

A Study on  
**Fundamental Analysis on Top 5 I.T Sector Companies based on Market Capitalization**

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**Abstract:**

**Executive Summary**

India is one of the fastest developing economies in the world. Companies in India are growing at faster rate as compared to their growth rate a decade back. Many Indian companies are expanding their business not just within the Indian Markets but have also become Global companies.

The objective of conducting this study was to analyze the Top Five companies in the Indian I.T Sector and apply the theoretical knowledge of Fundamental Analysis, Ratio Analysis and to apply it to the companies. Fundamental Analysis helps us to understand the functioning of the company and analyze the company from within. It helps get a clear perspective of how the company is doing with respect to its operations and financials. It helps us understand the businesses the company operates in and how it is doing with respect to the market and its peers.

After conducting the study, it was seen that certain companies outperformed their peers in some areas. It also pointed towards some facts which showed potential outperformance by those companies and attractive valuation which made it a sound investment option for the investors.

The study was carried out based on secondary data collected from various sources, so the credibility and accuracy of this report depends on the data collected. Key ratios have been analyzed to give the recommendations and there could be other factors that affect the pricing and performance of the company.

## **Chapter 1. Introduction**

Fundamental analysis is the art of evaluating the intrinsic value of a stock to find long-term investing opportunities. In other words, Fundamental analysis is a method of determining a stock real or fair market value.

This report delves into fundamental analysis, a method aimed at evaluating a stock's intrinsic value for long-term investment opportunities. The study focuses on the IT sector, conducting a comparative analysis of five selected companies. Three key aspects of fundamental analysis—Economic, Industry, and Company analysis—are explored. Calculations of ratios, including ROE, ROA, and EPS, reveal a downward trend in the majority of stocks, leading to a recommendation to avoid such stocks for long-term investment.

In summary, the study emphasizes the significance of fundamental analysis in guiding investment choices, urging investors to be well-informed about the stock market landscape before making any financial decisions.

### **Objectives:**

- Conducting Fundamental Analysis of Top Five IT Companies
- Application of the EIC Model
- Key Ratio Calculation and Analysis
- Determining Financial Position
- Identification of Investment Opportunities

## **Chapter 2. Review of Literature**

Fundamental Analysis is the examination of the underlying forces that affect the interest of the economy, industrial sectors and companies. It tries to forecast the future movement of the capitalmarket using signals from the Economy, Industry and Company. It requires an examination of the market from a broader perspective.

1) **Paper Title** – GRAHAM, B., and D. L. DODD. Security Analysis

**Author** – Graham and Dodd (1934)

**Source Link** – <https://journals.sagepub.com/doi/abs/10.1177/000271623517700152>

**Last Accessed on** – 20<sup>th</sup> October 2022

**Description** – In this paper the authors have argued the importance of the fundamental factors in share price valuation. Theoretically, the value of a company, hence its share price, is the sum of the present value of future cash flows discounted by the risk adjusted discount rate.

2) **Paper Title** – Gordon, M. J. (1962). The Savings, Investment, and Valuation of a Corporation. Review of Economics and Statistics

**Author** – Muhammad Mahbubur Rahman **Source Link** – [Journal of Financial Risk Management](#)

**Last Accessed on** – 20<sup>th</sup> October 2022

**Description** – This conceptual valuation framework is the spirit of the renowned dividend discount model developed.

However, the dividend discount model valuation involves the forecast of future dividend payment which is

difficult due to the changes in firm's dividend policy. Thus, the subsequent studies along this line of literature searched for the cash flow that is unaffected by the dividend policy and can be obtained from the financial statements.

3) **Paper Title** – Current Studies on the Information Content of Accounting Earnings (1989)

**Author** – Ou and Penman

**Source Link** – <https://www.jstor.org/stable/2491068>

**Last Accessed on** – 20<sup>th</sup> October 2022

**Description** – This research focuses on conducting a thorough analysis of income statements and balance sheets, utilizing various financial ratios. The primary objective is to leverage historical financial data to make informed predictions about a company's future earnings potential. By identifying patterns, trends, and anomalies in these financial statements, analysts can uncover mispriced securities in the market.

4) **Paper Title** – Sentiment Analysis of Investor Opinions on Twitter.

**Author** – Brian Dickinson, Wei Hu

**Source Link** – <https://scirp.org/reference/referencespapers.aspx?referenceid=1516120>

**Last Accessed on** – 20<sup>th</sup> October 2022

**Description** – Conceptual arguments to study their ratios. They demonstrate that the earnings prediction signals in variables like growth in accounts receivables relative to sales growth and gross margin rate are incrementally associated with contemporaneous stock returns and are significant in predicting future earnings.

5) **Paper Title** – A Fundamental analysis of public sector banks in India

**Author** – A.s Ambily

**Source Link** – [https://www.ijbmi.org/papers/Vol\(9\)8/Ser-5/D0908053338](https://www.ijbmi.org/papers/Vol(9)8/Ser-5/D0908053338)

**Last Accessed on** – 20<sup>th</sup> October 2022

**Description** – This research paper provides an in-depth exploration of the evolution and expansion of the Indian banking industry. It delves into the current performance of banks operating within this dynamic sector, employing a comprehensive array of financial ratios. Through these ratios, the study evaluates key aspects such as liquidity, profitability, asset quality, and capital adequacy.

