

A STUDY ON FINANCIAL RATIO ANALYSIS OF TATA CONSULTANCY SERVICES

Submitted in partial fulfilment of the requirements for the award of

Master of Business Administration

by

HARINI M Register No. 42410231



SCHOOL OF BUSINESS ADMINISTRATION

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

**Accredited with Grade "A++" by NAAC I Category – 1 University by UGC
Approved by AICTE I Jeppiaar Nagar, Rajiv Gandhi Salai,
Chennai – 600 119**

DECEMBER - 2023



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BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of **HARINI M (42410231)** who have done the Project work entitled “**A Study on financial ratio analysis of TATA CONSULTANCY SERVICES** ” under my supervision from October 2023 to December 2023.

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Submitted for Viva voce Examination held on 22.12.2023

Internal Examiner

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DECLARATION

I **HARINI M (Register No. 42410231)** hereby declare that the Project Report entitled “**A Study on financial ratio of TATA CONSULTANCY SERVICE**” done by me under the guidance of **DR. MOLU GHOSH**, at **SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, CHENNAI** is submitted in partial fulfilment of the requirements for the award of Master of Business Administration degree.

DATE: 22.12.2023

PLACE: Chennai

SIGNATURE OF THE CANDIDATE

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HARINI M

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ABSTRACT

A ratio analysis is a quantitative analysis of information contained in a company's financial statements. Ratio analysis is based on line items in financial statements like the balance sheet, income statement and cash flow statement. Ratio analysis is used to evaluate various aspects of a company's operating and financial performance such as its efficiency, liquidity, profitability and solvency. Tata Consultancy Services Limited, initially started as Tata Computer Systems, was founded in 1968 by a division of Tata Sons Limited. Its early contracts included punched card services to sister company TISCO (now Tata Steel), working on an Inter-Branch Reconciliation System for the Central Bank of India, and providing bureau services to Unit Trust of India. In 1975, TCS delivered an electronic depository and trading system called SECOM for a Swiss company SIS Segal Inter Settle ; it also developed System X for the Canadian Depository System and automated the Johannesburg Stock Exchange. TCS associated with a Swiss partner, TKS Teknosoft, which it later acquired. In 1980, TCS established India's first dedicated software research and development centre, the Tata Research Development and Design Centre (TRDDC) in Pune. In 1981, it established India's first client-dedicated offshore development centre, set up for clients Tandem.

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CHAPTER 1 – INTRODUCTION

1.1. INTRODUCTION

RATIO ANALYSIS

A ratio analysis is a quantitative analysis of information contained in a company's financial statements. Ratio analysis is based on line items in financial statements like the balance sheet, income statement and cash flow statement; the ratios of one item – or a combination of items - to another item or combination are then calculated. Ratio analysis is used to evaluate various aspects of a company's operating and financial performance such as its efficiency, liquidity, profitability and solvency. The trend of these ratios over time is studied to check whether they are improving or deteriorating. Ratios are also compared across different companies in the same sector to see how they stack up, and to get an idea of comparative valuations. Ratio analysis is a cornerstone of analysis. Ratio analysis refers to the analysis and interpretation of the figures appearing in the financial statements (i.e., Profit and Loss Account, Balance Sheet and Fund Flow statement etc.). It is a process of comparison of one figure against another. It enables the users like shareholders, investors, creditors, Government, and analysts etc. to get better understanding of financial statements.

Ratio analysis is mainly performed by external analysts as financial statements are the primary source of information for external analysts.

The analysts very much rely on the current and past financial statements in order to obtain important data for analysing financial performance of the company. The data or information thus obtained during the analysis is helpful in determining whether the financial position of a company is improving or deteriorating.

Ratio analysis is a fundamental tool in financial analysis that involves examining various relationships between financial variables in a company's financial statements. It provides insights into the company's operational efficiency, financial health, and overall performance by evaluating key ratios such as liquidity, profitability, and leverage. This analytical approach aids investors, creditors, and management in making informed decisions about the company's financial well-being and potential risks. Ratio analysis is

a financial assessment method using key ratios like liquidity, profitability, and leverage to gauge a company's performance and financial health.

