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IMPACT OF LIQUIDITY ON PROFITABILITY OF SELECT IT COMPANIES

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ABSTRACT

A fundamental question in corporate strategy is why there is difference in profits across companies of the same industry. The success of any business depends on its ability to generate profits. Hence it is important to know those indicators that give a real picture of a company's profit. Liquidity on simple terms refers to the ability of a firm to convert its assets in cash to meet the short term obligations. Liquidity and profitability are two most critical key performance indicators of the company. Therefore, a financial manager must find the right balance between both. Hence, this study is undertaken to understand the impact of liquidity on profitability of select IT companies.

KEYWORDS: IT industry, Liquidity, Profitability, ANOVA, Regression

1.1 INTRODUCTION

According to IBEF (Indian brand equity foundation), IT industry accounted for 8% in India's GDP in 2020. The software exports by IT companies stood at 1.20 lakh crore. Moreover the sector is growing rapidly and is expected to reach $100 million by 2025. In the financial year 2021, India ranked 3rd worldwide with 608,000 cloud experts across all verticals. Hence it is important to study the profitability of the growing IT sector. Financial performance analysis is very crucial as it acts as a tool for both investors and company's management to understand its operations, tracking profits and aiding in decision making. Liquidity and profitability together and individually analyze whether your company is successful as well as your potential for sustainability in meeting emergencies. Therefore liquidity and profitability should be balanced.

1.2 STATEMENT OF THE PROBLEM

Every company's primary priority is its profitability. In order to drive the firm in the proper direction, management must have adequate level of profitability. At the same time liquidity is also equally important as it helps to know the financial position. Measuring liquidity helps you find the right balance, monitoring the financial health of your company and positioning it for strategic growth. Hence it is important to analyse the indicators of liquidity that have an impact on the profitability of a company. Therefore, this research is undertaken to study the impact of liquidity on profitability of selected IT Company's. The major research questions are as follows

1. What are the current liquidity and profitability positions of IT companies?
2. How does liquidity impact the profitability of the IT companies?

1.3 SCOPE OF THE STUDY

Financial performance analysis is a comprehensive diagnostic of the business's profitability and financial soundness. This study is undertaken to analyse the profitability and liquidity of the IT companies. This study aims in knowing the profitability of IT companies by analysing the financial statements for the last 10 years and focuses on those liquidity indicators which have a significant impact on the company's profitability with the help of secondary data.

1.4 OBJECTIVE OF THE STUDY

- To evaluate liquidity and profitability level of select IT companies for the period 2011-2021.
- To analyze and observe impact of liquidity on profitability of select IT companies

1.5 RESEARCH METHODOLOGY

- **Research design:** Analytical approach was followed for the purpose of this research.
- **Source of data:** Secondary data (websites, Journals, Articles CMIE prowess database software)
- **Sampling technique:** The 8 Companies was selected based on Multistage purposive sampling considering sales value of companies, continuity of data for period of study and companies adopted financial year. The companies are TCS, Infosys, Wipro, Tech Mahindra, Capgemini, L&T, Mind tree and HSBC.
- **Period of study :** The study focuses on a period of 10 years from 2011-2021 and was carried out within a period of 4 months (Feb-may, 2022)
- **Tools and techniques:** The analysis is done in the method of ratios analysis and various other tools such as regression and ANOVA using SPSS statistics and Microsoft excel

1.6 RESEARCH GAP

The majority of the studies concentrated in knowing the financial performance, of the IT sector. Only limited study has been made to analyze the impact of one performance ratio on the other in case of IT sector. Therefore my study aims to know the impact of liquidity on profitability of select IT companies.