6) **Paper Title** – Financial Ratios interpretation

**Author** – Pat Drake

**Source Link** – [International Journal of Research & Method in Education](#)

**Last Accessed on** – 20<sup>th</sup> October 2022

**Description** – Financial Statement Analysis is the selection, evaluation, and interpretation of financial

data, along with other pertinent information, to assist in investment and financial decision-making. Moreover, it is also the process of identifying financial strengths and weaknesses of the firm by properly establishing a relationship between the items of the balancesheet and the profit and loss account.

7) **Paper Title** – Fundamental analysis with special reference to pharmaceutical companies listed in NSE.

**Author** – J Hema and V Ariram

**Source Link** – <https://www.jetir.org/papers/JETIR1902504.pdf>

**Last Accessed on** – 20<sup>th</sup> October 2022

**Description** – It stated that an investor should analyze the market fundamentally and technically before investing in shares. They also noticed growth in the pharmaceutical industry in India.

8) **Paper Title** – A study on fundamental analysis of ONGC

**Author** – Sugandha raj Kulkarni

**Source Link** – <https://www.researchgate.net/publication/323119998>

**Last Accessed on** – 20<sup>th</sup> October 2022

**Description** – “A study on fundamental analysis of ONGC” explains about the relevance of fundamental analysis along with the attempt to find the intrinsic value of shares.

### **Chapter 3. Research methodology**

Research methodology is **the specific procedures or techniques used to identify, select, process, and analyze information about a topic**. In a research paper, the methodology section allows the reader to critically evaluate a study’s overall validity and reliability.

The study is Secondary in nature and has been used secondary data only. The required data about the financial ratios have been collected from the financial websites.

**Data Collection Tools** : Secondary Data Collected (past year’s financial statements) and websites.

**Data Presentation** : Data is presented in the Graph.

### **Chapter. 4 Data Analysis**

#### **COMPANY ANALYSIS**

The provided data lists the market capitalization (in Crores) for five major IT companies: TCS, Infosys, Wipro, HCL Technologies, and Tech Mahindra. Market capitalization reflects the total value of a company's outstanding shares in the stock market. List of Top Five IT Companies in India Listed in BSE/ NSE Stock Market (2022).

**Table No. - 1**

S.No	Company	Market Capitalization (Rs. Cr.)
1.	TCS	14,09,671
2.	Infosys	7,12,779
3.	Wipro	3,48,343
4.	HCL Technologies	3,46,114
5.	Tech Mahindra	1,34,268

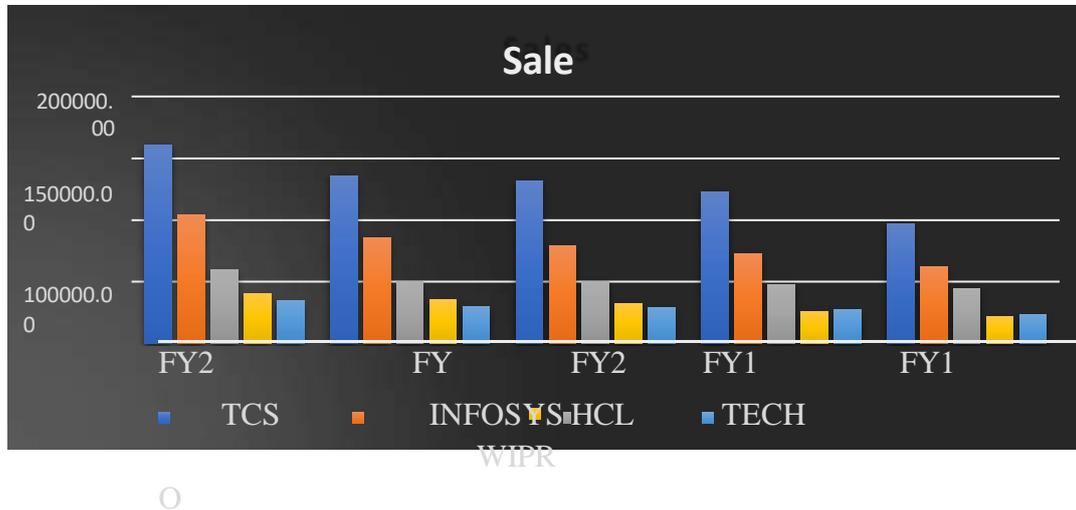
In this context, TCS holds the highest market capitalization, followed by Infosys, Wipro, HCL Technologies, and Tech Mahindra. Data analysis of market capitalization aids investors and analysts in assessing the relative size and valuation of these companies in the stock market.

