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IMPACT OF LIQUIDITY ON PROFITABILITY OFSELECTED IT COMPANIES IN INDIA

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Abstract

India's IT sector has been a substantial earner of foreign exchange through software exports and IT services. Companies engage in outsourcing, consulting, and software development services for clients worldwide, contributing significantly to India's export revenue. Liquidity and profitability are two critical aspects of a firm's financial health, and they play distinct roles in determining the overall performance and sustainability of a business. The main objective of this paper is to analyze impact of liquidity on profitability of selected IT Companies which are TCS, Infosys, HCL, Wipro and Tech Mahindra, during 2019 to 2023. This study uses regression analysis to test 3 indicators of liquidity ratio (current ratio, liquid ratio, and cash to current liability ratio) and 4 indicators of profitability ratio (net profit ratio, return on net worth, return on capital employed and EPS).It has been proved through analysis that liquidity has no relationship with profitability and has no significant impact on the profitability of selected IT Companies in India.

Keywords: IT Company, Liquidity and Profitability, Current Ratio, Liquid Ratio, Net Profit , Return on Net worth, Return on Capital Employed, EPS and Multiple Regression.

Introduction

The Information Technology sector in India has been a transformative force, propelling the country into the global technology landscape. Its continued growth is expected to play a vital role in shaping India's economic future, fostering innovation, and addressing societal challenges. The IT sector has been a key enabler of the digital transformation of various industries, including finance, healthcare, education, and government services. Digital solutions and technology platforms have improved efficiency and accessibility.

The main objective of a firm is to increase the value of the firm for its shareholders. For that reason, profitability and liquidity are quite important. Financial statements play a crucial role in providing relevant information for decision-making, performance evaluation, and communication with various stakeholders. Profitability is crucial for the long-term sustainability of a business. Consistent profits allow a company to reinvest in operations, research and development, and growth initiatives. Maintaining liquidity enhances a firm's credibility with creditors, suppliers, and other stakeholders, as it demonstrates the ability to meet financial obligations on time.There is a delicate balance between liquidity and

profitability. Too much focus on liquidity may result in missed growth opportunities, while excessive pursuit of profitability might lead to liquidity challenges. In this way, the present study is aimed to investigate the relationship between liquidity and profitability. The analysis is based on 5 Information Technology Companies listed on the National Stock Exchange over a period of past five years from 2019 to 2023.

Literature Review

Agusfina, and Sinarti (2020) studied on effect of liquidity and profitability of 20 companies listed on the Indonesia Stock Exchange in the infrastructure, utilities and transportation sectors for the period of 5 years from 2013 -2017. They used regression analysis to test 3 indicators of liquidity ratio (current ratio, quick ratio, and liquid ratio) and 3 indicators of profitability ratio. The study shows Current Ratio effect on Return on Equity while Current Ratio does not significantly influence Net Profit Margin and Return on Capital Employed. Quick Ratio did not affected Net Profit Margin and Return on Equity, However, Liquid Ratio did not affected the three indicators of profitability.

Shah(2020) examined impact of Liquidity on Profitability of selected 13 listed printing companies at bombay stock exchange for the period from 2009-10 to 2018-19. The study used descriptive statistics, Durbin – Watson correlation and Regression analysis. The study considered profitability as dependent variables. The result shows that the liquidity across selected companies of printing industry is inefficient and showing significant impact on profitability.

Islam, Ullah, Avi and Ashanuzzaman (2022) studied on impact of Liquidity on Profitability of selected 5 Banks in Bangladesh for a period of 10 years from 2011 to 2020. For this purpose dominant profitability ratios studied along with the calculation of liquidity. They used Ordinary Least Square Models and found that LTD, CTD as well as DTA had significantly positive impacts on ROA. They concluded that net income of banks would rise with the increases in cash & cash equivalents, loans and advances, as well as total deposits. Further studies conducted that commercial banks functioning in Bangladesh to look into how liquidity affects profitability in a large sample.

Megaladevi (2018) tried to measure a study on the impact of liquidity ratios on profitability of selected cement companies in India. The study used Descriptive Statistics, Correlation, Regression Analysis. It shows that CR and QR had significant relationship with ROAE. ROE correlated at 5% level of significance with ICR and at 1% level of significance with ROCE and EBDITCE. ROTA is positively correlated at 5% level of significance with ROCE, EBDITCE, ROACE and ICR. The study concluded that liquidity had negatively relationship with profitability, and has considerable impact on the profitability of various cement Company in India.