2.1 REVIEW OF LITERATURE

Sugandha Sharma and Anindita Banerjee (2017) had made a study to identify and assess the liquidity and profitability of IT companies in India. Their aim was to study the leading 4 IT companies for a period of 3 years (i.e.) Infosys, TCS, HCL and Wipro. The scope of their study includes calculation of various profitability ratios such as gross profit ratio, net profit ratio, operating profit ratio, return on investments etc. and liquidity ratios such as current ratio and quick ratio. And, concluded that, the most favorable financial performance can be achieved by a company which has a trade-off between liquidity and profitability.
Sugandha Sharma and Abhishek Raizada (2020) had made an attempt to study the relationship between liquidity and profitability. The scope of their study included calculation of various profitability and liquidity ratios. 5 leading companies were taken, Infosys ltd, Wipro ltd, IBM, Tech Mahindra and HCL. Research hypothesis were framed and were analyzed based on combined score of the mean value and was concluded that IBM ranked the highest followed by Infosys and HCL (in the same rank), then Wipro and finally Tech Mahindra.
Rathi, Mala; Goyal and Krishnawatar (2020) in their research paper aimed to analyze the financial performance of Tata consultancy services. The analysis was made using various ratios and statistical tools like trend analysis, DuPont analysis and Altman B model have been used to enumerate the financial performance of the company during the last 5 years. The results indicate a positive trend in its revenue, net profit and earnings of the company. And hence it was concluded that the company is growing positively with great swiftness.
CS Arvinder Kaur (2018), made an attempt to examine the financial position and performance of selected IT companies for a period of 10 years (2007-08 to 2016-17) and to establish a linear relationship between liquidity, leverage, efficiency and profitability. The analysis was made using various accounting ratios and tools like ANOVA and CAGR. From the analysis it was found out that TCS performance was most satisfactory in terms of gross and net profit. And in terms of return on equity HCL ranked first followed by TCS and Wipro. And in terms of liquidity it can be said that TCS has highest liquidity followed by Wipro, HCL and Infosys.
Dr. K. Venkatachalam, Mr. D. Saravanakumar (2019) , Researcher has framed topic as Financial liquidity and health analysis of selected iron and steel firms in India the focus of this study is to know liquidity and solvency level and how they impact on financial health. They selected companies list in BSE and NSE of five steel companies in India for period of 2009-2018 they used ratio analysis to know liquidity and solvency level, to know impact they used Mean, SD, CV, CAGR and ANOVA methods and used Z- Score model to analysis financial health and found that SAIL company has good Financial heath

3.1 DATA ANALYSIS AND INTERPRETATION

Table No.1 Current Ratio

	TCS	INFOSYS	WIPRO	TECH MAHINDRA	CAPGEMINI	L&T	MINDTREE	HSBC
AVERAGE	3.539	3.633	2.573	2.058	2.649	2.382	2.772	3.437
SD	1.348	0.741	0.534	0.660	1.136	0.668	0.351	1.757
CV	0.381	0.204	0.207	0.321	0.429	0.280	0.126	0.511
CAGR	4.595	-5.367	2.172	8.603	11.695	6.927	1.811	-3.629

The above table shows the current ratio. The average current ratio ranges from 3.633 to 2.058 during the study. Infosys has the highest average of current ratio while, Tech Mahindra has the least. In case of SD, HSBC and TCS have high fluctuations with a value of 1.757 and 1.348 respectively. The analysis of CV shows high dispersion found in HSBC and Capgemini. The study further shows a positive CAGR in TCS, Wipro, Tech Mahindra, Capgemini, L&T and Mind tree while a negative CAGR was found in Infosys and HSBC.

Table 2: ANOVA for current ratio

		Sum of Squares	df	Mean Square	F	Sig.
Current ratio	Between Groups	23.949	7	3.421	3.408	**0.003**
	Within Groups	2.282	72	1.004		
	Total	96.231	79			

Ho: There is no mean difference between current ratio and select IT companies.

Since the calculated significance value of 0.003 is lesser than 0.05 (i.e. 5% level of significance), therefore we reject the null hypothesis. Hence there is mean difference between current ratio and select IT companies

Table 3: Liquid Ratio

YEAR	TCS	INFOSYS	WIPRO	TECH MAHINDRA	CAPGEMINI	L&T	MINDTREE	HSBC
AVERAGE	3.331	3.434	2.228	1.801	2.443	2.188	2.607	3.163
SD	1.380	0.779	0.434	0.594	1.154	0.746	0.334	1.738
CV	0.414	0.227	0.195	0.330	0.472	0.341	0.128	0.550
CAGR	4.694	-5.751	1.123	9.183	12.031	8.412	2.121	-4.928

The above table shows the Liquid ratio. The average current ratio ranges from 3.434 to 1.801 during the study. Infosys has the highest average of liquid ratio while, Tech Mahindra has the least. In case of SD, HSBC and TCS have high fluctuations with a value of 1.757 and 1.348 respectively. The analysis of CV shows high dispersion found in HSBC and Capgemini. The study further shows a positive CAGR in TCS, Wipro, Tech Mahindra, Capgemini, L&T and Mind tree while a negative CAGR was found in Infosys and HSBC.