DEFINITION

Khan and Jain define the term ratio analysis as “the systematic use of ratios to interpret the financial statements so that the strengths and weaknesses of a firm as well as its historical performance and current financial conditions can be determined.”

ADVANTAGES OF RATIO ANALYSIS

1. Forecasting and Planning:

The trend in costs, sales, profits and other facts can be known by computing ratios of relevant accounting figures of last few years. This trend analysis with the help of ratios may be useful for forecasting and planning future business activities.

2. Budgeting:

Budget is an estimate of future activities on the basis of past experience. Accounting ratios help to estimate budgeted figures. For example, sales budget may be prepared with the help of analysis of past sales.

3. Indication of Overall Profitability:

The management is always concerned with the overall profitability of the firm. They want to know whether the firm has the ability to meet its short-term as well as long-term obligations to its creditors, to ensure a reasonable return to its owners and secure optimum utilization of the assets of the firm. This is possible if all the ratios are considered together.

4. Indication of Liquidity Position:

Ratio analysis helps to assess the liquidity position i.e., short-term debt paying ability of a firm. Liquidity ratios indicate the ability of the firm to pay and help in credit analysis by banks, creditors and other suppliers of short-term loans.

5. Aid to Decision-making:

Ratio analysis helps to take decisions like whether to supply goods on credit to a firm, whether bank loans will be made available etc.

6. Comparative Analysis:

Facilitates comparisons between different companies or industries, aiding investors in making investment choices.

7. Communication Tool:

Serves as a communication tool between management and stakeholders by presenting financial information in a concise and understandable manner.

8. Monitoring Efficiency:

Helps monitor the efficiency of various operational aspects, such as inventory management, receivables collection, and asset utilization.

9. Identification of Trends:

Reveals trends and patterns in financial data, enabling proactive adjustments to business strategies.

10. Financial Health:

Provides insights into the financial health and stability of a business, aiding in identifying potential risks and opportunities.

1.2 INDUSTRY PROFILE



TATA CONSULTANCY SERVICE

Tata Consultancy Services Limited (TCS) is an Indian multinational information technology (IT) services and consulting company headquartered in Mumbai. It is a part of the Tata Group and operates in 150 locations across 46 countries. In July 2022, it was reported that TCS had over 600,000 employees worldwide. TCS is the second largest Indian company by market capitalization and is among the most valuable IT service brands worldwide, and is the top Big Tech (India) company. As of June 2023, it is the world's 2nd largest user of U.S. H-1B visas.

As of 2018, it is ranked eleventh on the Fortune India 500 list. In September 2021, TCS recorded a market capitalization of US\$200 billion, making it the first Indian IT tech company to do so. In December 2022, the market cap was Rs. 11,71,481.89 crore. In 2016–2017, parent company Tata Sons owned 72.05% of TCS and more than 70% of Tata Sons' dividends were generated by TCS.

