An Analysis Comparing the Liquidity of Selected Indian Information Technology Industries

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Abstract: The article evaluates significant Indian IT companies' liquidity from 2005 to 2015. The essay starts by describing the investigation's scope, then briefly reviews accounting and liquidity performance literature. Next, it describes the study's aims, data, and methods. After that, it analyzes the results and concludes.

I. Introduction

The Indian Information Technology (IT) sector has become one of the fastest-growing contributors to India's employment generation, exports and GDP. Liquidity assessment plays an important role in understanding whether in this situation the firms can meet short-term obligations while sustaining the rapid growth. This study analyzes the liquidity performance of three leading Information Technology firms—TCS, Infosys, and Wipro—from 2005–06 to 2014–15. The objective is to interpret liquidity dynamics not only descriptively but also in relation to managerial decision-making, operational cycles, and working-capital practices. Even as the global economy grows, the Indian IT industry continues to flourish. Corporate finance includes financial analysis which analyzes historical data to predict a company's future finances. IT can accelerate economic growth, boost efficiency, and benefit all areas of the economy. It may also improve governance, trade imbalances, and India's exports. It enhances health care, skill development, information transfer, consumer protection, government service accessibility, and simplicity of use.

The study aims to study the practices and to draw on firms' preference on internal financing; liquidity strength, reducing dependence on external debt. Working Capital Management i.e. efficiently management of receivables, payables and cash management which are directly affecting the liquidity ratios. The current study will contribute by analyzing liquidity ratios of these IT Companies from (2005–2015), and will address the gaps, linking profitability and risk findings to liquidity dynamics.

II. Literature Analysis

The financial performance of IT companies has been widely studied, but much of the existing literature emphasizes profitability, efficiency, or foreign exchange exposure rather than liquidity per se.

In 2002, Bortolotti et al. studied the financial and operational efficiency of thirty-one national telecommunication businesses located in twenty-five nations which underwent complete or partial privatization through public share sale. Researchers has implemented the traditional pre-versus post-privatization comparisons and advanced panel data estimation techniques and discovered the financial and operational performance of telecommunication companies experiences a notable enhancement following privatization. However, a significant portion of this improvement can be attributed to regulatory modifications, either on their own or in conjunction with substantial ownership changes, rather than solely to privatization".

Davda's (2012) study, "research assists an investor who wants to approach their investing activity with rationality and scientific methodology. It necessitates the evaluation of extensive information on the historical performance and anticipated future performance of firms, industries, and the overall economy. Only after this evaluation can the investor make an informed investment choice". Sornaganesh and Maheswari (2014) "examined the financial viability of the enterprises included in their sample. The study employs an analytical and descriptive research approach. The data pertaining to the IT sectors has been gathered from the annual reports produced by the respective industries, covering a span of five years from 2008 to 2012".

Rao et al. (2013) "assert that the central focus of their research is the critical significance of profitability and liquidity management in making financial management decisions. A corporation that can effectively balance profitability and liquidity performance indicators has the potential to achieve optimal financial performance. The objective of this research is to determine the financial status and assess the importance of them. Descriptive statistics reveal that the chosen unit's performance in terms of liquidity, solvency, and profitability is quite good. Furthermore, a moderately efficient financial situation is seen in all 36 instances. The suggestion was made that both organizations being studied should focus on achieving financial viability, particularly by addressing unexplained factors, with the goal of generating value for shareholders". In their study,

Daga and Parikh (2014) "examined the financial performance of three prominent Indian IT companies - Tata Consultancy Services Limited (TCS), Wipro Limited, and Infosys Technologies Pvt. Ltd. They specifically focused on assessing the level of risk these companies face in their overseas market exposure. Given the significant devaluation of the Indian rupee (which has decreased by about 60% since the global economic crisis in 2008), it is crucial to comprehend the level of risk that the Indian IT industry is exposed". "The research utilizes secondary data from the years 2003-2004 to 2012-2013. To evaluate the financial performance of all three organizations, growth analysis and ratio analysis are conducted. The Coefficient of Variation and Ratio analysis of turnover,

gross profit, and net profit for firms are computed and compared to assess the risk of foreign market exposure. The study is conducted for two separate periods, 2003-2008 and 2008-2013".

Whereas in the same year 2014, Sornaganesh and Maheswari reported a broad evaluation of the Indian IT sector's financial health which includes annual reports from 2008 to 2012. Their descriptive and analytical approach provided useful insights into overall viability but did not specifically isolate liquidity as a factor influencing stability. This omission is significant because liquidity directly affects a company's ability to meet short-term obligations and withstand market fluctuations.

