of ANOVA motivates us to conduct Post Hoc Test. The result of Post Hoc Test is given in the following table. The table shows that there is a significance difference between company C1 and C3, C1 and C4, C1 and C5, C2 and C4, C2 and C5.

### 3. RETURN ON CAPITAL EMPLOYED:

It is an index of profitability of business and is obtained by comparing net profit (before interest and taxes) with capital employed. It is calculated as follow:

$$\text{Return On Capital Employed} = \frac{\text{EBIT (Net Profit)}}{\text{Capital Employed}} \times 100$$

Table 11: Return on Capital Employed Ratio of Selected Companies of paper industry in Uttarakhand

S.NO	C	2010-11	2011-12	2012-13	2013-14	2014-15	AVG	S.D	C.V	Min	Max.
1	C1	17.92	13.48	16.91	26.5	26.22	20.206	5.85	28.98	13.48	26.50
2	C2	26.5	20.6	29.05	21.07	13.79	22.202	5.92	26.64	13.79	29.05
3	C3	24.1	-3.54	5.11	0.22	8.83	6.94	10.68	153.82	-3.54	24.10
4	C4	-2.94	15.95	12.71	20.03	14.39	12.0	8.80	73.13	-2.94	20.03
5	C5	9.45	-9.25	3.76	-5.4	8	1.31	8.27	630.32	-9.25	9.45
Average		15.00	7.44	13.50	12.48	14.24	12.53	2.99	23.88	7.45	15.01

Sources: Prepared by authors with the help of annual reports of the paper companies.

The return on capital employed ratio of paper companies was showed fluctuating trend during the study period. The ratio lies between 7.45 percent in 2011-12 to 15.1 percent in 2010-11 with an average of 12.53 percent. The highest ratio was found in C2

(Siddheshwari paper Udyog Ltd.) followed by C1 (Century pulp and paper ltd.), C4 (Banwari paper mill ltd.), C3 (Cheema paper Ltd.), C5 (Vishvakarma paper & Board Ltd.)



Further, these ratios have been compared using One Way ANOVA. As our data show normality that motivated us to apply One Way ANOVA, which is a parametric test. It has been hypothesized that “*there is*

*no significant difference in return of capital employed of five companies.*”

The above set hypothesis has been tested at 5 percent level of significance. Results are presented in the table 12 and 13.

**Table 12: Return on Capital Employed: Descriptives**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
C1	5	20.2060	5.85472	2.61831	12.9364	27.4756	13.48	26.50
C2	5	22.2020	5.91560	2.64554	14.8568	29.5472	13.79	29.05
C3	5	6.9440	10.68147	4.77690	-6.3188	20.2068	-3.54	24.10
C4	5	12.0280	8.79630	3.93382	1.1060	22.9500	-2.94	20.03
C5	5	1.3120	8.26976	3.69835	-8.9563	11.5803	-9.25	9.45
Total	25	12.5384	10.92656	2.18531	8.0281	17.0487	-9.25	29.05

**Table 13: ANOVA for Return on Capital Employed**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1548.836	4	387.209	5.882	.003
Within Groups	1316.519	20	65.826		
Total	2865.355	24			

The result shows that calculated value of ANOVA is 5.88 which is greater than the critical value 2.87 at 5 percent level of significance. Calculated P value is 0.003 which is less than 0.05. Both values reject our null hypothesis and accept to our alternative hypothesis. It shows a return on capital employed ratio of selected companies in this study differs significantly.

However result of One Way ANOVA shows that there is a significance difference between at least two groups out of total 10 groups but it does not show between which two group this difference does exist. This limitation of ANOVA motivates us to conduct Post Hoc Test. The result of Post Hoc Test is given in the following table. The table shows that there is a significance difference between company C1 and C5, C2 and C5.

