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# A STUDY OF LIQUIDITY OF SELECTED IT COMPANIES OF INDIA

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## Abstract

*The IT sector has undergone through significant transformation after the pandemic situation. Use and demand of IT services in all fields of life has increased to the great extent. The IT sector contribute nearly 8% of India's total GDP and it is expected to contribute 10% by year 2025. The Present paper will focus on the study of liquidity of India's selected leading IT firms. As liquidity management is major focused aspect for any manufacturing and service providing companies to measure the financial soundness of the firm so it is very necessary to study liquidity of the company. Study of liquidity position of the company indicates the strength of payment of its current liabilities by using current assets of the company. Both over and under situation of liquidity is harmful for company's profitability. That is why companies should give importance to working capital management and sufficient care should be taken in this regard. This study is depending on the secondary data sources like annual reports of the selected companies, published books and journals and related websites. Researcher tries to make comparative analysis of liquidity position of selected IT sector companies. By using financial data researcher tries to find out that does the liquidity position of selected IT companies are same? Or is there any difference among them? Moreover, with the context of available data and by doing analysis researcher tries to find out that which company has more sound liquidity position compare to other.*

***Keywords:*** *IT sector, IT Services, Liquidity, Profitability & Current Ratio*

## INTRODUCTION

The IT sector has undergone through significant transformation after the pandemic situation. Use and demand of IT services in all fields of life has increased to the great extent. The IT sector contribute nearly 8% of India's total GDP and it is expected to contribute 10% by year 2025. In this research we have selected top 5 leading IT companies in terms of Net Sales which are listed in BSE Sensex i.e. TCS, Infosys, Wipro, HCL Tech, Tech Mahindra.

The Present paper will focus on the study of liquidity of India's selected leading IT firms. As liquidity management is major focused aspect for any manufacturing and service providing companies to measure the financial soundness of the firm so it is very necessary to study liquidity of the company. Study of liquidity position of the company indicates the strength of payment of its current liabilities by using current assets of the company. Both over and under situation of liquidity is harmful for company's profitability. That is why companies should give importance to working capital management and sufficient care should be taken in this regard.

## LITERATURE REVIEW

1. **(Singh & Asress, 2010)** Using a sample of 449 Indian manufacturing firms, a study was conducted to assess the working capital adequacy and its impact on firm profitability, and it was discovered that there is a significant difference in the relative solvency level of firms and firms with adequate working capital.
2. **(Dr.S.S.Saravanan & J.Abarna, 2011)** In their research Anova was used to conduct a study on the liquidity of selected automobile companies in India, and it was discovered that there is a significant difference in the absolute liquid ratios of the selected automobile companies.
3. **(Zygmunt, 2013)** in his paper 'Does Liquidity impact on Profitability?' has tried to recognize the liquidity impact on profitability in polish listed IT companies. Study proved that together with the growth of accounts payables conversion period, receivable conversion period, as well as inventory conversion period, the profitability of polish listed IT companies' increases. It is proved that relationship between accounts payables conversion period and profitability is positive. Further it is proved the existence of statistically significant relationship between liquidity and profitability.

4. **(Panigrahi, 2013)** The liquidity position of five leading companies was studied over a ten-year period from 2000 to 2010. It has been discovered that the liquidity position of small businesses is superior to that of large corporations. Finally, it is concluded that businesses should keep an ideal current and liquid ratio.

5. **(Chukwunweike, 2014)** The study on 'The Impact of Liquidity on Profitability of Some Selected Companies: The Financial Statement Analysis (FSA) Approach', researcher employed the "non-probability" sampling technique, in which at a 10% level of significance, a simple correlation analysis was employed to test the hypothesis. The overall outcomes of this study show that There was a substantial positive association between current ratio and profitability, there was no definite significant correlation between acid-test ratio and profitability, there was no statistically significant positive relationship between return on capital employed and profit. Corporate organisations should not pursue extreme liquidity policies at the price of their profitability, but rather establish a balance between the two performance indicators: liquidity and profitability.

6. **(Bhunia, n.d.)** In his Paper titled 'A study of liquidity trends on private sector steel companies in India' researcher has tried to studied importance of working capital for the growth and development of the companies. With the help of study of liquidity trend analysis, he has found that actual value of working capital must have to increase by making additional investments in form of raw material, overall management is required for all the companies by proper application of Inventory Control System and to reduce stock piling of finished goods Sales management should also improve. He also suggests improvement in receivable management; review and examination of payment policy; maximisation of assets and minimisation of liabilities by efficient administration of net current assets.