**1. Financial Analysis**

<b>1. Sales</b>					
	<b>FY22</b>	<b>FY 21</b>	<b>FY20</b>	<b>FY19</b>	<b>FY18</b>
<b>TCS</b>	1,60,341	1,35,963	1,31,306	1,23,170	97,356
<b>INFOSYS</b>	10,39,40	85,912	79,047	73,107	61,941
<b>WIPRO</b>	59,574	50,299	50,387	48,029	44,710
<b>HCL TECHNOLOGIES</b>	40,638	35,673	32,606	26,012	22,073
<b>TECH MAHINDRA</b>	34,726	29,640	29,225	27,219	23,661

The annual sales data spanning five years (FY18 to FY22) for major Indian IT companies, including TCS, Infosys, Wipro, HCL Technologies, and Tech Mahindra, illustrates a consistent growth trend. TCS emerged as the sales leader, followed by Infosys and Wipro. This data underscores the sector's adaptability to changing market dynamics and its overall strong performance.

Chart 1 – Sales



The analysis of both data and graphs indicates a consistent and steady growth in the sales of TCS over the past five years, establishing it as a clear outperformer in terms of revenue. Infosys has also demonstrated continuous growth, with a noteworthy surge in sales for the fiscal year 2021-2022.

<https://www.angelone.in/blog/top-10-information-technology-companies-by-market-capitalisation>

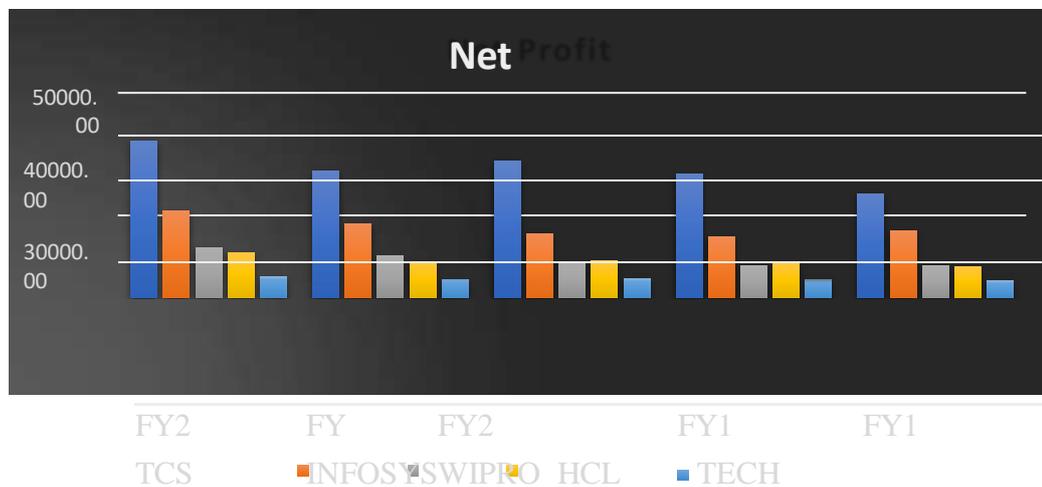
## 2. Net Profit

Net profit, also known as net income or net earnings, is the total amount of revenue that remains after deducting all expenses, taxes, and other costs from a company's total income.

2. Net Profit					
	FY22	FY 21	FY20	FY19	FY18
<b>TCS</b>	38,187	30,960	33,260	30,065	25,241
<b>INFOSYS</b>	21,235	18,048	15,543	14,702	16,155
<b>WIPRO</b>	12,135	10,060	8,680	7,614	7,722
<b>HCL TECHNOLOGIES</b>	10,874	8,743	8,969	8,185	7,362
<b>TECH MAHINDRA</b>	4,913	4,239	4,534	4,380	3,999

The analysis shows consistent net profit growth for all companies, with TCS leading, followed by Infosys and Wipro. While Net Profit Ratio isn't detailed, the overall data indicates a robust financial outlook for these IT giants.

Chart 2 – Net Profit



TCS's Net Profit Margin has generally grown, with a slight dip in FY-21. This suggests effective cost management. Tech Mahindra saw a recent turnaround from a decline, while Wipro's profits remained stagnant, showing a rise in the last financial year.

<https://www.moneycontrol.com/stocks/marketinfo/marketcap/bse/it-services-consulting.html>