Services

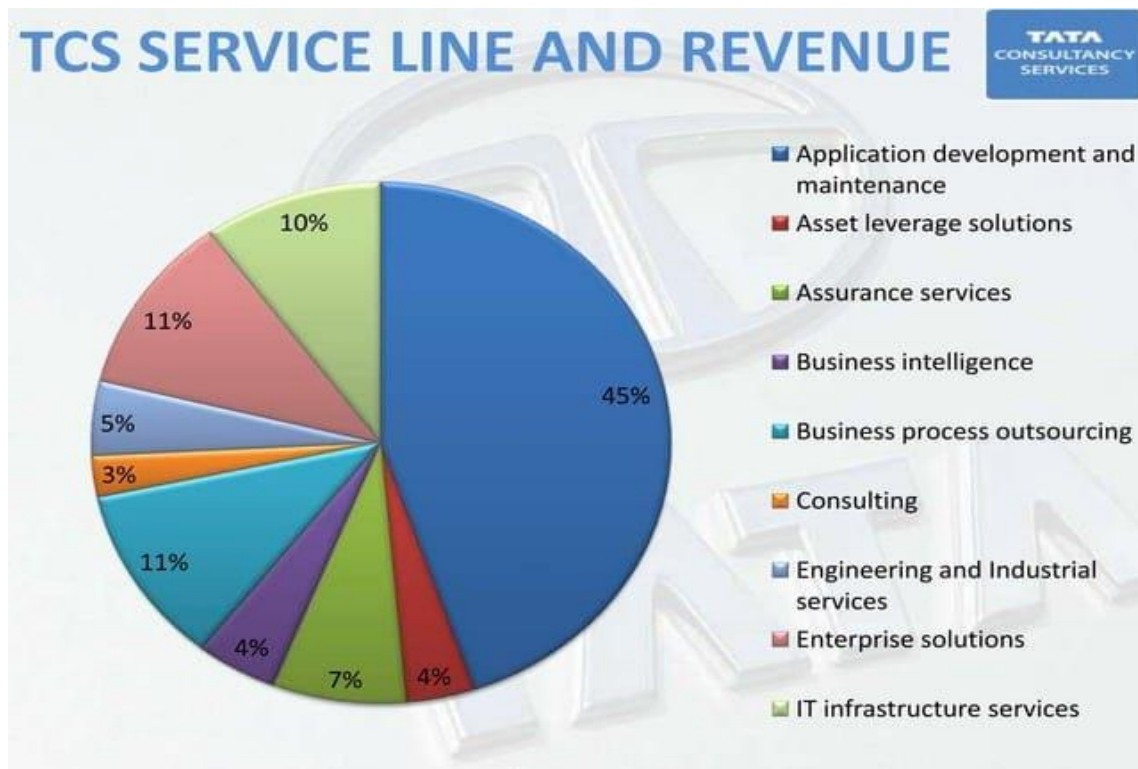
- Cloud
- Cognitive Business Operations
- Consulting
- Cybersecurity

Mission

- To help customers achieve their business objectives by providing innovative, best-in-class consulting, IT solutions and services.
- To make it a joy for all stakeholders to work with us.

Values

- Leading change, Integrity, Respect for the individual, Excellence, Learning and sharing.



Industry Focus:

TCS operates primarily in the IT services and consulting industry, providing a wide range of services to clients across various sectors. The company has a diverse portfolio that includes services related to IT consulting, business solutions, software development, infrastructure support, and more.

Services and Solutions:

TCS offers a broad spectrum of services, including:

Consulting Services: TCS provides consulting services to help businesses improve their processes, optimize operations, and implement digital transformation strategies.

IT Services: This includes application development, maintenance, and testing services, as well as infrastructure management.

Business Process Outsourcing (BPO): TCS offers outsourcing solutions for various business processes, allowing clients to focus on their core competencies.

Digital Services: TCS is involved in digital transformation initiatives, helping clients leverage emerging technologies such as artificial intelligence, blockchain, Internet of Things (IoT), and cloud computing.

Corporate Social Responsibility (CSR):

TCS is actively involved in various CSR initiatives, focusing on education, healthcare, and environmental sustainability. The company is committed to making a positive impact on the communities in which it operates.

SWOT ANALYSIS		
Location of factor	TYPE OF FACTOR	
	FAVOURABLE	UNFAVOURABLE
INTERNAL	<u>STRENGTHS</u> •Extensive global reach •Strong financial performance •Employee management skills	<u>WEAKNESSES</u> •TCS is one of the largest private sector employers in India •Appraisal and Promotion policies.
EXTERNAL	<u>OPPORTUNITIES</u> •In the emerging Technology areas like cloud computing •Growth in worldwide IT services	<u>THREATS</u> •Economic uncertainty and currency fluctuation •Increasing cost of human capital

STRENGTHS

One of the world's largest IT services companies.

Increasingly viewed by customers in the same league as IBM and HP.

- Large international workforce.
- Driving BPO services in India.
- Diversified revenues across regions, services and verticals.

WEAKNESS

Derives large proportion to revenues from developed markets, especially the US, that are facing economic difficulties.