## VI. RETURN ON NET WORTH

This ratio is help to judging the profitability of the business organization, this ratio help to stack- holder of the company to know the return on investment, it help

to know the return in term of profit. Shareholder always interested in knowing how much return they earned on their invested capital (“how much the firm earned on its invested capital”). Following formula has been used to find return on net worth:

$$\text{Return On Net Worth} = \frac{\text{Net Profit (After Int. \& Tax)}}{\text{Owner Equity}} \times 100$$

**Table 14: Return on Net Worth Ratio of Selected Companies of paper industry in Uttarakhand**

C	2010-11	2011-12	2012-13	2013-14	2014-15	AVG	S.D	C.V	Min	Max.
C1	19.34	21.21	23.09	39.07	31.87	26.92	8.32	30.91	19.34	39.07
C2	24.47	17.71	24.64	17.64	9.41	18.77	6.26	33.37	9.41	24.64
C3	19.1	-7.46	0.99	-7.28	5.14	2.10	10.94	521.51	-7.46	19.10
C4	87.45	-9.78	76.73	-37.72	-5.75	22.19	56.18	253.23	-37.72	87.45
C5	8.04	-20.85	-7.12	-32.59	-2.58	-11.02	15.90	-144.31	-32.59	8.04
Avg	31.68	.166	23.66	-4.14	7.61	11.79	15.36	130.30	-4.18	31.68

Sources: Prepared by authors with the help of annual reports of the paper companies.

The return on net worth of paper companies was showed fluctuating trend during the study period. The ratio lies between minus 4.14 percent in 2013-14 to 31.68 percent in 2010-11 with an average of 11.79 percent. The highest ratio was found in C1 (Century pulp and paper) followed by C4(Banwari paper mill ltd.),C2(Siddheshwari paper Udyog Ltd.), C5 (Vishvakarma paper & Board Ltd.), C3 (Cheema paper Ltd.)

Further, these ratios have been compared using One Way ANOVA. As our data show normality that motivated us to apply One Way ANOVA, which is a parametric test. It has been hypothesized that “There is no significant difference in return on net worth of five companies.”

The above set hypothesis has been tested at 5 percent level of significance. Results are presented in the Table 15 and 16.

**Table 15: Descriptives Return on Net Worth**

C	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
C1	5	26.9160	8.31947	3.72058	16.5860	37.2460	19.34	39.07
C2	5	18.7740	6.26412	2.80140	10.9961	26.5519	9.41	24.64
C3	5	2.0980	10.94134	4.89312	-11.4875	15.6835	-7.46	19.10
C4	5	22.1860	56.18143	25.12510	-47.5725	91.9445	-37.72	87.45
C5	5	-11.0200	15.90300	7.11204	-30.7662	8.7262	-32.59	8.04
Total	25	11.7908	28.54025	5.70805	.0100	23.5716	-37.72	87.45

**Table 16: ANOVA for Return on Net Worth**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4999.400	4	1249.850	1.718	.186



Within Groups	14549.696	20	727.485		
Total	19549.095	24			

Result shows that, calculated value of ANOVA is 1.718 which is lower than the critical value 2.87 at 5 percent level of significance. Calculated P value is 0.186 which is higher than 0.05. Both values accept to our null hypothesis and reject to our alternative hypothesis. It shows return on Net Worth ratios of selected companies in this study differ significantly.

However result of One Way ANOVA show that there is no significance difference between at least two groups out of total 10 groups but it do not show between which two group this difference does exist. This limitation of ANOVA motivate us to conduct Post Hoc Test. Result of Post Hoc Test is given in following table. Table shows that there is a significance difference between company C1 and C5, C2 and C5.

## VII. LIMITATION OF THE STUDY

Though proper care has been taken for conducting this study, but it is generally believed that no study is complete in itself. Supporting this generality, this study also suffers with the following limitations:

1. Due to unavailability of appropriate data, the study is related to a period of 5 years only.
2. Only profitability ratio is taken for this study and some ratios could not be calculated due to unavailability of data.

## VIII. SCOPE FOR FURTHER RESEARCH

As this study has under gone to examine only profitability taking few tools of profitability measurement, hence there is further scope to undertake the study examining liquidity and activity ratios.

## IX. CONCLUSION

Profitability is the ability of a certain investment to earn a return from its use. It's a very important instrument to measure not only the business performance but also overall efficiency.

The present study has applied five types of profitability measurement tools i.e. Gross Profit Ratio, Operating Profit Ratio, Net Profit Ratio, Return on Capital Employed, and Return on Owners Fund. Calculated ratios, further, compared for their averages using one way ANOVA and post hoc test has been applied to capture significant difference between companies. Findings leads us to conclude that, there is a statistically significant difference between selected companies for their profitability ratios except return on shareholders fund, where, there is no significant difference has been observed between the companies. we further conclude that, size of company, its capital structure, and brand name are the factors that cause for such differences between companies.

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