Madushanka and Jathurika(2018) studied on Impact of Liquidity Ratios on Profitability (With special reference to Listed Manufacturing Companies in Sri Lanka) for a period of 5 years from 2011 to 2016, they used Correlation and regression analysis as well as the descriptive statistics were applied in the analysis the study found that Liquidity ratios (Quick ratio) have positive and significantly related to the firm profitability among the listed manufacturing companies. The study recommended manufacturing companies in Sri Lanka should pay more attention on the liquidity ratios as they have the significant impact on the profitability of the firms. Further they want to devise new strategies for the proper liquidity management as their current ratio values implies the lack of management in liquidity assets.

Research Methodology

Research Question:

Is there any significant impact of liquidity ratios onprofitability of selected Information Technology Companies in India?

Sample Design

The study will attempt to understand the impact of liquidity ratios on profitability of selected Information Technology Companies in India. For this purpose Top Five IT company which is listed on NSE selected for the study.

Sample Unit IT Companies

(1) Sample Size Top Five IT companies namely TCS, Infosys, HCL Tech., Wipro and Tech Mahindra.

IT companies are selected on the basis of their market capital as per NSE.

Time period of the study

The study is conducted based on the financial statement of selected IT Companies for a period of 5 years. (March 2019 to 2023)

Sources of Data

This study is based on secondary data. The secondary data consists of the annual reports of selected five IT Companies for last five years. Various other reports like journals, websites and research paper were also referred to the present study.

Tools used for Analysis

Financial Tools

The financial tool Ratio Analysis is used for this Study. Which include Current ratio, liquid ratio and Cash to current liability ratio for liquidity analysis, while Net profit ratio, Return on net worth ratio, Return on capital employed and Earning per share ratio used for profitability analysis of selected IT companies.

Statistical Tools:

The analytical tool used is multiple regression using the help of a programs SPSS.

Determining Impact of Variables on Profitability

The multiple regression models are used to determine the relationship between the liquidity and profitability of selected IT companies. Regression is basically a statistical technique that predicts the value of dependent variable based on one or more independent variables. To measure the impact of liquidity on profitability of selected IT companies multiple regression model has been developed for the study.

Liquidity ratios are implemented as the independent variables and dependent variables are the profitability ratios.

Hypothesis :

H_{01} : There is a no significant impact of liquidity ratios on net profit ratio of the selected IT Companies in India

H_{02} : There is a no significant impact of liquidity ratios onreturn on capital employed ratio of the selected IT Companies in India

H_{03} : There is a no significant impact of liquidity ratios on net worth ratio of the selected IT Companies in India

H_{04} : There is a no significant impact of liquidity ratios on EPS ratio of the selected IT Companies in India

Data Analysis:

(1) Net Profit Ratio to Liquidity ratios

The regression analysis involved Net Profit ratio (NPR) – the dependent variable and Current ratio, liquid ratio, cash to current liability ratio are independent variables. Table 1 presents the regression model summary. In this model adjusted R^2indicates that -72.1% of NPR can be explained by the differences in the Independent variable(liquidity ratios), the remainder 27.9% of the NPR is attributed to other factors.

Table 1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.755[a]	.570	-.721	6.73440

a. Predictors: (Constant), L3, L2, L1

Testing of Hypothesis :

The results of testing Hypothesis 1 regarding the effect of Liquidity on Net Profit Ratio can be seen in table 2.

H_{01} : There is a no significant impact of liquidity ratios on net profit ratio of the selected IT Companies in India

Table 2: Result of the multiple regression testing hypothesis 1.

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	NPR(Constant)	-37.988	62.684		-.606	.653
	L1	-324.033	756.332	-12.965	-.428	.742
	L2	342.761	754.827	13.739	.454	.729
	L3	19.562	19.922	.826	.982	.506
a. Dependent Variable: Performance1						

Table 2 shows the model summary of the regression for the selected IT companies. The result shows that current ratio has negative relationship with NPR, whereas, liquid ratio and cash to current liability ratio have positive but insignificant relationship. It can be seen that the significance level of all three liquidity ratio is greater than 0.05, so null hypothesis is accepted and alternative hypothesis is rejected .This means that the net profit margin is not influenced by the liquidity ratios.

(2) Capital Employed ratio to Liquidity ratios

The regression analysis involved Capital Employed Ratio (ROCE) – the dependent variable and Current ratio, liquid ratio, cash to current liability ratio are independent variables. Table 3 presents the regression model summary. In this model adjusted R^2indicates that 95.4% of ROCE can be explained by the differences in the Independent variable (liquidity ratios), the remainder 4.6% of the ROCE is attributed to other factors.

Table 3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.994[a]	.988	.954	2.97674

a. Predictors: (Constant), L3, L2, L1

Testing of Hypothesis :

The results of testing Hypothesis 2 regarding the effect of Liquidity on return on capital employed ratio can be seen in table 4.