The gaps identified during the course of literature review that as compared to risk and profitability liquidity is not being focused, limited comparison of top IT companies and a lack of contextual attention to dividend policies, forex exposure and receivables cycles.

Research Hypothesis

In order to assess the financial efficacy and to evaluate the liquidity status of the IT companies, the following Hypotheses were framed as:

H01: There is no substantial difference in the present ratio of TCS, Infosys, and Wipro.

H02: There is no substantial difference in the quick ratio of TCS, Infosys, and Wipro.

H03: There is no notable difference in the dividend distribution of TCS, Infosys, and Wipro.

Scope of Study

The research sought to provide a comprehensive financial performance analysis of the IT companies within India. Therefore, the current analysis focuses on the three leading Information Technology businesses in India. The research has used the financial data of the chosen firms from 2005-06 to 2014-15. The liquidity of the sample firms is used as a measure to assess their financial performance.

III. Methodology

The current study employs both analytical research and descriptive research approaches. The data has been gathered from the annual reports of IT industries during a span of 10 years, from 2005-06 to 2014-15. For the research, a limited sample size of three industries has been chosen, namely TCS, WIPRO, and INFOSYS. The research has categorized the following tools and procedures.

Sample Design: The research is conducted specifically focusing on the IT sector in India. The availability of data or financial accounts is the underlying factor. Hence, 'Convenience Sampling' is used for the investigation.

Variables: Secondary data and interviews with key informants provide the backbone of this study. The three IT sectors' annual reports from the last ten years make up the secondary data and the following variables are calculated i.e. current ratio, liquid ratio and dividend payout ratio.

Study Duration: Three selected IT companies audited financial statements covering a decade (2005–06 to 2014–15) are used for the study. The duration is sufficient to account for the transient fluctuations and provide sufficient information to draw conclusions about the efficiency of the many selected organizations.

Analytical Tools: Descriptive Statistics i.e. mean, SD and CV, inferential tests ANOVA and Ratio Analysis - numerical representation that illustrates the logical connection between two items inside a financial statement, the ratios may be categorized as profitability, activity, liquidity, and solvency ratios.

Descriptive Statistical Analysis: Mean, S.D., C.V., and ANOVA is used. The normality and homogeneity of variance were tested before applying ANOVA to ensure validity.

IV. Results & Inferences

The following table no 1 i.e. the statistics shows the Means, SD and range of the current ratio of the three IT companies followed by the interpretation

Table No 1 – Statistics

Descriptive Data for Current Ratios

CR	Mean	Std. Deviation	Minimum	Maximum	Range
TCS	28.28	1.84	25.5	30.9	5.4
INF	31.36	2.29	27.4	34.6	7.2
WIP	21.34	1.53	18.8	24	5.2
Total	26.99	4.64	18.8	34.6	15.8
QR					
TCS	22.09	1.50	18.89	24.29	5.40
INF	25.27	2.25	21.25	27.91	6.66
WIP	17.25	1.54	15.07	19.31	4.24
Total	21.54	3.78	15.07	27.91	12.84
DPR					
TCS	43.07	7.24	35.2	58.14	22.94
INF	31.87	6.14	25.6	41.24	15.64
WIP	25.24	5.42	18.1	33.9	15.8
Total	33.4	9.65	18.1	58.14	40.04

Sources: Primary Data

Current Ratio

In Table no 1, you can see the IT industry's descriptive data for current ratios. The average current ratio at Infosys is 3.83 to 1, with a range of 4.57 to 1 and 2.73 to 1, making it the greatest ratio in the industry. The current ratio for TCS ranges from 1.89 to 2.64 to 1, with an average of 2.22 to 1. The current ratio for Wipro ranges from 1.28 to 2.33 to 1, with an average of 1.84 to 1. Compared to TCS (0.27 standard deviation), which shows less fluctuation and more consistency in its current ratio, Infosys has a higher average standard deviation of 0.73, suggesting more unpredictability and less consistency.