## DEFINITION OF IMPORTANT TERMS

- **Current Ratio**

One of the most fundamental liquidity ratios is the current ratio. It assesses a company's ability to repay current liabilities with current assets. Current assets are assets that are projected to be converted to cash within one year of the regular operating cycle. Current liabilities are commitments that must be settled during the typical operating cycle or within the next 12 months.

The current ratio compares current assets to current liabilities and tells us whether current assets are sufficient to cover current liabilities. A current ratio of one or more indicates that current assets exceed current liabilities and that the company should not have a liquidity problem. A current ratio less than one indicates that current liabilities exceed current assets, which may suggest liquidity issues. Current Ratio is calculated by dividing current assets by current liabilities.

- **Quick Ratio (Acid-Test Ratio)**

The quick ratio is a measure of a company's capacity to satisfy its short-term obligations using its most liquid assets and is an indicative of its short-term liquidity. The ratio eliminates inventories from current assets since we are only interested in the most liquid assets. It is especially important in measuring the liquidity condition of enterprises in a crisis, i.e. when it is difficult to liquidate goods. Quick ratio is calculated by dividing liquid current assets by total current liabilities.

- **Cash Ratio**

The cash ratio is calculated by dividing a company's total cash and cash equivalents (CCE) by its current liabilities. The measure computes a company's ability to repay its short-term debt; this information is useful to creditors when considering how much loan, if any, to issue to the inquiring party. The cash ratio is widely used to assess a company's liquidity. The indicator determines a company's ability to pay current liabilities with only cash and cash equivalents on hand. If a corporation is obliged to pay all current liabilities immediately, this indicator demonstrates the company's ability to do so without selling or liquidating other assets.

## RESEARCH METHODOLOGY

- **Significance of the study**

IT sector is the fastest growing sector in this era. At this point of time organisational efficiency is depends on the better performance of the company in term of profit with this it is also mandatory now a day to maintain liquidity of the firm efficiently. An efficient liquidity management can help in growth and development of company and which will ultimately lead to Industrial development. This study will help to understand the position of liquidity of top selected IT companies.

## OBJECTIVES OF THE STUDY

Present Research Paper has the following objectives:

- To make comparative study of liquidity of selected IT sector Companies
- To study Liquidity position of selected IT sector Companies

- To Identify Liquidity Ratios of Selected IT sector Companies

- **Period of the Study**

The current research will cover the period of last five years, from 2017 to 2021. The liquidity ratios are generated using data from the previous five years.

- **Data Collection**

This research is based on secondary sources. The financial data for these years will be derived from annual reports of selected Indian IT companies. Other study-related information is gathered from official websites and internet resources, as well as books, periodicals, and journals.

- **Method of Data Analysis:**

Data Analysis is done through classification, Calculation and Tabulation of data. This study is based on ratio analysis. Further calculation is made with the help of Mean, Standard Deviation & Coefficient of Variance. Single Factor ANOVA is used for testing of Hypothesis at 95% Confidence interval i.e., 0.05 level of significance.

- **Hypothesis of the study:**

- **$H_0$**: There is no significant difference between Current Ratio of the Selected IT Companies of India

**$H_1$**: There is significant difference between Current Ratio of the Selected IT Companies of India

- **$H_0$**: There is no significant difference between Quick Ratio of the Selected IT Companies of India

**$H_1$**: There is significant difference between Quick Ratio of the Selected IT Companies of India

- **$H_0$**: There is no significant difference between Cash Ratio of the Selected IT Companies of India

**$H_1$**: There is significant difference between Cash Ratio of the Selected IT Companies of India

- **$H_0$**: There is no significant difference between Debtor's Turnover Ratio of the Selected IT Companies of India

**$H_1$**: There is significant difference between Debtor's Turnover Ratio of the Selected IT Companies of India

**Testing of Hypothesis:**

**Table-1 Current Ratio**

| | TCS | Infosys | Wipro | HCL Tech | Tech Mahindra |
|---|---|---|---|---|---|
| **Mar '17** | 3.09 | 3.80 | 1.50 | 3.02 | 2.42 |
| **Mar '18** | 2.85 | 3.83 | 1.37 | 3.04 | 2.25 |
| **Mar '19** | 2.84 | 3.03 | 1.34 | 2.89 | 1.69 |
| **Mar '20** | 1.97 | 2.56 | 1.26 | 1.23 | 2.39 |
| **Mar '21** | 1.78 | 2.42 | 1.18 | 1.95 | 1.92 |

