



“A Comparative study on financial analysis of TSC and Infosys”

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ABSTRACT:

Information Technology is one of the sectors in the world that is expanding the fastest. This research paper is based on a comparison of TCS and Infosys' financial analysis. The financial results of TCS and Infosys are analysed and contrasted using a t-test and graph. Secondary data from yearly reports, websites and publication served as the foundation for this investigation. The research paper cover the last five year, from 2019-20 to 2023-24.

KEY WORDS: IT Companies, T-test, financial performance, Ratios

INDRODUCTION:

Among the industries that is growing the fastest in the globe Information Technology. It has grown to be one of the main drivers of the economy over the past 20 years. With an expected \$245 billion in revenue in 2023, the IT sector in India generated 7.5% of the country's GDP. The information technology industry is growing thanks to advancements in machine learning and artificial intelligence as well as service oriented solutions. These businesses constitute one of this biggest IT centers in the globe and are among the biggest employers in India. Tata sons ltd. established Tata consulting services Ltd. in 1968. Mumbai is the home base of the well-Known Indian provider of business solutions consulting information technology services. The around the world. TCS has operations in 46 nations among the Big4 most valuable IT services brands globally. TCS is currently ranked in its global 500 2024 report Infosys demonstrated the quickest rate of compound yearly growth in brand value within the IT services industry over a five year period.

REVIEW OF LITERATURE:

1) Madhavi Surpurkar & Pallavi Hangargi (2024), the risk and return profiles of IT enterprises are thoroughly examined in this study during a five year period 2019-2023. The IT industry is renowned for its originality dynamism, but it also vulnerable to risk factors and considerable to market volatility. To ensure that help decision makers make well-informed choices this research attempts to give analysis, investors and legislators insightful information about the stability and performance of IT companies. The research finding ad to the body of knowledge already available in the IT industry about financial analysis and investment management.

2) Mr. K. Janarthanan & Dr. S. Prasanna Kumar (2023), researcher conducted a study about IT sector because of their substantial market capitalization the evaluation of TCS, Infosys and Wipro was examined for the years 2017-2022 examining the key performance indicators of the leading IT behemoth in this industry will assist in identifying them. Ratio analysis is used in conjunction with statistical methods such as one-way ANOVA and CAGR to evaluate business undertakings overall. IT companies were found not to be negatively impacted by COVID-19 and apparently they have been doing very well in the last few years.

3) Prashant Dixit (2014), in their study on comparing the top 5 Indian IT sector using the DEA approach. The research tell about DEA models can produce fresh ideas for enhancing performance. The foundation of



the optimization platform based DEA approach is linear programming. Therefore, the DEA stands out from other approaches since it pinpoints the ideal performance patterns rather than average. Data envelopment analysis between labor and profits was then completed. It's been determined through the calculation of profitability efficiency ratios and comparison of these data that the employee count considerably influences the profitability of IT enterprises.

OBJECTIVE OF THE STUDY:

- 1) The purpose of the research is to contract the financial analysis of TCS and Infosys IT sector.
- 2) To carefully examine the selected organization's profitability and liquidity situations.

RESEARCH DESIGN:

There is only a cursory examination of the leading 2 IT Company's financial performance from 2019-20 to 2023-24.

DATA COLLECTION:

This study's foundation is secondary type of data that has been official website, journal and annual reports.

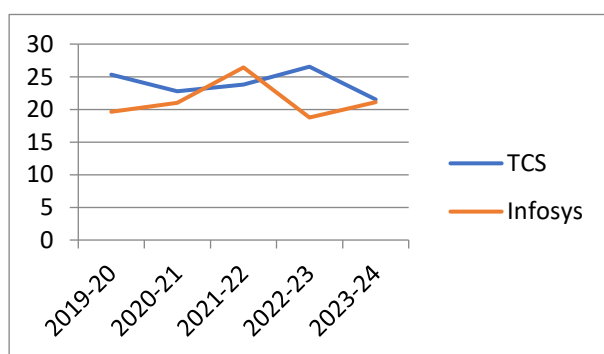
TOOLS & TECHNICS

T-test and graph are used to analyzed and compare financial analysis using ratios of TCS & Infosys.