H_{02} : There is a no significant impact of liquidity ratios on return on capital employed ratio of the selected IT Companies in India

Table 4: Result of the multiple regression testing hypothesis 2.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
ROCE	ROCE(Constant)	-193.518	27.708		-6.984	.091
	L1	-979.333	334.315	-14.510	-2.929	.209
	L2	1057.849	333.649	15.702	3.171	.195
	L3	40.263	8.806	.629	4.572	.137
a. Dependent Variable: Performance2						

The above result shows that current ratio has negative relationship with ROCE, whereas, liquid ratio and cash to current liability ratio have positive but insignificant relationship. It can be seen that the significance level of all liquidity ratio(L1= 0.209, L2= 0.195, L3= 0.137) is greater than 0.05 So, on the basis of the analysis, null hypothesis is accepted at 5% level of significance and alternative hypothesis is rejected. This means that the return on capital employed ratio is not influenced by the liquidity ratios.

(3) Net worth ratio to Liquidity ratios

The regression analysis involved Return on net worth ratio – the dependent variable and Current ratio, liquid ratio, cash to current liability ratio are independent variables. Table 5 presents the regression model summary. In this model adjusted R^2indicates that 96.2% of Return on net worth ratio can be explained by the differences in the Independent variable (liquidity ratios), the remainder 3.8% of the return on net worth ratio is attributed to other factors.

Table 5 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.995[a]	.990	.962	2.13437

a. Predictors: (Constant), L3, L2, L1

Testing of Hypothesis :

The results of testing Hypothesis 3 regarding the effect of Liquidity on return on net worth ratio can be seen in table 6.
H_{02} : There is a no significant impact of liquidity ratios on return on net worth ratio of the selected IT Companies in India

Table 6: Result of the multiple regression testing hypothesis 3.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Net worth(Constant)	-147.201	19.867		-7.409	.085
	L1	-843.199	239.709	-15.836	-3.518	.176
	L2	903.874	239.232	17.006	3.778	.165
	L3	28.659	6.314	.568	4.539	.138
a. Dependent Variable: Performance3						

Table 6 shows the model summary of the regression for the selected IT companies. The result shows that current ratio has negative relationship, whereas, liquid ratio and cash to current liability ratio have positive but insignificant relationship. It can be seen that the significance level of all liquidity ratio(L1= 0.176, L2= 0.165, L3= 0.138) is greater than 0.05 So, on the basis of the analysis, null hypothesis is accepted at 5% level of significance and alternative hypothesis is rejected. This means that the return on net worth ratio is not influenced by the liquidity ratios.

(4) EPS ratio to Liquidity ratios

The regression analysis involved Earning per share(EPS) ratio – the dependent variable and Current ratio, liquid ratio, cash to current liability ratio are independent variables. Table 7 presents the regression model summary. In this model adjusted R^2indicates that 94% of EPS ratio can be explained by the differences in the Independent variable (liquidity ratios), the remainder 6% of the EPS ratio is attributed to other factors.

Table 7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.993[a]	.985	.940	6.72793

a. Predictors: (Constant), L3, L2, L1

The results of testing Hypothesis 3 regarding the effect of Liquidity on return on net worth ratio can be seen in table 4.

H_{02} : There is a no significant impact of liquidity ratios on return on net worth ratio of the selected IT Companies in India

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	EPS (Constant)	-258.638	62.624		-4.130	.151
	L1	-3423.563	755.606	-25.541	-4.531	.138
	L2	3537.141	754.102	26.435	4.691	.134
	L3	17.259	19.903	.136	.867	.545
a. Dependent Variable: Performance4						

Table 2 shows the model summary of the regression for the selected IT companies. The result shows that current ratio has negative relationship with NPR, whereas, liquid ratio and cash to current liability ratio have positive but insignificant relationship. It can be seen that the significance level of all three liquidity ratio is(L1= 0.138, L2= 0.134, L3= 0.545) greater than 0.05, so null hypothesis is accepted and alternative hypothesis is rejected. This means that the EPS ratio is not influenced by the liquidity ratios.

Conclusion

As a result of the study impact of liquidity on profitability of IT Companies in India from period 2019-2023, indicates that profitability is insignificantly related to liquidity. It can be concluded that Net profit, Return on Capital Employed, Return on Net Worth and EPS ratios have no significant impact on all liquidity ratio. It indicates any change by the profitability ratio will not cause all liquidity to increase or decrease. It has been proved through analysis that liquidity has no relationship with profitability and has no considerable impact on the profitability of selected IT Companies in India.

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