Table 4: ANOVA for Liquid ratio

		Sum of Squares	df	Mean Square	F	Sig.
Liquid ratio	Between Groups	24.979	7	3.568	3.537	**0.003**
	Within Groups	72.637	72	1.009		
	Total	97.616	79			

Ho: There is no mean difference between Liquid ratios and select IT companies

Since the calculated significance level of 0.003 is less than 5% significance level (i.e. 0.05), hence we reject the null hypothesis. Therefore, there is mean difference between liquid ratios and select IT companies

Table 5: Absolute Liquid Ratio

	TCS	INFOSYS	WIPRO	TECH MAHINDRA	CAPGEMINI	L&T	MINDTREE	HSBC
AVERAGE	1.754	2.164	1.399	0.674	1.481	0.734	1.134	1.740
SD	1.136	0.763	0.414	0.372	0.850	0.584	0.308	0.976
CV	0.647	0.352	0.296	0.552	0.574	0.796	0.271	0.561
CAGR	13.121	-9.626	4.930	24.512	13.759	22.518	6.264	-4.348

The above table shows the Absolute liquid ratio. The average absolute liquid ratio ranges from 2.164 to 0.674 during the study. Infosys has the highest average of liquid ratio while, Tech Mahindra has the least. In case of SD, TCS and HSBC have high fluctuations with a value of 1.136 and 0.976 respectively. The analysis of CV shows high dispersion found in L&T and TCS. The study further shows a positive CAGR in TCS, Wipro, Tech Mahindra, Capgemini, L&T and Mind tree while a negative CAGR was found in Infosys and HSBC.

Table 6: ANOVA for Absolute Liquid ratio

		Sum of Squares	df	Mean Square	F	Sig.
Absolute liquid ratio	Between Groups	18.706	7	2.672	4.976	**0.000**
	Within Groups	38.663	72	0.537		
	Total	57.369	79			

Ho: There is no mean difference between Absolute liquid ratios and select IT companies.

Since the calculated significance value of 0.000 is less than 5% (i.e.0.05) significance level, hence the null hypothesis is rejected. So there is mean difference between Absolute liquid ratios and select IT companies.

Table 7: Net profit ratio

	TCS	INFOSYS	WIPRO	TECH MAHINDRA	CAPGEMINI	L&T	MINDTREE	HSBC
AVERAGE	26.007	23.413	17.723	13.890	11.485	15.966	12.118	13.257
SD	1.804	2.559	1.686	2.685	4.587	1.507	2.540	3.841
CV	0.069	0.109	0.095	0.193	0.399	0.094	0.210	0.290
CAGR	-2.323	-2.521	3.106	4.983	-2.058	1.232	2.011	-6.069

The above table shows the Net profit ratio. The average net profit ratio ranges from 26.007 to 11.485 during the study. TCS has the highest average of liquid ratio while, Capgemini has the least. In case of SD, Capgemini and HSBC have high fluctuations with a value of 4.587 and 3.841 respectively. The analysis of CV shows high dispersion found in HSBC and Mind tree. The study further shows a positive CAGR in Wipro, Tech Mahindra, L&T and Mind tree while a negative CAGR was found in TCS, Infosys, Capgemini and HSBC.

Table 8: ANOVA for Net Profit Ratio

		Sum of Squares	df	Mean Square	F	Sig.
Net profit ratio	Between Groups	2011.990	7	287.427	35.725	**0.000**
	Within Groups	579.281	72	8.046		
	Total	2591.271	79			

Ho: There is no mean difference between net profit ratios and select IT companies.

Since the calculated significance value of 0.000 is less than 5% level of significance (i.e.0.05), hence we reject null hypothesis. Therefore, there is mean significance between net profit ratios and select IT companies.