DATA ANALYSIS

1) Net Profit Margin Ratio (%)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
TCS	25.33	22.77	23.81	26.54	21.52
Infosys	19.66	21.00	26.43	18.76	21.12



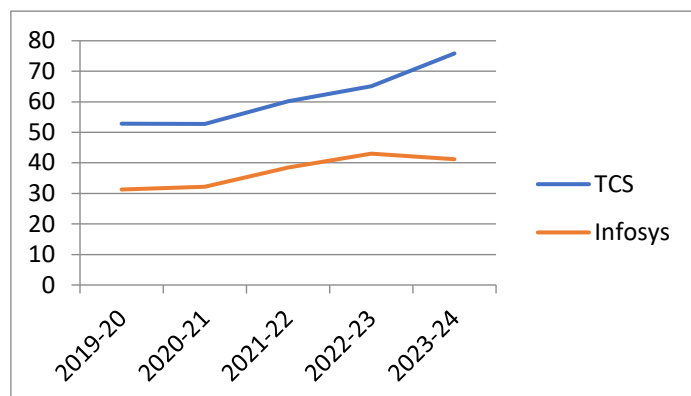
In this above net profit margin ratio of is show to be TCS fluctuated from 2019-20 to 2023-24 with 25.33 in 2019-20 to 21.52 in 2023-24. The net profit margin of Infosys is also fluctuated from 2019-20 to 2023-24 with 19.66 in 2019-20 to 21.12 in 2023-24.

The aforementioned graph illustrates how TCS and Infosys net profit margin varied over the course of the research.



2) Return on Capital Employed (%)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
TCS	52.79	52.75	60.23	65.07	75.85
Infosys	31.28	32.23	38.46	43.03	41.23

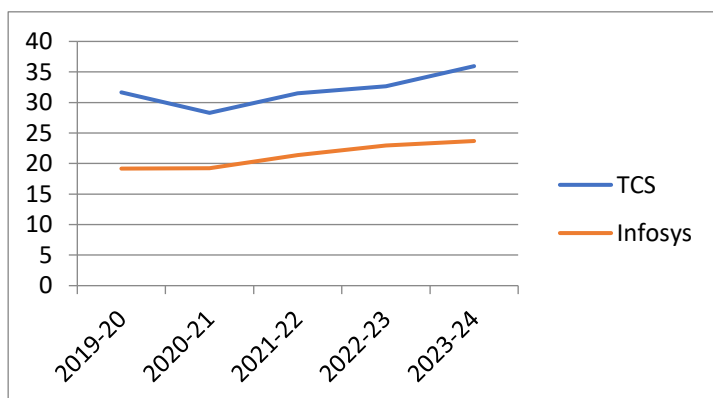


In this the ROCE utilizes is show in the above table TCS is increased from 2019-20 to 2023-24 with 52.79 in 2019-20 to 75.85 in 2023-24. The ROCE of Infosys is also increased from 2019-20 to 2023-24 with 31.28 in 2019-20 to 41.23 in 2023-24.

As can be observed from the accompanying graph TCS and Infosys both saw increases in return on capital employed during the research.

3) Return on Assets (%)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
TCS	31.68	28.30	31.49	32.63	35.95
Infosys	19.17	19.21	21.36	22.96	23.69



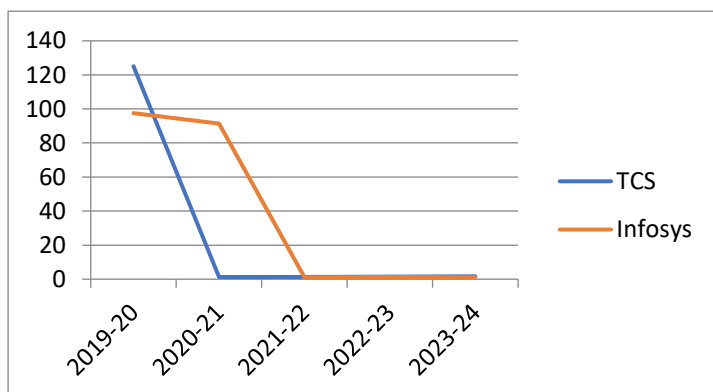
In this above the table, one can observe ROA of TCS is decreased from 2019-20 to 2020-21 with 31.68 in 2019-20 to 28.30 in 2020-21 and then increased from 2021-22 to 2023-24 with 31.49 in 2021-22 to 35.95`in 2023-24. The ROA of Infosys is increased from 2019-20 to 2023-24 with 19.17 in 2019-20 to 23.69 in 2023-24.

The graph above illustrates how Infosys return on assets increased during the research period whereas TCS's fell.