The graphical presentation in figure no 01 and table no 2 shows the trends in the current ratio of IT industries from 2026-26 to 2014-15.
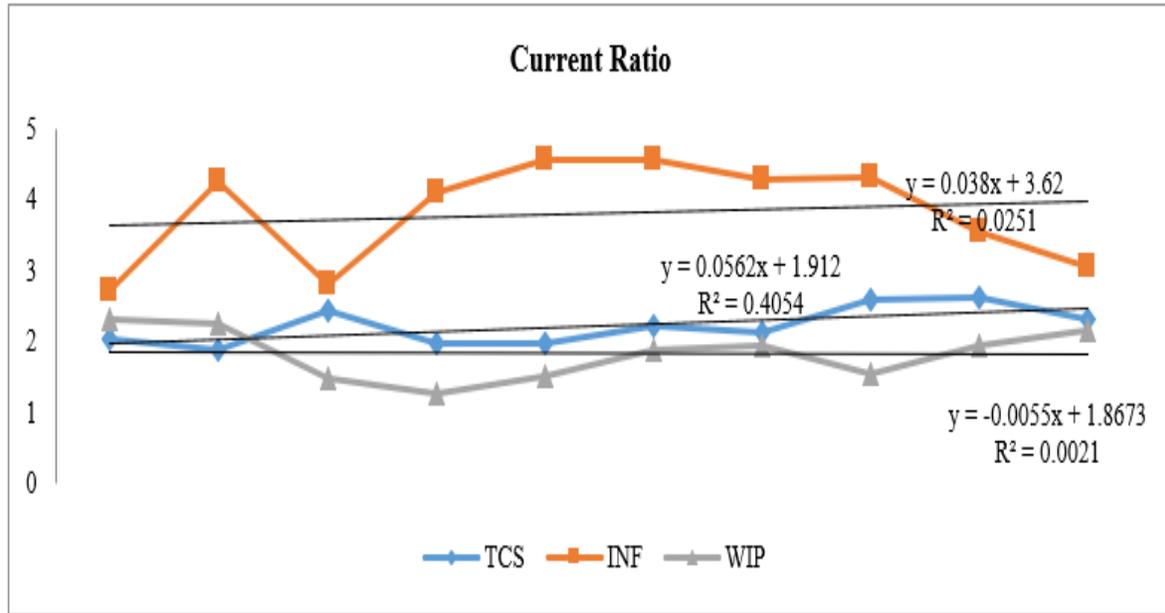
Table no 2

Trends in Current Ratio, Quick Ratio and Dividend Payout Ratio

Year	CR						QR						DPR					
	TCS	INF	WIP	Mean	SD	CV	TCS	INF	WIP	Mean	SD	CV	TCS	INF	WIP	Mean	SD	CV
2005-06	2.05	2.73	2.33	2.4	0.3	14.4	2.15	2.7	2.26	2.4	0.3	12.3	25.42	57.44	39.31	40.7	16.1	39.4
2006-07	1.89	4.26	2.26	2.8	1.3	45.5	1.88	4.26	2.16	2.8	1.3	47.0	30.76	19.47	33.87	28.0	7.6	27.0
2007-08	2.43	2.81	1.48	2.2	0.7	30.6	2.42	2.81	1.39	2.2	0.7	33.2	31.92	47.75	31.23	37.0	9.3	25.3
2008-09	1.97	4.1	1.28	2.5	1.5	60.0	1.96	4.1	1.22	2.4	1.5	61.6	30.59	26.26	17.57	24.8	6.6	26.7
2009-10	1.97	4.57	1.52	2.7	1.6	61.3	1.97	4.57	1.45	2.7	1.7	62.8	65.54	26.71	21.79	38.0	24.0	63.0
2010-11	2.22	4.57	1.89	2.9	1.5	50.5	2.15	4.56	1.74	2.8	1.5	54.1	35.32	58.47	31.98	41.9	14.4	34.4
2011-12	2.12	4.29	1.94	2.8	1.3	47.0	2.04	4.28	1.76	2.7	1.4	51.3	54.85	37.51	30.59	41.0	12.5	30.5
2012-13	2.59	4.34	1.55	2.8	1.4	49.9	2.24	4.33	2.06	2.9	1.3	43.9	36.21	29.69	32.74	32.9	3.3	9.9
2013-14	2.64	3.57	1.95	2.7	0.8	29.9	2.53	3.26	2.59	2.8	0.4	14.5	36.91	39.6	28.87	35.1	5.6	15.9
2014-15	2.33	3.05	2.17	2.5	0.5	18.6	2.26	2.77	1.95	2.3	0.4	17.8	91.22	49.49	40.84	60.5	26.9	44.5
Mean	2.2	3.8	1.8				2.2	3.8	1.9				43.9	39.2	30.9			
SD	0.3	0.7	0.4				0.2	0.8	0.4				20.7	13.7	7.1			
CV	12.0	19.0	19.7				9.6	20.8	23.1				47.1	34.9	22.8			