Lags some peers and multinational rivals in high-end consulting offerings.

- Heavy exposure to banking, financial services and insurance vertical.

OPPORTUNITIES

- Product portfolio expansion enables TCS to move into end-to-end services market, benefiting revenues and margins.

Positioned among all Indian vendors to disrupt the global league of IBM-HP-Accenture.

- Geographical expansion into relatively untapped regions.

- Potential for strong revenue growth from home market in India.

THREATS

- * Lower outsourcing costs in neighbouring South Asian markets could see contracts move away from TCS.

- People-led linear growth means Cognizant can beat it.

- There are no visible leaders beyond N Chandrasekaran

- Vulnerable to global economic climate, with demand from developed market financial institutions still a key part of its revenue mix.

CHAPTER 2 – REVIEW OF LITERATURE

2.1 INTRODUCTION

A literature review is a critical and in-depth evaluation of previous research. It is a summary and synopsis of a particular area of research, allowing anybody reading the paper to establish why the study is pursuing this particular research. A good literature review expands on the reasons behind selecting a particular research question. A literature review is likewise not a collection of quotes and paraphrasing from other sources. A good literature review should critically evaluate the quality and findings of the research.

- **Cooper (2000)** conducted a study on Financial Intermediation on which he observed that the quantitative behaviour of business-cycle models in which the intermediation process acts either as a source of fluctuations or as a propagator of real shocks. In neither case do we find convincing evidence that the intermediation process is an important element of aggregate fluctuations. For an economy driven by intermediation shocks, consumption is not smoother than output, investment is negatively correlated with output, variations in the capital stock are quite large, and interest rates are procyclical. The model economy thus fails to match unconditional moments for the U.S. economy. We also structurally estimate parameters of a model economy in which intermediation and productivity shocks are present, allowing for the intermediation process to propagate the real shock. The unconditional correlations are closer to those observed only when the intermediation shock is relatively unimportant.
- **Gerrard (2001)** conducted a study on The Financial Performance on which he found that Using ratio analysis the financial performance of a sample of independent single-plant engineering firms in Leeds is examined with regard to structural and locational differences in establishments. A number of determinants of performance are derived and tested against the constructed data base. Inner-city engineering firms perform relatively less well on all indicators of performance compared with outer-city firms. The study illustrates the importance of using different measures of performance since this affects the magnitude and significance of the results. Financial support is necessary to sustain engineering in the inner city in the long run.
- **Zhu Wuxiang and Song Yong (2001)** Equity structure and firm value: An empirical analysis of listed companies of household electric appliances industry. Based on the sample of 20 number of listed companies in the household electric appliances the relationship between firm value and equity structure is examined.

- **Schmidgall (2003)** conducted a study on Financial Analysis Using the Statement of Cash Flows on which he observed that Managers use many financial ratios to judge the health of their businesses. With the recent requirement of a statement of cash flow (SCF) by the Financial Accounting Standards Board, managers now have a new set of ratios that will give a realistic picture of the business. The ratios include cash flow-interest coverage, cash flow-dividend coverage, and cash flow from operations to cash flow in investments. These ratios are particularly useful because they show changes in a hotel or restaurant's cash position over time, rather than at a given moment, as is the case with many other ratios.
- **Murinde (2003)** conducted study on Corporate Financial Structures on which he observed that the financial structure of a sample of Indian non-financial companies using a new and unique dataset consisting of a panel containing the published accounts of almost 900 companies that published a full set of accounts every year during 1989-99. In a new departure in the literature, the dataset includes quoted and unquoted companies. We compare the sources-uses approach to analysing company financial structures with the asset-liability approach. We use both approaches to characterize and to compare the financial structures of Indian companies over time; between quoted and unquoted companies; and between companies which belong to a business group and those that do not. Finally, we compare our results to those obtained previously for India and for the industrial countries.
- **G.E. Halkos (2004)** Efficiency measurement of the Greek commercial banks with the use of financial ratios: a data envelopment analysis approach. This paper studied about the application of the non-parametric analytic technique in respect of the DEA (Data Envelopment Analysis) to measure the performance of Greek banking sector.
- **McMahon (2005)** conducted a study on Financial Information on which he found that financial statements mean little to the uninitiated. This paper, explains, in layman's terms, how to understand financial information. It covers measures of profitability. The second article will cover measures of company liquidity and the use of financial ratios. This paper continues to explain how to interpret and understand financial information. It deals with measures of liquidity, solvency and fund flows and describes how to establish standards against which a company's financial ratios can be compared.
- **Toshiyuki Sueyoshi (2005)** Financial ratio analysis of the electric power industry. This approach compares 147 nondefault firms with 24 default firms of US power/energy market in terms of the financial performance and this is a type of non-parametric discriminant analysis which provides the weights of linear discriminant function.
- **Vijay Kumar. V, Mavaluri Pradeep and Boppana Nagarjuna (2006)** in their study concluded that financial ratios are divided into five basic categories, which are:

liquidity, activity, debt, profitability, and market ratios. The ratios give valuable insight into the health of a firm, the financial condition and profitability.

- **Ross et al., (2007)** proved that most researchers divide the financial ratios into four group's i.e., profitability, solvency, liquidity and activity ratios.
- **Lee (2008)** conducted a study on Financial Risk on which he observed that financial researchers, including those concentrating on the lodging industry, use various financial risk measures for their studies. Examples of those risk measures are beta, earnings variability, bankruptcy probability, debt-to-equity ratio and book-to-market ratio. The purpose of this study is, first, to descriptively investigate various financial risk measures used in the lodging financial literature by performing factor analysis and identifying four distinct risk groups. Second, this study examines the predictive ability of the four risk groups for lodging firm performance. The findings of this study suggest that strategic and stock performance risk factors better represent a lodging firm's financial risk than do bankruptcy and firm performance risk factors, and also, ROA than ROE better estimates lodging firm performance in terms of their relationships with financial risk factors.
- **Johnson (2009)** conducted a study on Financial Ratio patterns on which he found that the properties and characteristics of financial ratios have received considerable attention in recent years with interest primarily focused on determining the predictive ability of financial ratios and related financial data. Principal areas of investigation have included the prediction of corporate bond ratings, and the anticipation of financial impairment]. Related studies have examined the characteristics of merged firms the differences in financial ratio averages among industries whether firms seek to adjust their financial ratios toward industry averages the relationship between accounting-determined and market-determined risk measures, and the influence of financial ratios on analysts' judgments about impending bankruptcy The general conclusion to emerge from these various research efforts is that a number of financial ratios have predictive and descriptive utility when properly employed.
- **Ghosh Santanu Kumar and Mondal Amitava (2009)** in their study concluded that the measurement of financial performance used in the analysis were return on equity, return on assets and assets turnover ratio of Indian Banks.
- **Robert O. Edmister (2009)** in his study "An Empirical Test of Financial Ratio analysis for Small Business Failure" developed and empirically tested a number of methods for analysing financial ratios to predict the failure of small business.
- **Brigham and Ehrhardt (2010)** stated that the "financial ratios are designed to help evaluate financial statements". Financial ratios are used as a planning and control tool. Financial ratio analysis is used to evaluate the performance of an organization.