**Table-2 Summary**

| *Groups* | *Count* | *Sum* | *Average* | *Variance* |
|---|---|---|---|---|
| TCS | 5 | 12.53 | 2.506 | 0.34633 |
| Infosys | 5 | 15.64 | 3.128 | 0.44447 |
| Wipro | 5 | 6.65 | 1.33 | 0.0145 |
| HCL Tech | 5 | 12.13 | 2.426 | 0.65053 |
| Tech Mahindra | 5 | 10.67 | 2.134 | 0.10093 |

From the observation of above Table-1& 2 it is found that Highest Current Ratio is reported by Infosys Ltd. With sum of 15.65 amongst other selected companies. Along with this it is also found that except Wipro Ltd. all other companies are having ideal Current ratio situation i.e. 2:1.

**Table-3 Analysis of Variance (ANOVA)**

| Source of Variation | SS | df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| Between Groups | 8.561184 | 4 | 2.140296 | 6.8742 | 0.0011898 | 2.866081 |
| Within Groups | 6.22704 | 20 | 0.311352 | | | |
| Total | 14.78822 | 24 | | | | |

It is clear from the Table-3 that calculated value of 'F' 6.87 is higher than table value of 'F' 2.87 and also the p value is less than 0.05 so, Alternate hypothesis $H_1$ is accepted and Null hypothesis $H_0$ is rejected. After study, it can be conclude that there is a significant difference between Current Ratios of the Selected IT Companies of India.

**Table-4 Quick Ratio**

| | TCS | Infosys | Wipro | HCL Tech | Tech Mahindra |
|---|---|---|---|---|---|
| **Mar '17** | 2.93 | 3.77 | 2.17 | 2.82 | 2.41 |
| **Mar '18** | 2.67 | 3.74 | 1.85 | 2.75 | 2.20 |

| | | | | | |
|---|---|---|---|---|---|
| **Mar '19** | 2.74 | 2.96 | 2.35 | 2.59 | 1.67 |
| **Mar '20** | 1.89 | 2.49 | 2.13 | 1.10 | 2.33 |
| **Mar '21** | 1.69 | 2.38 | 2.09 | 1.89 | 1.86 |

**Table-5 Summary**

| *Groups* | *Count* | *Sum* | *Average* | *Variance* |
|---|---|---|---|---|
| TCS | 5 | 11.92 | 2.384 | 0.30808 |
| Infosys | 5 | 15.34 | 3.068 | 0.44087 |
| Wipro | 5 | 10.59 | 2.118 | 0.03232 |
| HCL Tech | 5 | 11.15 | 2.23 | 0.53515 |
| Tech Mahindra | 5 | 10.47 | 2.094 | 0.10033 |

From the study of Table- 4 &5 it can depict that Infosys is again in top in terms of Highest Quick Ratio with the Sum of 15.34. It also observed that all the selected companies are in ideal Quick Ratio position i.e. 1:1

**Table-6 Analysis of Variance (ANOVA)**

| *Source of Variation* | *SS* | *df* | *MS* | *F* | *P-value* | *F crit* |
|---|---|---|---|---|---|---|
| Between Groups | 3.231464 | 4 | 0.807866 | 2.868124 | 0.0508279 | 2.866081 |
| Within Groups | 5.667 | 20 | 0.28335 | | | |
| Total | 8.898464 | 24 | | | | |

It is clear from the Table-6 that calculated value of 'F' 2.868 is higher than table value of 'F' 2.866 and also the p value is equal to 0.05 so, Alternate hypothesis $H_1$ is accepted and Null hypothesis $H_0$ is rejected. After study, it can be conclude that there is a significant difference between Quick Ratios of the Selected IT Companies of India.