Sources: Primary Data

Figure no 1 Trends in Current Ratio of IT Industries

Sources: Primary Data

Table no 2 & figure no 1 show the trends in current ratio of IT industries. Annual and industry-wide data are used to construct descriptive statistics for IT. Infosys (3.8 to 1), TCS (2.2 to 1), and Wipro (1.8 to 1) have average current ratios. Infosys & TCS average greater than 2:1, whereas Wipro averages 1:1–2:1. Wipro has the largest coefficient of variation (19.7), indicating a more unpredictable and inconsistent current ratio. Infosys' coefficient of variation (19.0) is lower than TCS' (12.0), indicating a more stable, uniform ratio. In 2010–11, TCS, Infosys, and Wipro had high current ratios, according to annual statistics. The ratio was 2.9:1. 2009–10 had the largest coefficient of variance, 61.3%. This implies increased current ratio uncertainty in the chosen IT sectors.

Table 3

| Companies Name	R	R2	F Value	P Value	Constant Value	Beta Coefficient	T Value	P Value
TCS Comp.	0.64	0.41	5.45	0.03*	1.91	0.06	2.34	0.03*
Infosys Comp.	0.16	0.03	0.12	0.21	3.62	0.0.4	0.45	0.66
Wipro Comp.	0.0.5	0.0021	0.02	0.90	1.87	-0.06	-0.13	0.90

Sources: Primary Data

In Table 3, the independent variable substantially impacts the dependent variable at the 5% level of significance, suggesting that it is quite important. R2 shows that the independent variable explains 41% of the dependent variable's variance. The research also found that the R2 value is statistically significant with an f-value of 5.45; and p-value of 0.03, both below 0.05.

The relevance of R2 indicates fit quality. Infosys studies show that the independent variable explains a third of the variance in the dependent variable with an R2 of 3%. The R2 is not statistically significant since the f-value is 0.12 and the p-value is 0.21, both over 0.05. Wipro defines R2 as the percentage explanation of the dependent variable by the independent variable. The study found that the F-value (0.02) and p-value (0.90) above 0.05. Therefore, R2 is not inferred as statistically significant.

Quick Ratio

Table no 1 shows IT quick ratio statistics. Infosys has the highest average quick ratio of 3.76 to 1 with a range of 4.57 to 1 to 2.7 to 1. TCS's quick ratio averages 2.16 to 1 from 2.53 to 1.88 at its lowest. Wipro has an average quick ratio of 1.86 to 1, ranging from 1.22 to 2.59. Infosys' fast ratio has a larger average standard deviation of 0.78 than Tata Consultancy Services', suggesting more unpredictability and less consistency.

Figure no 2 IT Industry Expansion
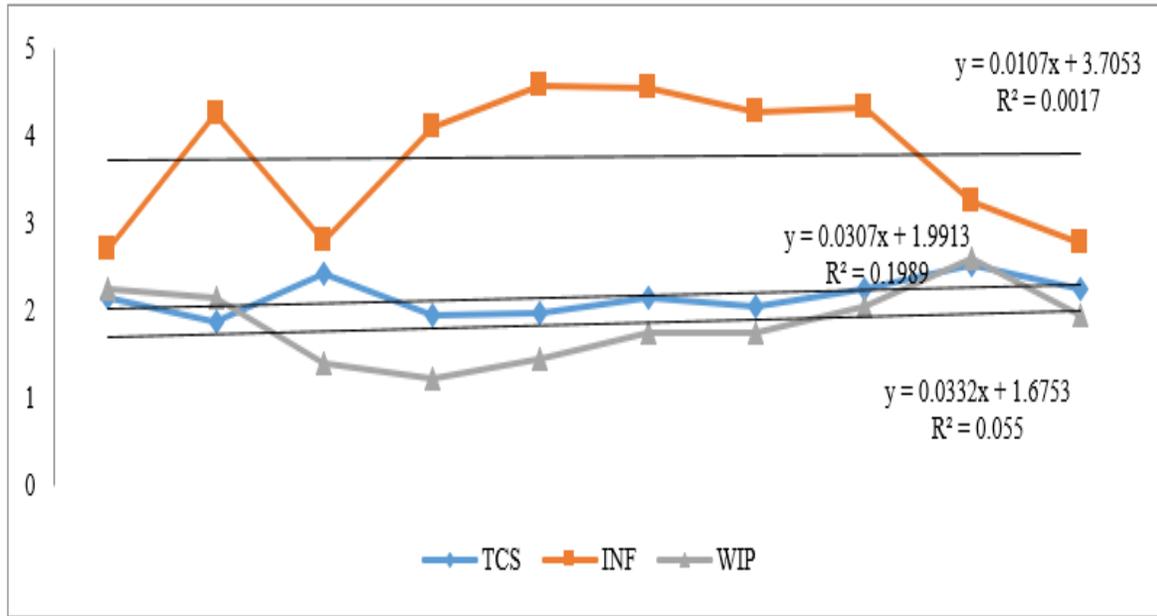
Sources: Primary Data

