IMPACT OF LIQUIDITY & PROFITABILITYANALYSIS OF SELECTED IT COMPANIES

Mr. S. Purna Chandra Rao, MCom; MBA *1, Mr. M. Raju, M.Com. *2, Mrs. P. Mamatha, MBA; M.Phil. *3
***1 Faculty, Dept of Management, Siva Sivani Degree College, Kompally, Sec-bad-100.**
***2 Faculty, Dept. of Commerce, Siva Sivani Degree College, Kompally, Sec-bad-100.**
***3 Principal, Siva Sivani Degree College, Kompally, Sec-bad-100.**

ABSTRACT

Why profits vary throughout companies in the same industry is a key subject in corporate strategy. The ability of a business to turn a profit determines its success. Therefore, it is critical to understand the metrics that provide a true picture of a business's profitability. Simply put, liquidity is a company's capacity to transform its assets into cash in order to pay for short-term obligations. The company's two most important key performance metrics are profitability and liquidity. A financial manager must so strike the correct balance between the two. Therefore, the purpose of this study is to comprehend how liquidity affects the profitability of particular IT organisations.

KEYWORDS: Regression, ANOVA, IT industry, liquidity, and profitability.

INTRODUCTION

The Indian Brand Equity Foundation, or IBEF, estimates that the IT sector will contribute 8% of India's GDP in 2020. IT companies exported 1.20 lakh crore worth of software. In addition, the industry is expanding quickly, and by 2025, it should be worth $100 million. India placed third globally in the fiscal year 2021, with 608,000 cloud expertise spanning all sectors. Therefore, it is crucial to research the profitability of the expanding IT industry. Financial performance analysis is essential since it helps management and investors alike analyse earnings and make decisions by providing an understanding of the business's activities. Together and separately, liquidity and profitability assess the performance of your business and your ability to continue operating in the face of emergencies. As a result, profitability and liquidity need to be balanced.

STATEMENT OF THE PROBLEM

Profitability is the first priority for any organisation. A sufficient amount of profitability is required by management to steer the company in the right path. Liquidity, however, is also crucial since it aids in understanding the financial situation. Measuring liquidity enables you to strike the correct balance while keeping an eye on your business's financial situation and positioning it for strategic expansion. Therefore, it is crucial to examine the liquidity indicators that affect a company's profitability. Thus, the purpose of this research is to examine how liquidity affects the profitability of particular IT companies. The following are the main research questions:

1. What are IT businesses' current positions in terms of profitability and liquidity?

2. What effect does liquidity have on IT companies' profitability?

SCOPE OF THE STUDY

A thorough examination of a company's profitability and financial stability is done through financial performance analysis. Analysing the IT companies' profitability and liquidity is the goal of this study. By examining the financial records for the previous ten years, this study seeks to determine the profitability of IT companies. With the use of secondary data, it focuses on liquidity factors that significantly affect the profitability of the business.

OBJECTIVE OF THE STUDY

● Assessing the level of liquidity and profitability of specific IT companies between 2011 and 2021.

● Examining and tracking the effect of liquidity on the profitability of specific IT enterprises.

RESEARCH APPROACHES

Research design: To conduct this study, an analytical technique was used.

Source of data: The data source is secondary data, which includes articles, journals, websites, and CMIE prowess database software.

Sampling technique :The eight companies were chosen by a multistage purposive sampling process that took into account the companies' sales value, data continuity throughout the study period, and adopted financial year. The businesses are Mind Tree, HSBC, Tech Mahindra, Capgemini, TCS, Infosys, Wipro, and Wipro.

Study duration: The study was conducted over the course of four months between February–May of 2022, and it covers a ten-year period from 2011–2021.

Techniques and tools: Using Microsoft Excel and SPSS statistics, the analysis is performed using the ratios analysis method along with a number of other tools including regression and ANOVA.

RESEARCH GAP

Almost all of the research focused on understanding the IT industry's financial performance. The influence of one performance ratio on the other in the context of the IT sector has only been studied sporadically. Consequently, the goal of my research is to determine how liquidity affects the profitability of particular IT firms.

REVIEW OF LITERATURE

In order to determine and evaluate the liquidity and profitability of Indian IT companies, Sugandha Sharma and Anindita Banerjee (2017) conducted research. Their three-year study of the top four IT firms—Infosys, TCS, HCL, and Wipro—was their goal. Their study encompasses the computation of multiple profitability ratios, including net profit, operating profit, return on investment, gross profit, and fast and current ratios for liquidity. They came to the conclusion that a business that balances profitability and liquidity can attain the best financial results.

Sugandha Sharma and Abhishek Raizada (2020) attempted to investigate the connection between profitability and liquidity. Their investigation encompassed the computation of diverse profitability and liquidity ratios. The five most prominent businesses were Infosys Ltd., Wipro Ltd., IBM, Tech Mahindra, and HCL. Based on the combined score of the mean value, research hypotheses were formulated and examined. The results showed that IBM was ranked top, followed by Infosys and HCL (both in the same rank), Wipro, and Tech Mahindra.

