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PROFITABILITY ANALYSIS (A COMPARATIVE STUDY OF THE BSE LISTED IT COMPANIES)

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Abstract
This paper focuses on the profitability of selected Indian BSE Listed IT Companies in terms of ratios. The research analysis covers a period of five years 2013-2017 and applies various profitability ratios and found that the performance of HCL was satisfactory compared to other BSE listed IT companies Wipro and Tech Mahindra in terms of Gross Profit Ratio, Operating Profit Ratio and Return on Capital Employed. During the study period Tech Mahindra and Wipro showed an average performance. Statistical Tools Mean, Standard Deviation, Coefficient of variation is used for data analysis. ANOVA is used to find out the significant difference between the companies and between the years. This paper also highlights the knowledge of the investor about the profitability of the selected BSE listed IT Companies.

Keywords: Mean, Standard Deviation, ANOVA, Gross Profit, Profitability.

1. Introduction: The word profitability is poised of two words: profit and ability. Profitability is the ability of a business to create a profit. A profit is left over revenue that a business makes after it pays all expenses that are related to business, such as producing a product, and the other expenses that are related to conduct the business activities. Profitability is capability of a company to employ its resources to generate more revenues than expenses. This is a company’s potential to generate profits from its operations. Revenues and expenses are two main aspects of profitability. Revenue is the amount of money that is earned by providing services or selling products. Businesses use their resources to provide these services and produce these products. Profit is the financial gain. It is the difference between the amount earned and the amount spent. The ability of a business is the power of earning or the operational performance. Profit and profitability are very synonym related and are mutually dependent. But they are two different theories. Profit of a business is its operational and financial efficiency. Profitability infers the term profit in relation to other elements which affect these profits to help in decision making. Profit is regarded as a total implication against profitability, which is a relative concept. Profit is the remaining income left after meeting all the administrative and manufacturing expenses, whereas profitability is the profit making ability of a business enterprise. The profit indicates the amount of earning of a business during certain period, whereas profitability indicates where these profits are constant or improved or deteriorated, and to what extent and how these profits are improved. A company is doing well and performing well if the calculated ratio is higher w.r.t competitor and having the same value w.r.t previous period. For any business Profitability is the primary goal. Without it the business will not survive in the long run. Hence measuring current and past profitability and estimating the future profitability is very important. The profitability ratios are useful to get imminent of a business. It is useful to an analyst to get

indication on the sufficiency or adequacy of profits. These statistical tools are used to find out how well a business is performing in terms of its capability to generate profit. By these tools one can understand the Growth, Profitability of a company and thus assist management and stakeholders to take corrective actions. Profitability ratios are useful for financial analysis and these tools correspond about the final goal of a company business. The rationale behind calculating the profitability ratios is to measure the Gross Profit ratio, operating efficiency and return on capital employed of a company and profits generated by a business. The Profitability ratios are useful for stakeholders, employees etc for different purposes. The stakeholders of a business include promoters, Government, management, lenders and creditors etc.

II**. Review of Literature**: Rakhi Hotwani have studied for ten years to know the financial soundness of Tata Motors using ratios net worth, PAT, Return on Net worth and concluded that tata motors has created significant wealth for its stakeholders and provided handsome return on investment. Asma Khan and Jyoti Singhal have studied for five years performance of selected IT industries in terms of ratios (Operating Profit Ratio, net profit ratio, Return on Long Term Funds.

Monica Tulsian has studied for five years to know the financial soundness of steel companies using the ratios: Gross profit ration, operating profit ratio and return on capital employed. Koradia has examined the profitability of three public sector oil companies using four ratios (Gross profit, Operating Profit, Capital employed and Net profit) and found that there is significant difference between profitability ratios over the years apart from return on capital employed. In last five years, the profitability of BSE listed IT companies is seldom analyzed using any statistical tool. In this paper, authors have proposed that analysis using Mean, SD, ANOVA statistical tools.

III. Types of Profitability Ratios: By calculating the following ratios, profitability of the preferred companies under study has been analyzed:

a) **Gross Profit Ratio**: The gross profit ratio is also called as gross profit margin. This ratio conveys the relationship of gross profit to net sales in percentage. This ratio is intended to find the profitability of business. If gross profit ratio is more, then it means good management. The main purpose of computing this ratio is to find out the efficiency with which selling operations, production operations are carried on. In the current study the gross profit ratio has been calculated by using the following formula:

$$\text{Gross profit ratio} = \frac{\text{Gross Profit}}{\text{Net sales}} \times 100$$

b) **Operating Profit Ratio**: This ratio finds the relation between operating profit and net sales. The main idea of calculating this ratio is to find out the operational efficiency of the management. This ratio is also known as operating profit margin. Operating profit means the net profit that occur from the usual activities of the business and operations without considering irrelevant expenses and dealings of merely financial nature. The operational efficiency of the business is good, if the operating profit ratio is high. A high operating profit ratio means the business is increasing its sales and also cut down its operating expenses. Operating profit ratio can be calculated by formula as follows:

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

C) **Return on capital Employed Ratio**: This ratio finds the relationship between profit and capital employed. It evaluates the earning power of the net assets of the business. It is calculated by formula as follows:

$$\text{Return on capital employed} = \frac{\text{Net Profit}}{\text{Capital Employed}} \times 100$$

IV: Research Methodology: The present study is mainly based on secondary data which has been collected from the Websites, journals, company documents, newspapers. Data has been collected for the last five years (i.e. from 2013 to 2017) to analyze profitability of Wipro, HCL and Tech Mahindra. Profitability of these companies has been

analyzed with the help of ratio analysis and various ratios have been calculated. Statistical tools such as Mean, SD, CV, has been used to interpret the data. Hypothesis has been tested by using F test.

V. Objectives of the Study: The present study has been conducted to examine and evaluate all the aspects of the profitability of Indian BSE listed IT companies on certain parameters through ratio analysis. The following are the broad objectives of the study:

1. To analyze the trends in the profitability of BSE listed IT Companies during the last five years.
2. To appraise the financial position of BSE listed IT Companies through various ratios.
3. To study the significance relationship between the companies and between the years by using ANOVA.

V: Hypotheses of Study

H_0: There is no significant difference in Gross Profit Ratio between the companies and between years.
H_0: There is no significant difference in Operating Profit Ratio between the companies and between years.
H_0: There is no significant difference in Return on Capital Employed between the companies and between years.

VI: Data Analysis:

Table No 1,Gross Profit Ratio (in %) of Selected BSE Listed IT Companies in India

Company	2017	2016	2015	2014	2013	Mean	SD	CV
Tech Mahindra	11	13.42	15.65	19.44	17.81	15.464	3.3709	0.2179
Wipro	18.47	18.43	20.43	21.6	18.75	19.536	1.4174	0.0725
HCL	38.18	36.06	38.24	41.34	33.14	37.392	3.0323	0.0810

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From the table no 1 it can be noted that the Gross profit ratio of Wipro, Tech Mahindra and HCL showed a mixed trend during the whole period of the study because during the year 2013-2017. The Average good profit ratio of HCL was the highest, 37.392%, followed by Wipro, 19.536%. HCL recorded the highest gross profit ratio during the year 2014. Tech Mahindra recorded the least gross profit ratio, 11% during the year 2017. This trend shows inefficiency of the management and it is recommended that the Tech Mahindra management should try to manage the decreasing trend of the ratio by controlling the cost of goods sold and by increasing the sales.

Inference: On the basis of the average of the gross profit ratio it can be concluded that HCL performed better though the gross profit ratio showed a decreasing trend. The fluctuations in the gross profit of Tech Mahindra were high as the coefficient of variation was 21.29% which should be controlled while the coefficient of variation of gross profit ratio for Wipro and HCL was 7.25% and 8.1% showing a moderate consistency in the ratio.

Testing of Hypothesis:

Table No 2

Sources of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-Ratio	Significance
Between Years	51.09969	4	12.77492	2.60914	Non-Significant
Between Companies	1360.425	2	680.2126	138.926	Significant
Residual	39.16963	8	4.896203		
Total	1450.694	14			

Analysis of variance is computed in order to test the significant difference among the companies and between years for Gross Profit ratio. The result shows that the calculated F value for the between years is 2.60 which is less than the table value of 3.83 at 5% significant level. For between companies it is 138.9 which are more than the table value of 4.45 at 5% significant level. There is Significant difference in the Gross profit ratio in case of between companies where as there is a no significant difference between the years at 5% level. Hence the hypothesis is rejected for between companies and accepted for between years.

Operating Profit Ratio (in %) of Selected BSE Listed IT Companies in India

Table No 3

COMPANY	2017	2016	2015	2014	2013	MEAN	SD	CV
Tech Mahindra	29.22	31.38	28.57	33.29	29.54	30.4	1.9231	0.0632
Wipro	20.75	20.38	22.32	23.5	20.86	21.562	1.3114	0.0608
HCL	40.66	38.14	39.98	44.31	36.67	39.952	2.8960	0.0724

From the above table no 3 it can be noted that operating profit ratio of the IT companies showed mixed trend. The ratio increased for first three years and showed a recorded 23.5%. HCL recorded the highest average operating profit ratio, 39.952%. HCL recorded the highest value during the year 2014. Since 2014 HCL showed decreasing. The mean operating profit ratio for Tech Mahindra was 30.4 % and for Wipro it is 21.562%. Of the three companies, Wipro showed a lower ratio. Wipro average ratio was good (21.562%) which can be regarded as good management, but the decreasing trend should be controlled.

Inference: On the basis of the average of the operating profit ratio it can be concluded that HCL performed better though the gross operating profit ratio showed a decreasing trend. The fluctuations in the operating profit of HCL were high as the coefficient of variation was 7.24% which should be controlled while the coefficient of variation of operating profit ratio for Tech Mahindra and Wipro was 6.32% and 6.08% showing a moderate consistency in the ratio.