Table no 2 and figure no 2 show IT industry expansion throughout time. Annual and industry-wide data are used to construct descriptive statistics for IT. Infosys has the best average fast ratio at 3.8 to 1, followed by TCS at 2.2 and Wipro at 1.9. Infosys and TCS average greater than 2:1, whereas Wipro averages 1:1–2:1. Wipro has the largest coefficient of variation at 20.8, indicating a more unpredictable fast ratio. Infosys' coefficient of variation (19.0) is lower than TCS' (9.6), indicating a more stable ratio. The average fast ratio for the three IT sectors (TCS, Infosys, and Wipro) was 2.9 to 1 in 2012–13. The coefficient of variance peaks at 62.3% in 2009–10. Due to this, the chosen IT industries' rapid ratio seems more uncertain.

Table 4

| Companies Name	R	R2	F Value	p Value	Constant Value	Beta Coefficient	t value	p value
TCS Comp.	0.45	0.20	1.99	0.20	1.99	0.03	1.41	0.20
Infosys Comp.	0.04	0.001	0.01	0.91	3.71	0.01	0.12	0.91
Wipro Comp.	0.24	0.06	0.47	0.001	1.99	0.03	0.68	0.001

Sources: Primary Data

The coefficient of the independent variable is statistically significant at the 5% level, indicating that it strongly impacts the dependent variable (table no 4). The coefficient of determination (R2) indicates how much one variable explains another's fluctuation. Twenty percent is the study's R2. Both the f-value (1.99) and p-value (0.20) exceed 0.05. This shows, R2 value is not statistically significant.

The R2 is 1%, F is 0.01 and p is 0.91. If these figures are substantially higher than 0.05, the R2 is not statistically significant. The coefficient of determination (R2) indicates how much one variable explains another's fluctuation. This research has 6% R2. A significant p-value (f=4.7) is 0.001. These figures are substantially less than 0.05, indicating that R2 has high statistical significance. The relevance of R2 indicates fit quality.

Dividend Payout Ratio

IT sector dividend payment ratios are described in Table no 1. TCS's dividend payout ratio is 43.87, ranging from 91.22 to 25.42. Infosys has a 39.24 average dividend payout ratio, ranging from 58.47 to 19.47. Wipro's average ratio is 30.88, with a top of 40.84 and a low of 17.57. Compared to Wipro (7.05), which has the lowest dividend payout ratio Std. Div., TCS (20.67) has more fluctuation and less consistency.

Figure 3 Dividend Payout Rato
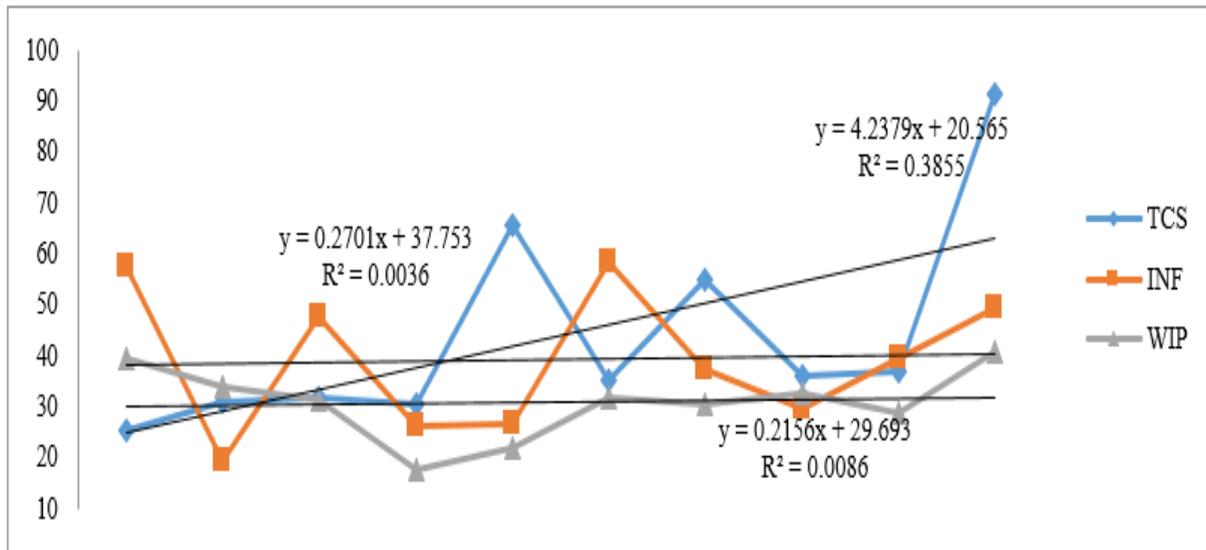
Sources: Primary Data