In their research paper, Rathi, Mala, Goyal, and Krishnawatar (2020) sought to examine Tata Consulting Services' financial performance. To list the company's financial performance over the previous five years, a variety of ratios and statistical approaches, including trend analysis, DuPont analysis, and the Altman B model, were employed in the analysis. The data shows that the company's revenue, net profit, and earnings are trending upward. Thus, it was determined that the business is expanding favourably and quickly.

CS Arvinder Kaur (2018) attempted to establish a linear link between liquidity, leverage, efficiency, and profitability by analysing the financial status and performance of a subset of IT companies during a ten-year period (2007–08 to 2016–17). Numerous accounting ratios and techniques, including ANOVA and CAGR, were used in the investigation. According to the analysis, TCS's performance in terms of net and gross profit was quite satisfactory. Furthermore, HCL came in top in terms of return on equity, followed by TCS and Wipro. Additionally, it may be stated that TCS has the greatest liquidity, followed by Infosys, Wipro, and HCL.

The topic of study, "Financial liquidity and health analysis of selected iron and steel firms in India," was framed by researchers Dr. K. Venkatachalam and Mr. D. Saravanakumar in 2019. The goal of the study is to determine the relationship between liquidity and solvency level and financial health. They used ratio analysis to determine the liquidity and solvency level of five steel companies in India listed on the BSE and NSE between 2009 and 2018. They also used the Mean, SD, CV, CAGR, and ANOVA methods to determine the impact of their selections, and they used the Z-Score model to analyse the financial health of the companies. They discovered that SAIL Company has good financial health.

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 current ratio can be seen in the table above. Throughout the investigation, the average current ratio varies between 3.633 and 2.058. Tech Mahindra has the lowest average current ratio, while Infosys has the highest. HSBC and TCS exhibit significant swings in SD, with corresponding values of 1.757 and 1.348. High dispersion was discovered in HSBC and Capgemini, according to the CV analysis. The analysis also reveals that Infosys and HSBC had a negative CAGR, whereas TCS, Wipro, Tech Mahindra, Capgemini, L&T, and Mind Tree showed a positive CAGR.

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

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The liquid ratio may be seen in the table above. Throughout the investigation, the average current ratio varies between 3.434 and 1.801. Tech Mahindra has the lowest average liquid ratio, while Infosys has the highest. HSBC and TCS exhibit significant swings in SD, with corresponding values of 1.757 and 1.348. High dispersion was discovered in HSBC and Capgemini, according to the CV analysis. The analysis also reveals that Infosys and HSBC had a negative CAGR, whereas TCS, Wipro, Tech Mahindra, Capgemini, L&T, and Mind Tree showed a positive CAGR.

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

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The Absolute Liquid Ratio is displayed in the table above. Throughout the investigation, the average absolute liquid ratio varies between 2.164 and 0.674. Tech Mahindra has the lowest average liquid ratio, while Infosys has the highest. TCS and HSBC exhibit significant swings in SD, with corresponding values of 1.136 and 0.976. The CV analysis reveals that L&T and TCS have considerable dispersion. The analysis also reveals that Infosys and HSBC had a negative CAGR, whereas TCS, Wipro, Tech Mahindra, Capgemini, L&T, and Mind Tree showed a positive CAGR.

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

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The Net profit ratio is displayed in the table above. Throughout the study, the average net profit ratio varied between 26.007 and 11.485. Capgemini has the lowest average liquid ratio, whereas TCS has the highest. Capgemini and HSBC exhibit significant swings in SD, with respective values of 4.587 and 3.841. The CV analysis reveals that HSBC and Mind Tree have substantial dispersion. The analysis also reveals that TCS, Infosys, Capgemini, and HSBC had a negative CAGR, whereas Wipro, Tech Mahindra, L&T, and Mind Tree had a positive CAGR.

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 return on shareholder's fund ratio is displayed in the above table. Throughout the study, the average return on shareholder's fund ratio varies from 39.136 to 14.577. In terms of average return on shareholder's fund ratio, TCS leads the field, while Capgemini comes in last. HSBC and L&T exhibit significant swings in SD, with corresponding values of 15.925 and 10.491. The CV analysis reveals that HSBC has a significant dispersion. The analysis also reveals that whilst TCS, Infosys, Capgemini, and L&T had a negative CAGR, Wipro, Tech Mahindra, Mind Tree, and HSBC had a positive CAGR.

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 return on investment ratio is displayed in the table above. Throughout the study, the average return on investments ratio varies from 48.629 to 20.183. Capgemini has the lowest average return on investment ratio, while TCS has the best. HSBC and L&T exhibit significant swings in SD, with corresponding values of 21.104 and 14.560. The CV analysis reveals that HSBC has a

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significant dispersion. The analysis also reveals that whilst TCS, Infosys, and L&T had a negative CAGR, Wipro, Tech Mahindra, Capgemini, Mind Tree, and HSBC had a positive CAGR.