### 3. Ratio Analysis

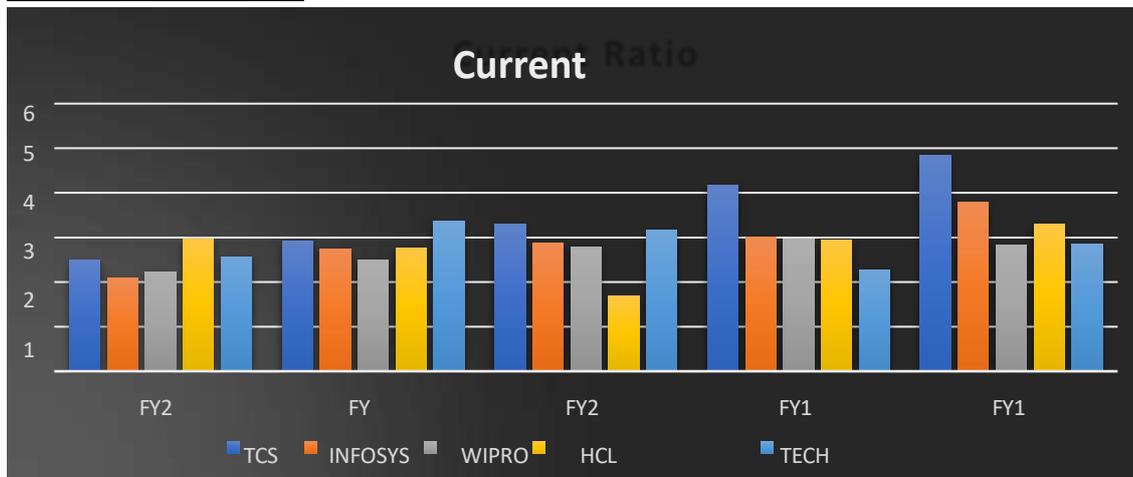
#### 3.1 Liquidity Ratios –

1) **Current Ratio:** The current ratio expresses the relationship of the current assets to the current liabilities. It is an indicator of the company’s liquidity and short-term debt paying ability.

Current Ratio					
	FY22	FY 21	FY20	FY19	FY18
TCS	2.49	2.92	3.30	4.18	4.85
INFOSYS	2.10	2.74	2.88	3.00	3.78
WIPRO	2.23	2.50	2.78	2.96	2.84
HCL TECHNOLOGIES	2.97	2.77	1.69	2.93	3.29
TECH MAHINDRA	2.56	3.36	3.16	2.28	2.85

The data reveals India's economic rebound post a notable 2020-21 GDP dip. Inflation remained manageable, and the Balance of Payments shifted to a surplus, indicating stability. The Index of Industrial Production showed volatility, and unemployment rates fluctuated.

Chart 3 – Current Ratio



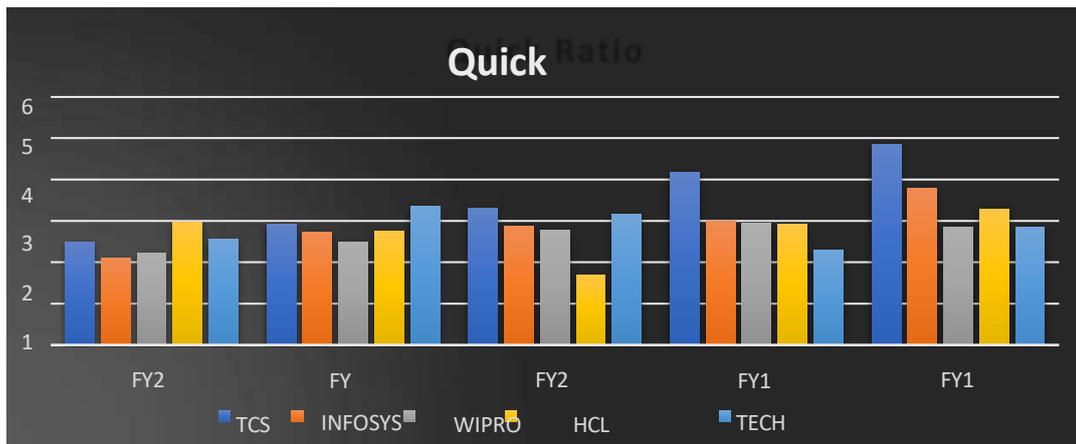
TCS holds the highest Current Ratio among peers, attributed to a strategic reserve of Cash & Surplus for future acquisitions. Other companies exhibit comparable ratios, except HCL Technologies, which saw a drop in FY19-20 but remains near the ideal 2:1 ratio.

2) **Quick Ratio:** The quick ratio measures a company's capacity to pay its current liabilities without needing to sell its inventory or obtain additional financing.

Quick Ratio					
	FY22	FY 21	FY20	FY19	FY18
TCS	2.48	2.92	3.30	4.18	4.85
INFOSYS	2.10	2.74	2.88	3.00	3.78
WIPRO	2.23	2.50	2.77	2.94	2.84
HCL TECHNOLOGIES	2.97	2.76	1.69	2.93	3.28
TECH MAHINDRA	2.56	3.36	3.16	2.29	2.85

Quick ratios, reflecting short-term liquidity, vary over. TCS and Infosys consistently maintain strong ratios, indicating robust liquidity. Tech Mahindra's ratio shows notable fluctuations. Regular monitoring of these metrics is essential for assessing a company's ability to meet immediate financial obligations.

Chart 4 – Quick Ratio



TCS achieved its peak Quick Ratio in FY 18-19 and FY 19-20, surpassing peers, reflecting the company's policy to cover current liabilities without selling inventory. In contrast, HCL Technologies neared a 1:1 ratio during FY 20-21.