Testing of Hypothesis

Table no 4

Sources of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-Ratio	Significance
Between Years	38.21391	4	9.553477	4.493572	Significant
Between Companies	845.9051	2	422.9525	198.9399	Significant
Residual	17.00825	8	2.126032		
Total	901.1272	14			

Analysis of variance is computed in order to test the significant difference among the companies and between years for Operating profit ratio. The result shows that the calculated F value for the between years is 4.493572which is more than the table value of 4.45897at 5% significant level. For between companies it is 198.9399which are more than the table value of 3.837853at 5% significant level. There is Significant difference in the Operating profit ratio
in case of between companies where as there is a significant difference between the years at 5% level. Hence the hypothesis is accepted for between companies and accepted for between years.

Return on Capital Employed (in %) of Selected BSE Listed IT Companies in India

Table no 5

Company	2017	2016	2015	2014	2013	Mean	SD	CV
Tech Mahindra	21.09	24.77	25.77	36.06	17.66	25.07	6.930162	0.276432
Wipro	20.95	23.12	26.85	29.47	26.72	25.422	3.369283	0.132534
HCL	32.04	26.99	39.92	47.3	41.71	37.592	8.05993	0.214405

From the above table no 5 it can be noted that return on capital employed of all the three companies showed mixed fluctuating trend during the period of the study and varied within in the range of 17.66% in 2013 and 47.3% in 2014 which shows inefficiency of the management and signifies that the management of the company failed to make an optimum utilization of the capital funds. Such a situation cannot be regarded satisfactory. The average of the ratio was 29.36 which can be regarded satisfactory but the decreasing trend of the ratio should be controlled by the management of the company. For this purpose efforts should be made to control and reduce the operating cost and increase the sales. For both Tech Mahindra and HCl the ratio of return on capital employed showed a increasing trend during the whole period of study and varied within the range of 17.66 percent in 2012-13 to 41.71percent in 2016-17. The average of the ratio was 29.36 percent which is though not poor but decreasing trend implies inefficient management. It is suggested that the management of the company should try to ratio by increasing the profit. The coefficient of variation was 13.25 percent denoting a moderate fluctuating trend but the decreasing trend should be controlled by the management.

Inference: On the whole it can be said that the return on capital employed position of HCL was better than Wipro and Tech Mahindra because the average of the ratio was higher but a decreasing trend in both the companies shows inefficiency of the management which should be controlled

Testing of Hypothesis:

Table no 6

Sources of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-Ratio	Significance
Between Years	335.5514	4	83.88784	4.147336	Non-Significant
Between Companies	508.3888	2	254.1944	12.56713	Significant
Residual	161.8154	8	20.22692		
Total	1005.756	14			

Analysis of variance is computed in order to test the significant difference among the companies and between years for Return on Capital employed. The result shows that the calculated F value for the between years is 4.147336which is less than the table value of 4.45897at 5% significant level. For between companies it is 12.56713 which are more than the table value of 3.837853at 5% significant level. There is Significant difference in the Return on Capital employed in case of between companies where as there is a no significant difference between the years at 5% level. Hence the hypothesis is rejected for between companies and accepted for between years.

Limitations of the study

The study covered three service based companies, in order to measure and compare the profitability. The study has been conducted during the period from 2013 to 2017. Any change made after this period has not been covered in this study.

IV. Conclusion

It is evident from the gross profit ratio of all the three BSE Listed IT companies showed a mixed fluctuating trend. All the companies showed a decreasing trend for first two years, which shows inefficiency of the management, however on the basis of the average it can be concluded that HCL performed better. Therefore it is suggested that management of all the companies

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should increase the gross profit ratio by controlling cost of goods sold and by increasing sales and try maintaining the same position in future also.
The operating profit ratio was lower in Wipro, it is suggested that the company should try to increase this ratio and also high fluctuation should be controlled by management. On the other hand the operating profit ratio was satisfactory in tech Mahindra and it is suggested that company should try maintaining this ratio. Therefore it can be concluded that Wipro was performed better from view point of this ratio as coefficient of variation was higher for HCL and Tech Mahindra.

Analyzing the return on capital employed ratio it can be concluded that return on capital employed position of HCL was better than Wipro and Tech Mahindra because the average of the ratio 37.592% was higher but the decreasing trend in both the company implies inefficiency of the management and inefficient utilization of the capital funds.

References

1. Annual Reports and Accounts of Wipro from 2013 to 2017.
2. Annual Reports and Accounts of HCL from 2013 to 2017.
3. Annual Reports and Accounts of Tech Mahindra from 2013 to 2017.
4. Monica Tulsian, (2014), Profitability Analysis (A comparative study of SAIL & TATA Steel)
5. Asma Khan and Jyothi Singhal, (2015), Growth and Profitability Analysis of Selected IT Companies.
6. Rakhi Hotwani, (2012) A study on Profitability analysis of TATA Motors.