Table 9: Return on shareholder's fund ratio

	TCS	INFOSYS	WIPRO	TECH MAHINDRA	CAPGEMINI	L&T	MINDTREE	HSBC
AVERAGE	39.136	24.408	20.402	19.857	14.577	37.980	23.259	28.511
SD	4.776	2.343	3.092	4.816	6.748	10.491	3.292	15.925
CV	0.122	0.096	0.152	0.243	0.463	0.276	0.142	0.559
CAGR	-0.522	-1.159	1.459	2.393	-1.816	-4.158	1.191	6.646

The above table shows the return on shareholder's fund ratio. The average return on shareholder's fund ratio ranges from 39.136 to 14.577 during the study. TCS has the highest average of return on shareholder's fund ratio while, Capgemini has the least. In case of SD, HSBC and L&T have high fluctuations with a value of 15.925 and 10.491 respectively. The analysis of CV shows high dispersion found in HSBC. The study further shows a positive CAGR in Wipro, Tech Mahindra, Mind tree and HSBC while a negative CAGR was found in TCS, Infosys, Capgemini and L&T.

Table 10: ANOVA for return on shareholder's fund ratio

		Sum of Squares	df	Mean Square	F	Sig.
Return On Shareholders Fund	Between Groups	5319.803	7	759.972	12.638	**0.000**
	Within Groups	4329.740	72	60.135		
	Total	9649.543	79			

Ho: There is no mean difference between return on shareholders' fund ratio and select IT companies.

Since the calculated significance value of 0.000 is less than 5% level of significance (i.e.0.05), hence we reject null hypothesis. Therefore, there is mean significance between return on shareholders' fund ratio and select IT companies.

Table 11: Return on Investment ratio

	TCS	INFOSYS	WIPRO	TECH MAHINDRA	CAPGEMINI	L&T	MINDTREE	HSBC
AVERAGE	48.629	32.756	26.591	25.081	20.183	46.671	29.441	40.381
SD	5.594	2.995	3.759	7.171	9.206	14.560	4.402	21.104
CV	0.115	0.091	0.141	0.286	0.456	0.312	0.150	0.523
CAGR	-0.318	-1.733	0.860	3.559	0.509	-4.249	1.578	7.888

The above table shows the return on investments ratio. The average return on investments ratio ranges from 48.629 to 20.183 during the study. TCS has the highest average of return on investments ratio while, Capgemini has the least. In case of SD, HSBC and L&T have high fluctuations with a value of 21.104 and 14.560 respectively. The analysis of CV shows high dispersion found in HSBC. The study further shows a positive CAGR in Wipro, Tech Mahindra, Capgemini, Mind tree and HSBC while a negative CAGR was found in TCS, Infosys and L&T.

Table 12: ANOVA for return on investments ratio

		Sum of Squares	df	Mean Square	F	Sig.
Return On Investment	Between Groups	7623.191	7	1089.027	10.045	**0.000**
	Within Groups	7805.915	72	108.415		
	Total	15429.106	79			

Ho: There is no mean difference between return on investments ratio and select IT companies.

Since the calculated significance value of 0.000 is less than 5% level of significance (i.e.0.05), hence we reject null hypothesis. Therefore, there is mean significance between return on investments ratio and select IT companies.

REGRESSION:

Table 13: Impact of Liquidity Ratios on Net Profit of Selected IT Companies

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.540	.914		4.969	.000
	CR	6.580	2.049	1.295	3.211	.002
	Absolute liquid	8.863	3.100	1.369	2.859	.006
	Liquid ratio	-.966	1.264	-.142	-.764	.447
R		.389	Std. Error of regression	4.38430		
R Square		.651	F- Value	3.120		
Adjusted R Square		.103	Sig. F	.001		

The above table suggests that empirical evidence regarding the impact of liquid ratios on Net Profit of select IT companies. The liquid ratio beta coefficient has a negative relationship with Net Profit. Negative value of ß indicates a negative relationship between liquid ratio and profitability over the study period. Absolute liquid ratio and current ratio have statistically significant impact on Net Profit as calculated significance value < 0.05 on the other hand liquid ratio beta coefficient has negative relationship and statistically insignificant effect on profitability its p value is > 0.05. R square shows that the independent variables explain 0.651% of the variations in the profitability of select IT companies. Significance F value 0.001 indicates that there is a significant impact of Liquidity ratios on Net Profit of select IT companies.