- **Virambhai (2010)** concluded that the company/management should try to increase the production, minimize the cost and operating expenses, exercise proper control on liquidity position, reduction of power, fuel, borrowing funds, overheads, interest burden, etc.
- **Sheela Christina (2011)** reported on Financial Performance of Wheels India Ltd. Secondary data collection method is used for the analytical type of research design. Before conducting the study, validity and reliability is checked for the past five years where the researcher used this for the purpose of study.
- **Ried Edward and Srinivasan Suraj (2010)** made an investigation to check whether the special items presented by the managers in the financial statements reflected in the economic performance or opportunism.
- **Gaur Jighyasu (2010)** focuses on the measurement of financial performance of business group companies of non-metallic mineral products industries of India. This study uses the 57 business group companies' financial data of non-metallic mineral products industries of India such as glass, cement, jewellery and gems, ceramic tiles, refractories etc.
- **Amalendu Bhunia (2010)** took the analysis of pharmaceutical company's financial performance to understand how the management of finance playing a crucial role in the growth. For a period of twelve years the study has undertaken from 1997-98 to 2008-09.
- **M Kumbirai, R Webb (2010)** A financial ratio analysis of commercial bank performance in South Africa. This paper investigated the South Africa's performance of commercial banking sector period for 2005-2009. this financial ratio is used to measure the liquidity, profitability and credit quality performance of large five commercial banks of South Africa.
- **Prasanta Paul (2011)** in his study "Financial Performance Evaluation - Different type of statistical tools" stated that tools like standard deviation, arithmetic mean, correlation etc. are used extensively.
- **According to Anthony (2012)**, Financial Statements, Essentially, are interim reports, presented annually and reflect a division of life of an enterprise into more or less arbitrary accounting period more frequently in a year.
- **Obamuyi (2013)** Contrary to the above argument, Modigliani - Miller theorem conclude that no relationship exists between the capital structure (debt or equity financing) and the market value of the bank (Modigliani and Miller, 1958). In other words, no relationship exists between equity to asset ratio and funding costs or profitability under perfect market.

- **According to Barth, Beaver and Landsman (2014)** concluded in their study that the value relevance literature provides fruitful insights for standard setting process.
- **Holthausen and Watts (2014)** in their study pointed out that value relevance research offers little or no insight for standard setting. As mentioned before, much of the studies are done on investigating the relative value relevance of various accounting figures reported in the financial statements. Brief and Zarowin¹⁷, in their study on value relevance of dividends, book value and earnings, pointed out that the variables, book value and dividends, have almost the same explanatory power as book value and reported earnings.
- According to **Barne, (2015)** States that financial ratio is widely used to develop insights into the financial performance of companies' by both the evaluators and researchers. The firm involves many interested parties, like the owners, management, personnel, customers, suppliers, competitors, regulatory agencies, and academics, each having their views in applying financial statement analysis in their evaluations. Evaluators 'use financial ratios, for instance, to forecast the future success of companies, while the researchers' main interest has been to develop models exploiting these ratios many distinct areas of research involving financial ratios can be differentiated.
- **Mingyi Hung (2016)** in his paper on "Accounting Standards and Value Relevance of Financial Statements: An International Analysis" concluded that the use of accrual accounting (versus cash accounting) negatively affects the value relevance of financial statements in countries with weak shareholder protection. This negative effect, however, does not exist in countries with strong shareholder protection.
- **Maria Zain (2018)**, in this article he discusses about the return on assets is an important percentage that shows the company's ability to use its assets to generate income. He said that a high percentage indicates that company's is doing a good utilizing the company's asset to generate income. He notices that the following formula is one method of calculating the return on assets percentage.
Return on Assets = Net Profit/Total Assets.
The net profit figure that should be used is the amount of income after all expenses, including taxes.
- **Jo Nelgadde (2018)**, in this thesis, he briefly discusses about the asset management ratio. It divided into different types of categories. He states that about the used to analyse accounts receivable and other working capital figures to identify significant changes in the company's operations and financial accounts. He said that there are two categories about this ratio such as account receivable turnover and average age of account receive.
- **James Clausen (2018)**, in this article expresses about the liquidity ratio. He Pronounce that it is analysis of the financial statements is used to measure company

performance. It also analyses of the income statement and balance sheet. Investors and lending institutions will often use ratio analyses of the financial statements to determine a company's profitability and liquidity. If the ratios indicate poor performance, investors may be reluctant to invest. Therefore, the current ratio or working capital ratio, measures current assets against current liabilities.