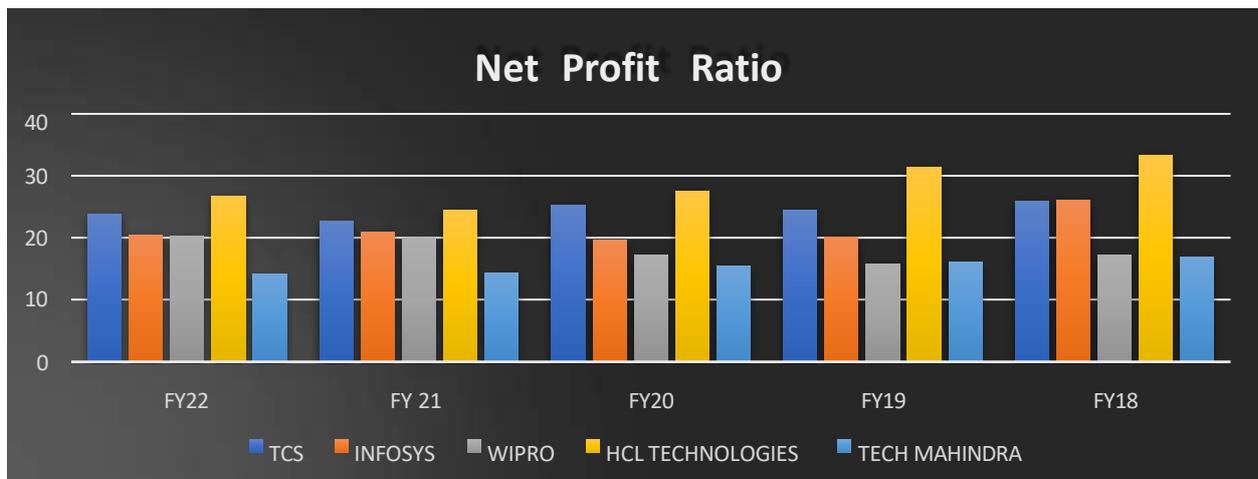
### 3.2 Profitability Ratios –

1) **Net Profit Ratio:** Net profit margin is the amount of Rupees after-tax profit a firm generates per Rupee of sales.

Net Profit Ratio					
	FY22	FY 21	FY20	FY19	FY18
TCS	23.81	22.77	25.33	24.40	25.92
INFOSYS	20.43	21.00	19.66	20.11	26.08
WIPRO	20.36	20.00	17.22	15.82	17.27
HCL TECHNOLOGIES	26.75	24.50	27.50	31.46	33.35
TECH MAHINDRA	14.14	14.30	15.51	16.09	16.90

These ratios indicate profitability, representing the percentage of net profit relative to total revenue. HCL Technologies consistently boasts the highest ratios, while Tech Mahindra exhibits the lowest, suggesting potential operational efficiency differences.

Chart 5 – Net Profit Ratio



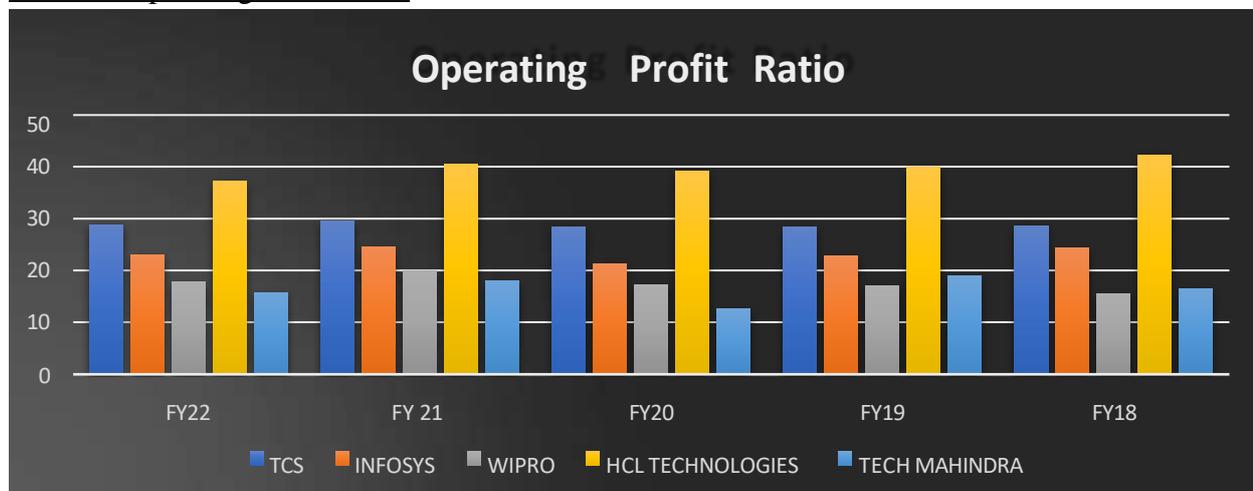
Tech Mahindra exhibits lower profit margins due to a high-volume, low-margin business model catering to a different market. TCS maintains steady profit margins with consistent sales growth, while Infosys experiences volatility and a recent decline in margins.