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 table above presents empirical data about how some IT companies' net profits are affected by liquid ratios. There is a negative correlation between the liquid ratio beta coefficient and net profit. A negative value for ß denotes a negative correlation between profitability and the liquid ratio throughout the research period. The liquid ratio beta coefficient has a negative association and a statistically negligible influence on profitability; its p value is >0.05. In contrast, the absolute liquid ratio and the current ratio have a statistically significant impact on net profit, as shown by the significance value.

FINDINGS

● Tech Mahindra had the lowest average value while Infosys had the greatest value. Additionally, it demonstrates that every company's average current ratio was higher than the recommended 2:1.

● Tech Mahindra had the lowest average liquid ratio, while Infosys had the highest average. It also demonstrates that every company's liquid ratio was higher than the recommended level of 1:1.

●Tech Mahindra had the lowest absolute liquid ratio average, while Infosys had the highest average. Additionally, Tech Mahindra had a value of 0.674:1, which was close to the average of 0.5:1 for all the organisations.

● TCS had the highest average net profit ratio, while Capgemini had the lowest average. A high net profit ratio is often regarded as positive. TCS is keeping a better ratio than the other corporations as a result.

● TCS had the highest average return on shareholder's fund ratio, while Capgemini had the lowest average. A high return on shareholder's capital is typically seen as efficient. TCS is keeping a better ratio than the other corporations as a result.

● TCS had the highest average return on investment ratio, while Capgemini had the lowest average. A high ratio of return on investment is generally regarded as efficient. TCS is keeping a better ratio than the other corporations as a result.

● Select IT companies and liquidity and profitability ratios have a mean difference.

Liquidity's effect on profitability: The liquid ratio has a negative association with profitability, although the current ratio and absolute liquid ratio have a positive link. Importance F value 0.001 shows that the net profit of a subset of IT companies is significantly impacted by liquidity parameters.

According to R square, 0.651% of the fluctuations in the profitability of certain IT organisations may be accounted for by the independent factors.

SUGGESTIONS

Current ratio: All of the companies' current ratios indicate that they are above the conventional 2:1 threshold. Even though it is encouraging, having too much cash invested in current assets could not be a good thing. It is recommended that Infosys, TCS, and HSBC maintain the standard level of current ratio since they now exceed it.

● Liquid ratio: A 1:1 quick ratio is the typical level. A high fast ratio suggests that some of the money has been spent. Every company has a quick ratio that is higher than the industry average, which indicates that the management is inefficient. As a result, it is suggested that they allocate a portion of their quick assets to initiatives that will expand or improve the company's effectiveness.

● Absolute liquid ratio: A standard level of 0.5:1 is ideal for absolute liquid ratios. The analysis shows that, with the exception of Tech Mahindra and L&T, every other company has a ratio above the recommended level. This is advantageous because it allows them to meet their obligations promptly, but it also indicates that the company is not making the most of its current assets because there is an excessive focus on them. Therefore, it is a good idea to put some money into other investments.

● Net profit ratio: An appropriately priced product and effective cost control are indicative of a business with a high net profit margin. TCS is the only one of the eight firms with a higher net profit ratio than the others, and all of them continue to do so. It is recommended that they stay at this level and work to raise the met profit level.

Return on shareholder capital: From the perspective of an investor, return on capital is a crucial metric since it indicates whether or not the business is able to compensate its owners. Therefore, a high ratio is advised. As a result, TCS and L&T have a high ratio according to the study. It is also recommended that all other businesses raise sales, cut costs, and boost net profit in order to boost shareholders' returns.

Return on investment provides an explanation of how a corporation uses its funds generally. In general, a high ratio is advised. All other companies are recommended to increase their returns on investments by expanding the capital utilised in their operations, as TCS and L&T have demonstrated.

CONCLUSIONS

The purpose of the study was to examine how liquidity affected the bottom line of particular IT companies. The research was conducted using secondary data that was gathered from CIME Prowess during the years of 2011–12 and 2020–21 (10 years). Regression, ANOVA, and ratio analysis are the methods employed. According to the report, Tech Mahindra outperformed the other corporations in terms of liquidity. In terms of profitability, TCS continues to hold a far better position than the other businesses. Using ANOVA, it was also shown that there is a mean difference between the profitability and liquidity ratios for a subset of IT organisations. According to the regression, there is a negative correlation between liquid ratio and profitability and a positive association between current ratio and absolute liquid ratio. Thus, it can be concluded that TCS is the only company maintaining a positive overall financial performance. Thus, it can be said that one of the most important aspects of achieving high profitability is the effective use of resources. A business should also consider its costs and other cash outflows and strive to minimise them in order to achieve high profits and establish a stable financial position.

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