Table no 2 and figure no 3 show IT companies' dividend payout ratios by year. Descriptive statistics are calculated for the IT industry annually and industry-wide. TCS has the highest average dividend payout ratio of 43.9. Infosys has 39.2, whereas Wipro has 30.3. TCS has the highest coefficient of variation (47.1), suggesting a more unpredictable dividend payout ratio. Infosys (34.9) has a smaller coefficient of variation than Wipro (22.8), suggesting better dividend payout ratio stability, homogeneity, and less variability. A year-wise analysis shows that the average dividend payout ratio for TCS, Infosys, and Wipro was 60.5 in 2015-15. The coefficient of variance is highest in 2009-10 at 63.0%. This shows increased dividend payout ratio uncertainty within IT industries.

Table 5

Companies Name	R	R2	F Value	p Value	Constant Value	Beta Coefficient	t value	p value
TCS Comp.	0.62	0.39	5.02	0.06	20.6	4.24	2.24	0.06
Infosys Comp.	0.06	0.004	0.03	0.87	37.8	0.27	0.17	0.87
Wipro Comp.	0.09	0.009	0.07	0.80	29.7	0.22	0.26	0.80

Sources: Primary Data

Table-5 shows that the independent variable strongly affects the dependent variable, as evidenced by its 5% significant coefficient. $R2$ is the proportion of dependent variable variation explained by the independent variable. This study has 39% $R2$. F = 5.02 and p = 0.06, both below 0.05, indicate that $R2$ is statistically significant. $R2$ indicates fit quality. Infosys research uses $R2$ to calculate the proportion of dependent variable variation explained by the independent variable. Calculated $R2$ was 0.4%. Additionally, the f value = 0.03 and the p value = 0.87. These values suggest that $R2$ is not statistically significant. $R2$ of Wipro shows the fraction of dependent variable variation assigned to the independent variable. This study has 9% $R2$. f value = 0.07, p value = 0.80. Therefore, $R2$ is not statistically significant.

V. Limitations & Future Research Recommendations

Limitations

- Limited sample size (only three firms).

- Data restricted to 2005–2015; post-2015 trends (digital transformation, pandemic effects) excluded.

- Reliance on accounting ratios; cash flow-based liquidity measures could provide deeper insights.

- ANOVA assumptions (normal distribution, equal variance) may not hold perfectly for financial time-series data.

- Secondary data constraints may introduce reporting or classification inconsistencies.

Future Research Recommendations

- Expand sample to include mid-sized IT firms.
- Extend timeline beyond 2015 for contemporary relevance.
- Incorporate cash conversion cycle and operating cash flow ratios for holistic liquidity assessment.

VI. Conclusion

All the three companies exhibit notable disparities in terms of their liquidity ratios. Infosys has the greatest current ratio & quick ratio values, followed by TCS and Wipro. Conversely, TCS has the highest DPR values, followed by Infosys and Wipro.

This study demonstrates that liquidity dynamics vary significantly among India's leading IT firms. Infosys maintains the strongest liquidity buffers but with volatility, TCS balances consistency with shareholder-friendly dividend policies, while Wipro faces liquidity stress due to variability.

By explicitly focusing on liquidity ratios, this research fills a critical gap in prior literature that emphasized profitability and risk but overlooked short-term solvency. The findings connect back to pecking order theory, showing that firms with stronger liquidity are less dependent on external financing, and to working capital management frameworks, highlighting how receivables and cash flow discipline shape liquidity outcomes.

Ultimately, this study contributes to both academic and managerial understanding by positioning liquidity not just as a financial metric, but as a strategic lever for resilience and shareholder value in the IT sector.

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