**4. Operating Profit Ratio:** This ratio indicates the profitability of current operations. This ratio does not take into account the company's capital and tax structure. It also means that the sales of the firm are increasing faster than the costs.

Operating Profit Ratio					
	FY22	FY 21	FY20	FY19	FY18
<b>TCS</b>	28.84	29.64	28.44	28.38	28.56
<b>INFOSYS</b>	23.02	24.51	21.31	22.84	24.30
<b>WIPRO</b>	17.73	19.87	17.32	17.04	15.47
<b>HCL TECHNOLOGIES</b>	37.18	40.46	39.19	40.05	42.30
<b>TECH MAHINDRA</b>	15.79	17.98	12.66	18.98	16.49

HCL Technologies consistently leads in operating profit ratios, reflecting efficient cost management. Infosys and TCS maintain healthy margins, while Wipro and Tech Mahindra exhibit some variability. Overall, HCL Technologies stands out in consistently generating strong operating profits compared to its peers.

Chart 6– Operating Profit Ratio



HCL Technologies has the highest operating profit ratio among its peer over last 5 years The Profit Margins of Infosys is stagnant over the last 5 years. Wipro has shown a stagnant operating profit.

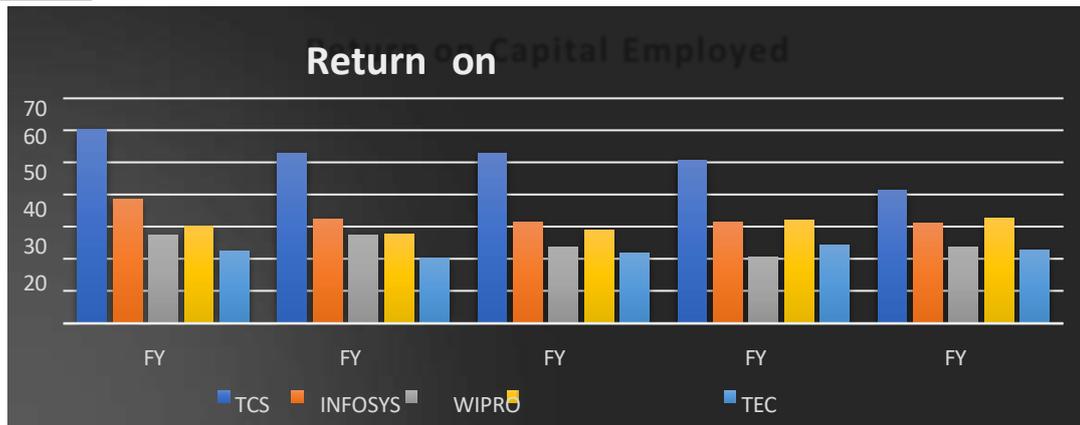
**5. Return on Capital Employed:**

ROCE can be used to assess a company's profitability and capital efficiency. In other words, this ratio can help to understand how well a company is generating profits from its capital as it is use.

Return on Capital Employed					
	FY22	FY 21	FY20	FY19	FY18
<b>TCS</b>	60.23	52.75	52.79	50.71	41.50
<b>INFOSYS</b>	38.46	32.23	31.28	31.38	31.00
<b>WIPRO</b>	27.32	27.49	23.62	20.44	23.87
<b>HCL TECHNOLOGIES</b>	30.14	27.76	28.84	32.00	32.52
<b>TECH MAHINDRA</b>	22.37	20.39	21.93	24.31	22.85

TCS consistently leads in ROCE, signifying efficient capital utilization. Infosys maintains healthy levels, while Wipro and Tech Mahindra display variability. TCS and Infosys stand out for effective profit generation relative to their capital investments in the IT sector.

Chart 7 – ROCE



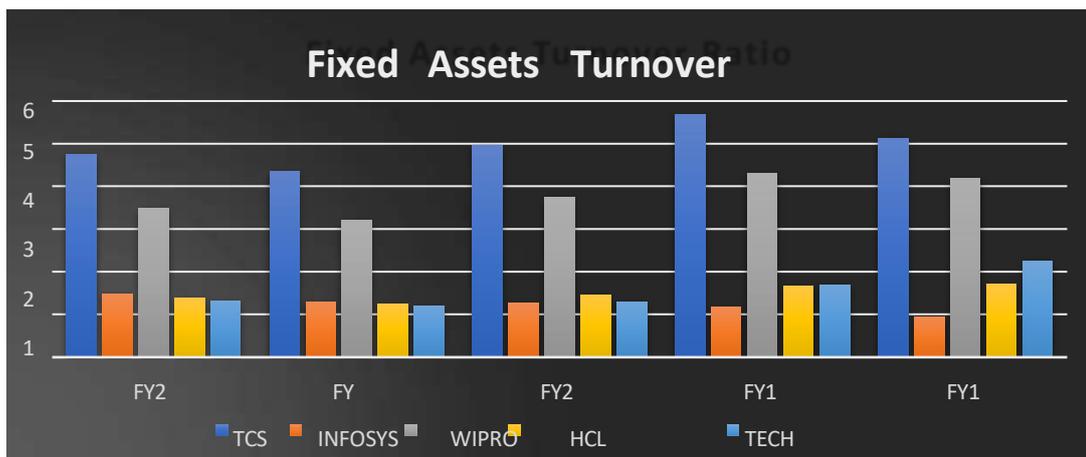
TCS has the highest Return on Capital Employed among its peers over last five years. ROCE of Infosys is stagnant over the last 5 years. Tech Mahindra ROCE is the lowest among its peers but it's stagnant.