**Table-7 Cash Ratio**

| | **TCS** | **Infosys** | **Wipro** | **HCL Tech** | **Tech Mahindra** |
|---|---|---|---|---|---|
| **Mar '17** | 0.07 | 1.63 | 0.24 | 0.06 | 0.16 |
| **Mar '18** | 0.09 | 1.44 | 0.13 | 0.04 | 0.14 |
| **Mar '19** | 0.18 | 1.01 | 0.64 | 0.71 | 0.12 |
| **Mar '20** | 0.16 | 0.89 | 0.64 | 0.09 | 0.32 |
| **Mar '21** | 0.04 | 1.00 | 0.54 | 0.29 | 0.17 |

**Table-8 Summary**

| *Groups* | *Count* | *Sum* | *Average* | *Variance* |
|---|---|---|---|---|
| TCS | 5 | 0.540113 | 0.108023 | 0.003399 |
| Infosys | 5 | 5.961406 | 1.192281 | 0.102405 |
| Wipro | 5 | 2.189004 | 0.437801 | 0.056418 |
| HCL Tech | 5 | 1.192962 | 0.238592 | 0.078658 |
| Tech Mahindra | 5 | 0.909532 | 0.181906 | 0.005912 |

By studying Table- 7 & 8 it is clear that the cash ratio of Infosys is higher and TCS has reported lowest cash ratio amongst all other companies. Here only Infosys have good average Cash ratio position compare to others as all other firms are have average cash ratio less than 0.5.

**Table-9 Analysis of Variance (ANOVA)**

| *Source of Variation* | *SS* | *df* | *MS* | *F* | *P-value* | *F crit* |
|---|---|---|---|---|---|---|
| Between Groups | 3.914878 | 4 | 0.978719 | 19.82881 | 9.8564E-07 | 2.8660814 |
| Within Groups | 0.987169 | 20 | 0.049358 | | | |
| Total | 4.902047 | 24 | | | | |

It is clear from the Table-9 that calculated value of 'F' 19.83 is higher than table value of 'F' 2.87 so, Alternate hypothesis $H_1$ is accepted and Null hypothesis $H_0$ is rejected. After study, it can be conclude that there is significant difference between Cash Ratios of the Selected IT Companies of India.

**Table-10 Debtors Turnover Ratio**

| | TCS | Infosys | Wipro | HCL Tech | Tech Mahindra |
|---|---|---|---|---|---|
| **Mar '17** | 5.20 | 5.71 | 5.57 | 4.54 | 4.76 |
| **Mar '18** | 5.49 | 5.36 | 5.07 | 4.48 | 4.91 |
| **Mar '19** | 5.74 | 5.73 | 4.78 | 4.46 | 4.93 |
| **Mar '20** | 4.98 | 5.48 | 5.06 | 4.74 | 4.80 |
| **Mar '21** | 5.05 | 5.39 | 5.81 | 5.61 | 5.22 |

**Table-11 Summary**

| *Groups* | *Count* | *Sum* | *Average* | *Variance* |
|---|---|---|---|---|
| TCS | 5 | 26.46 | 5.292 | 0.10107 |
| Infosys | 5 | 27.67 | 5.534 | 0.03083 |
| Wipro | 5 | 26.29 | 5.258 | 0.17627 |
| HCL Tech | 5 | 23.83 | 4.766 | 0.23488 |
| Tech Mahindra | 5 | 24.62 | 4.924 | 0.03253 |

From the above Table- 10 & 11 that the in terms of Debtors Turnover Ratio all the firms are performing similarly. Sum of ratios of all firms are nearly same there are not any major difference between them. Infosys reported highest Debtors Turnover Ratio while HCL Tech reported lowest Debtors turnover ratio.

**Table-12 Analysis of Variance (ANOVA)**

| *Source of Variation* | *SS* | *df* | *MS* | *F* | *P-value* | *F crit* |
|---|---|---|---|---|---|---|
| Between Groups | 1.888504 | 4 | 0.472126 | 4.101307 | 0.013788632 | 2.866081 |
| Within Groups | 2.30232 | 20 | 0.115116 | | | |
| Total | 4.190824 | 24 | | | | |

It is clear from the Table- that calculated value of 'F' 4.10 is higher than table value of 'F' 2.87 and also the p value is less than 0.05 so, Alternate hypothesis $H_1$ is accepted and Null hypothesis $H_0$ is rejected. After study, it can be conclude that there is a significant difference between Debtors Turnover Ratios of the Selected IT Companies of India.

## CONCLUSION

From the entire study we can conclude that the there is significant difference in the performance of all the selected IT Sector Companies in terms of their Current Ratio, Quick Ratio, Cash Ratio and Debtors Turnover Ratio. Liquidity position of Infosys is very good as compare to other firms as it has highest value in all four types of ratios. As a point of view of Cash ratios of firms Infosys are reported desired level of cash ratio but all other firms are reported with slight lower than the desired standard of cash ratio i.e. 0.5 so they should have to focused on their Cash Ratio. Further it can conclude that all firms are operating well as overall liquidity point of view and have a sound liquidity position.

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