4.1 FINDINGS

- The highest average value was found in Infosys while the lowest value of found in Tech Mahindra. It also shows that all the companies had an average current ratio above the thumb rule of 2:1.
- The highest average of liquid ratio was found in Infosys while a lowest average was found in Tech Mahindra. It also shows that all the companies had a liquid ratio above the thumb rule of 1:1.
- The highest average of absolute liquid ratio was found in Infosys and the lowest average was found in Tech Mahindra. And also all the companies had an average above thumb rule of 0.5:1 while Tech Mahindra had it near with a value of 0.674:1.
- The highest average of net profit ratio was found in TCS and a lowest average was found in Capgemini. Generally, a high net profit ratio is considered a good sign. Therefore, TCS is maintaining a good ratio than the other companies.
- The highest average of return on shareholder's fund ratio was found in TCS and a lowest average was found in Capgemini. . Generally, a high return on shareholder's fund is considered efficient. Therefore, TCS is maintaining a good ratio than the other companies.
- The highest average of return on investment ratio was found in TCS and a lowest average was found in Capgemini. Generally, a high return on investment ratio is considered efficient. Therefore, TCS is maintaining a good ratio than the other companies.
- There is mean difference between Liquidity and profitability ratios and select IT companies.
- Impact of liquidity on profitability: Current ratio and absolute liquid ratio have a positive relationship while liquid ratio has a negative relationship on profitability. Significance F value 0.001 indicates that there is a significant impact of Liquidity ratios on Net Profit of select IT companies.
- R square shows that the independent variables explain 0.651% of the variations in the profitability of select IT companies.

5.1 SUGGESTION

- **Current ratio:** The current ratio of the companies shows that all the companies are above the standard level of 2:1. While it is a good sign but too much concentration of cash in current assets may not be a good sign. Infosys, TCS and HSBC have a current ratio beyond the standard level and are advised to maintain the standard level.
- **Liquid ratio:** The standard level of quick ratio is 1:1. A high quick ratio indicates that some of the cash into put into use. All the companies have a quick ratio above the standard level and hence it means that there is inefficiency in the management. Therefore they are advised to invest some of their quick assets into projects that will grow the business or make it more efficient.
- **Absolute liquid ratio:** The ideal standard level of absolute liquid ratio is 0.5:1. From the study it is evident that except tech Mahindra and L&T all the others have the ratio above the standard level which is good as they can meet the obligations quickly but at the same time is also too much concentration on current assets means that the company is not utilizing its assets efficiently. Hence it is advisable to invest some cash into other investments.
- **Net profit ratio:** A high net profit margin indicates that a business is pricing is pricing its products correctly and is exercising a good cost control. Of the 8 companies TCS has the high net profit ratio and all the other companies are also maintaining a good net profit ratio. They are advised to maintain the same level and try to increase the met profit level.
- **Return on shareholder's fund:** Return on shareholders' fund is an important measure from an investors point of view as it helps in knowing whether the company is the position to repay its shareholders or not. Hence a high ratio is recommendable. Therefore from the study TCS and L&T have a high ratio. And all the other companies are advised to increase the sales or reduce the expenses and increase the net profit to increase the return on shareholders' fund.
- **Return on investment:** It explains the overall utilization of funds by a business enterprise. Generally a high ratio is recommended. TCS and L&T have a good return on investments and all the other companies are advised to increase them by increasing the capital employed in the business

6.1 CONCLUSION

The study was undertaken to analyze the impact of liquidity on profitability of select IT companies. The study was done with the help of secondary data collected from CIME Prowess for a period of 2011-12 to 2020-21 (10 years). The tools used are ratio analysis, ANOVA and regression. The study inferred that in terms of liquidity Tech Mahindra performed well than the other companies. On considering profitability, TCS is maintaining a very good profitability position than the other companies. It was further found that there is mean difference between Liquidity and profitability ratios and select IT companies using ANOVA. The regression shows that Current ratio and absolute liquid ratio have a positive relationship while liquid ratio has a negative relationship on profitability. Thus of all the companies it can be said that TCS is maintaining the overall financial performance in a good manner. Hence it can be concluded that efficient utilization of resources is one of the key factors in attaining high profitability and a company should also look into its expenses and other cash outflows and should aim in minimizing those for achieving high profits thereby making the company financially sound.

7.1 REFERENCE

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