**6. Turnover Ratio:** The turnover ratio assesses how efficiently a company uses its assets to generate revenue. It's calculated by dividing net sales by average total assets. A higher ratio indicates effective asset utilization for revenue generation.

Fixed Assets Turnover Ratio					
	FY22	FY 21	FY20	FY19	FY18
TCS	4.76	4.34	4.96	5.68	5.13
INFOSYS	1.48	1.28	1.27	1.16	0.94
WIPRO	3.48	3.20	3.74	4.30	4.19
HCL TECHNOLOGIES	1.38	1.23	1.44	1.67	1.70
TECH MAHINDRA	1.30	1.19	1.29	1.69	2.25

TCS consistently displays a high turnover ratio, reflecting efficient use of fixed assets for revenue generation. Infosys and HCL Technologies show lower ratios, indicating less efficient utilization.

Chart 8 – Fixed Assets Turnover Ratio



TCS and Wipro exhibit high Fixed Asset Turnover Ratios, signaling efficient utilization and increased sales over the years. This suggests effective returns from investments in fixed assets for both companies.

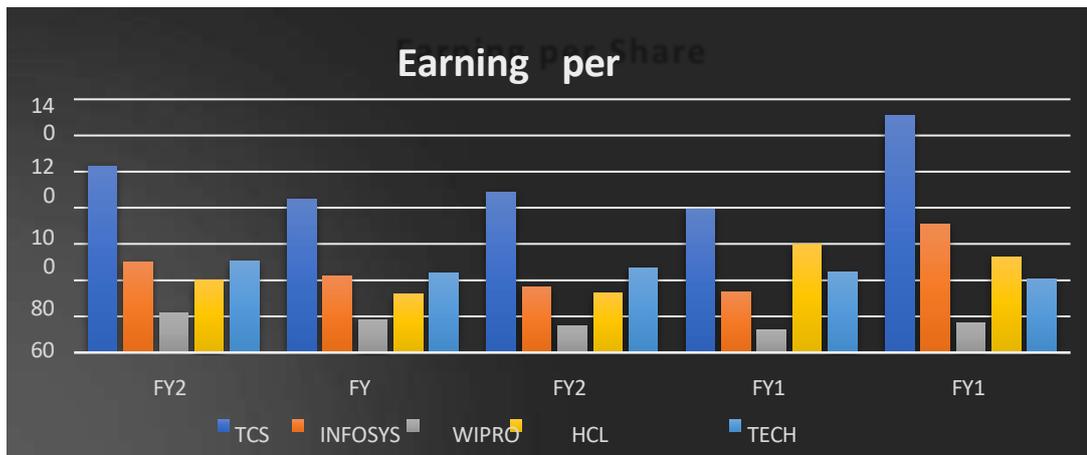
**7. Earning Ratios –**

**1.) Earnings per Share (E.P.S):** Earnings per Share refers to the portion of a company's profit allocated to each outstanding share of common stock.

Earnings per Share (E.P.S)					
	FY22	FY 21	FY20	FY19	FY18
<b>TCS</b>	103.24	84.78	88.64	79.34	131.15
<b>INFOSYS</b>	50.27	42.37	36.34	33.66	71.28
<b>WIPRO</b>	22.20	17.81	14.88	12.67	16.26
<b>HCL TECHNOLOGIES</b>	40.10	32.22	33.06	59.69	52.54
<b>TECH MAHINDRA</b>	50.48	43.76	46.89	44.58	40.84

TCS consistently exhibits a high fixed asset turnover ratio, reflecting efficient use of assets for revenue generation. Infosys and HCL Technologies, however, show lower ratios, suggesting less efficient utilization. This underscores TCS's superior operational efficiency in optimizing fixed assets compared to industry peers.