4) Asset Turnover Ratio (%)

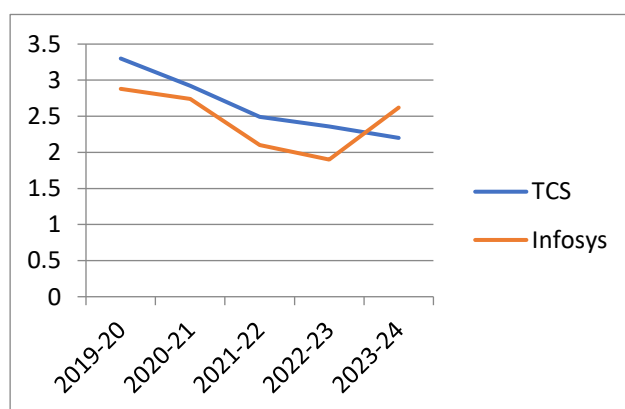
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
TCS	125.08	1.27	1.39	1.58	1.68
Infosys	97.53	91.45	1.08	1.24	1.19



In this above table it is observed assets turnover ratio of TCS is decreased from 2019-20 to 2021-21 with 125.08 in 2019-20 to 1.27 in 2020-21 and then continually increased from 2021-22 to 2023-24 with 1.34 in 2021-22 to 1.68 in 2023-24. The assets turnover ratio of Infosys is fluctuated from 2019-20 to 2023-24 with 97.53 in 2019-20 to 1.19 in 2023-24.

5) Current Ratio (%)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
TCS	3.30	2.92	2.49	2.36	2.20
Infosys	2.88	2.74	2.10	1.90	2.62

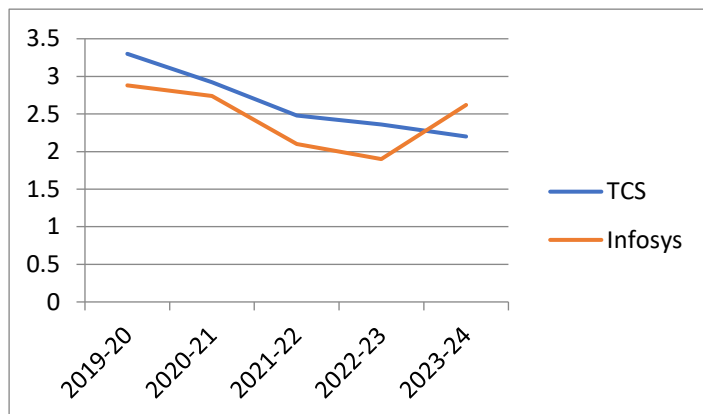


In this above table it is observed current ratio of TCS is decreased from 2019-20 to 2023-24 with 3.30 in 2019-20 to 2.20 in 2023-24. The current ratio of Infosys is decreased from 2019-20 to 2022-23 with 2.88 in 2019-20 to 1.90 in 2022-23 and then increased in 2023-24 with 2.62. The Ideal value of current ratio is 2:1. The aforementioned graph illustrates how TCS and Infosys current ratio varied over the course within the research.



6) Quick Ratio (%)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
TCS	3.30	2.92	2.48	2.36	2.20
Infosys	2.88	2.74	2.10	1.90	2.62



In this above table it is observed quick ratio of TCS is decreased from 2019-20 to 2023-24 with 3.30 in 2019-20 to 2.20 in 2023-24. The quick ratio of Infosys is decreased from 2019-20 to 2022-23 with 2.88 in 2019-20 to 1.90 in 2022-23 and then increased in 2023-24 with 2.62. The Ideal value of quick ratio is 1:1.

The aforementioned graph illustrates how TCS and Infosys quick ratio varied over the course of the study.

T-test:

Net Profit Margin

H0: The net profit margin of Infosys and TCS do not differ significantly.

H1: There is a notable distinction in TCS and Infosys' net profit margin.

t-Test: Paired Two Sample for Means		
	TCS	Infosys
Mean	23.994	21.394
Variance	3.97993	8.88408
Observations	5	5
Pearson Correlation	-0.36952971	
Hypothesized Mean Difference	0	
df	4	
t Stat	1.399442115	
P(T<=t) one-tail	0.117127538	
t Critical one-tail	2.131846786	
P(T<=t) two-tail	0.234255076	
t Critical two-tail	2.776445105	

In this above table it is showing that mean value for net profit margin of the Infosys is less than of the TCS. As computed T-test value 0.234 is tabulated value 2.77 there is not enough evidence to reject H0. There is no significant difference between the net profit margin of TCS and Infosys.



Return on capital employed:

H0: The return on capital employed by Infosys and TCS is not significantly different from one another.

H1: TCS and Infosys' return on capital employed differ significantly from one another.

t-Test: Paired Two Sample for Means		
	TCS	Infosys
Mean	61.338	37.246
Variance	93.14392	27.88853
Observations	5	5
Pearson Correlation	0.844325569	
Hypothesized Mean Difference	0	
df	4	
t Stat	9.110245875	
P(T<=t) one-tail	0.000402622	
t Critical one-tail	2.131846786	
P(T<=t) two-tail	0.000805244	
t Critical two-tail	2.776445105	

In this above table it is showing that mean value for return on capital employed of the Infosys is less than of the TCS. As computed T-test value 0.000 is tabulated value 2.77 there is not enough evidence to reject H0. There is no significant difference between the return on capital employed of TCS and Infosys.

Return on Assets:

H0: TCS and Infosys' return on assets are not significantly different from one another.

H1: The return on assets of Infosys and TCS differ significantly from one another.

t-Test: Paired Two Sample for Means		
	TCS	Infosys
Mean	32.01	21.278
Variance	7.51285	4.34347
Observations	5	5
Pearson Correlation	0.825892185	
Hypothesized Mean Difference	0	
df	4	
t Stat	15.42418969	
P(T<=t) one-tail	5.15512E-05	
t Critical one-tail	2.131846786	
P(T<=t) two-tail	0.000103102	
t Critical two-tail	2.776445105	

In this above table it is showing that mean value for return on assets of the Infosys is less than of the TCS. As computed T-test value 0.000 is tabulated value 2.77 there is not enough evidence to reject H0. There is no significant difference between the return on assets of TCS and Infosys.



Assets turnover ratio:

H0: There is no discernible difference between TCS and Infosys' asset turnover ratio.

H1: TCS and Infosys' asset turnover ratios differ noticeably from one another.

t-Test: Paired Two Sample for Means		
	TCS	Infosys
Mean	26.2	38.498
Variance	3055.41755	2617.211
Observations	5	5
Pearson Correlation	0.643372566	
Hypothesized Mean Difference	0	
Df	4	
t Stat	-0.60975095	
P(T<=t) one-tail	0.287482596	
t Critical one-tail	2.131846786	
P(T<=t) two-tail	0.574965191	
t Critical two-tail	2.776445105	

In this above table it is showing that mean value for assets turnover ratio of the Infosys is greater than is TCS. As computed T-test value 0.574 is tabulated value 2.77 there is not enough evidence to reject H0. There is no significant difference between the assets turnover ratio of TCS and Infosys.

Current ratio:

H0: The current ratio of TCS and Infosys does not exhibit any noteworthy variations.

H1: The current ratio of TCS to Infosys differ significantly.

t-Test: Paired Two Sample for Means		
	TCS	Infosys
Mean	2.654	2.448
Variance	0.20188	0.18072
Observations	5	5
Pearson Correlation	0.65028959	
Hypothesized Mean Difference	0	
df	4	
t Stat	1.25750097	
P(T<=t) one-tail	0.13849155	
t Critical one-tail	2.13184679	
P(T<=t) two-tail	0.27698311	
t Critical two-tail	2.77644511	

In this above table it is showing that mean value for current ratio of the Infosys is less than is TCS. As computed T-test value 0.276 is tabulated value 2.77 there is not enough proof to reject H0. There is no significant difference between the current ratio of TCS and Infosys.



Quick ratio:

H0: There is no significant difference between the quick ratio of TCS and Infosys.

H1: There is significant difference between the quick ratio of TCS and Infosys.

t-Test: Paired Two Sample for Means		
	TCS	Infosys
Mean	2.654	2.448
Variance	0.20188	0.18072
Observations	5	5
Pearson Correlation	0.65028959	
Hypothesized Mean Difference	0	
df	4	
t Stat	1.25750097	
P(T<=t) one-tail	0.13849155	
t Critical one-tail	2.13184679	
P(T<=t) two-tail	0.27698311	
t Critical two-tail	2.77644511	

In this above table it is showing that mean value for quick ratio of the Infosys is less than is TCS. As computed T-test value 0.276 is tabulated value 2.77 there is not enough evidence to reject H0. There is no significant difference between the quick ratio of TCS and Infosys.

Conclusion:

A detailed financial study that surpasses the figures included within the monetary statement is something that Information Technology companies still need to accomplish regarding development. TCS has a better overall profitability than Infosys, as indicated by the net profit margin ratio. TCS outperforms Infosys overall notwithstanding.

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In recognition of the publication of the paper entitled
“A Comparative study on financial analysis of TSC and Infosys”

Published in Volume 02, Issue 03, June 2024.

EDITOR IN CHIEF