Chart 9 – Earning Per share



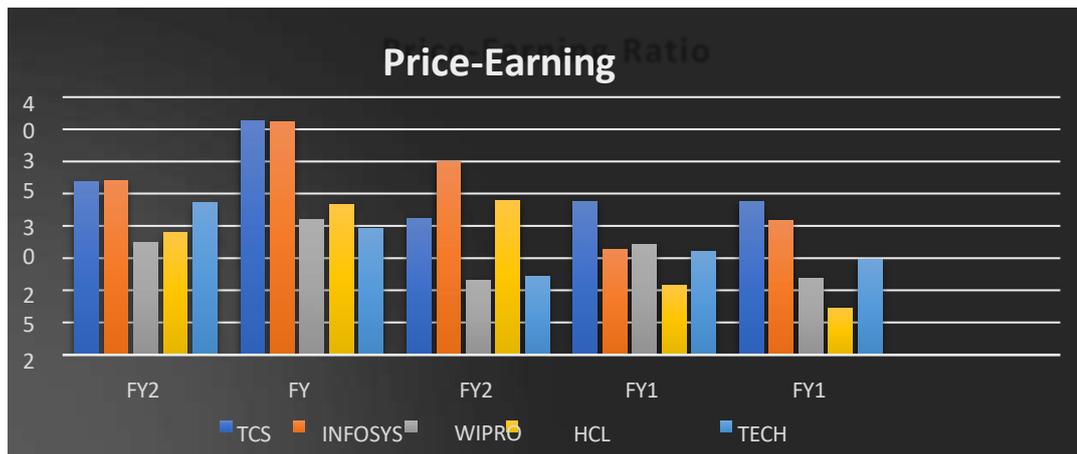
TCS consistently delivers the highest returns to shareholders with incremental EPS growth. Wipro exhibits lower values, while Tech Mahindra's increasing EPS suggests an investment opportunity. Overall, Infosys and TCS are recommended choices for investors.

**2.) Price- Earnings Ratio**

Price-Earnings Ratio					
	FY22	FY 21	FY20	FY19	FY18
TCS	26.9	36.25	21.14	23.84	23.8
INFOSYS	26.97	36.16	30.03	16.36	20.89
WIPRO	17.44	21.02	11.55	17.07	11.93
HCL TECHNOLOGIES	18.99	23.40	23.96	10.72	7.28
TECH MAHINDRA	23.64	19.57	12.21	16.03	14.84

P/E ratios, signaling a stock's valuation relative to earnings per share, reveal TCS and Infosys as consistently having higher ratios, showcasing investor confidence. Conversely, Wipro, HCL Technologies, and Tech Mahindra exhibit lower ratios, indicating more conservative valuations.

Chart 10 – PE Ratio



TCS boasts the highest PE Ratio, maintaining stability, while Infosys displays a growth trend over five years. HCL Technologies, with a lower PE ratio than the industry average, emerges as an appealing investment opportunity.

## **Chapter 5. Findings**

- TCS, Infosys, and Wipro all experienced revenue and profit growth during FY21-22, with TCS having the highest net profit margin.
- HCL Technologies showed a remarkable improvement in operating profit margin from FY20-21 to FY21-22, likely due to exceptional circumstances, but its revenue saw a significant drop.
- Tech Mahindra's net profit margin improved slightly, and it had moderate revenue growth during FY21-22.
- TCS appears to have a strong overall performance among the mentioned companies, with consistent growth in most financial metrics.

## **Chapter 6. Limitations**

- The study is purely based on secondary data so if the source which I referred includes incorrect information, it could affect the credibility of the report.
- The study is limited to a period of 5 years.
- The study is limited to only 5 companies and may not give us a complete picture of the industry.
- Financial ratios have been used to analyze the financials of the companies. Thus, the conclusion is based purely on these factors and there could be other qualitative & quantitative factors that may affect the performance of these companies.

## **Chapter 7. Conclusion**

### **1) About the Project**

This Project was about Analysis of the key ratios Sales, Net Profit, Net profit Ratio, Operating Profit Ratio, Fixed Asset Turnover Ratio, Earnings Per Share of TCS has made it the outperformer.

### **2) Research**

The research was about finding the best company to invest in through the analysis of the ratios such as Liquidity ratio, Profitability ratios.

TCS is the best and one of the most preferred company to invest your money, As the fundamental analysis is done which is one of the simplest way to identify the best stock to invest in.

## **Chapter 8. Suggestions**

- Mix up your investments to lower risk by including different types of assets and industries.
- When looking at TCS's P/E ratio, compare it to other companies in the same industry for a better idea of its value.
- Check out how TCS's P/E ratio has performed in the past to see if it's a good deal now.
- Think about TCS's performance over the long run, its growth potential, and what sets it apart from others.
- Look at the overall risk of investing in TCS, considering market changes and industry factors.

- Chat with a financial advisor to get personalized advice tailored to your goals and comfort with risk.

## **Chapter 9. Reference**

### **Website Links –**

- [www.moneycontrol.com](http://www.moneycontrol.com)
- [www.investopedia.com](http://www.investopedia.com)
- [www.tradingview.com](http://www.tradingview.com)

### **Journals –**

- Fundamental analysis for the share price valuation - Graham and Dodd (1934).
- The Savings, Investment, and Valuation of a Corporation. Review of Economics and Statistics – Gordon (1962).
- Financial Statement Analysis of Income Statement and Balance Sheet and Penman (1989).
- Lev and Thiagarajan (1993).
- A Fundamental analysis of public sector banks in India - Hemraj Verma and Prakash Tiwari (2009).
- Financial Statement Analysis - Drake (2010).
- A study on fundamental analysis of ONGC - Sugandha raj Kulkarni (2011).

### **Books –**

- Kevin, S., Securities, Analysis & PM
- Khan & Jain, Financial Management