- **Gopinathan Thachappilly (2018)**, in his studies, states that the Liquidity Ratios help Good Financial. He knows that a business has high profitability, it can face short-term financial problems and its funds are locked up in inventories and receivables not realizable for months. Any failure to meet these can image its reputation and creditworthiness and in extreme cases even lead to bankruptcy.
- **Medhat, (2019)** used multiple regression analysis and correlations to test the financial performance of Omani Commercial banks. He used the ROA and the interest income as performance proxies (dependent variables), and the bank size, the asset management and the operational efficiency as independent variables. He found positive strong correlation between financial performance and operational efficiency and a moderate correlation between ROA and bank size.
- **Al-Aameri and Alrikabi (2019)** was focusing on one of the important techniques in financial analysis, namely, the financial ratios, for the purpose evaluating the performance of petroleum projects company, and to find out the main strength and weakness points, so as to suggest the remedial actions for treatment of negative points and enhance the positive one. The papers contain detail study for the data included in financial statements to explain the financial performance of the company, and that will help the management for planning the future according to the previous performance, and also contain the converting process of the data of financial statements to meaningful information through several techniques, the financial statement analysis among them.
- **Lucia Jenkins (2019)**, Understanding the use of various financial ratios and techniques can help in gaining a more complete picture of a company's financial outlook. He thinks the most important thing is fixed cost and variable cost. Fixed costs are those costs that are always present, regardless of how much or how little is sold. Some examples of fixed costs include rent, insurance and salaries. Variable costs are the costs that increase or decrease in ratios proportion to sales.
- A study in Australian financial institutions (**Elizabith & Greg, 2019**) showed that all financial performance measures as interest margins, return on assets, and capital adequacy are positively correlated with customer service quality scores.
- Many researchers have been too much focus on asset and liability management in the banking sector, (**Arzu & Gokhan, 2019**) discussed the asset and liability management in financial crisis. They argued that an efficient asset-liability management requires maximizing bank's profit as well as controlling and lowering

various risk, and their study showed how shifts in market perceptions can create trouble during crisis.

- **Khan (2019)** found that the bank with higher total capital, deposits, credits, or total assets does not always mean that has better profitability performance. According to Dr. M. Ravichandran the financial performance can be measured by using various financial tools such as profitability ratio, solvency ratio, comparative statement, etc. Based on the analysis, findings have been arrived that the company has got enough funds to meet its debts & liabilities, the income statement of the company shows sales of the company increased every year at good rate and profit also increased every year.
- **M. Ganga (2020)** on the evaluation of financial performance of Equitas Micro Finance Private Limited in Chennai. According to them financial analysis is important to plan and control the firm's financial resources. They adopted various research techniques to find the evaluation of financial performance of the organization. They found that the managers must concentrate on gray area which would be useful for future growth of the company.
- **Dr. M. Ravichandran (2020)** the financial performance can be measured by using various financial tools such as profitability ratio, solvency ratio, comparative statement, etc. Based on the analysis, findings have been arrived that the company has got enough funds to meet its debts & liabilities, the income statement of the company shows sales of the company increased every year at good rate and profit also increased every year.
- **Gopinathan Thachappilly (2020)**, in this article he discusses about the Financial Ratio Analysis for Performance evaluation. Its analysis is typically done to make sense of the massive number of numbers presented in company financial statements. It helps evaluate the performance of a company, so that investors can decide whether to invest in that company. Here we are looking at the different ratio categories in separate articles on different aspects of performance such as profitability ratios, liquidity ratios, debt ratios, performance ratios investment evaluation ratios.

b

CHAPTER 3 – RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research Methodology is a systematic way to solve a research problem. It includes various steps that are generally adopted by a researcher in studying the problem along with the logic behind them. The present study was conducted at Tata Consultancy Services. The study depends mainly on the secondary data namely the annual reports of the company. Two years annual reports had been collected from the company. Data had also been collected from text books, journals, newspapers, magazines and internet.

3.2 STATEMENT OF THE PROBLEM

Ratio analysis is used to evaluate various aspects of a company's operating and financial performance such as its efficiency, liquidity, profitability and solvency. The trend of these ratios over time is studied to check whether they are improving or deteriorating. Ratio analysis is widely used as a powerful tool of financial statement analysis to check the company's operations or financial performance is difficult task by some other tools for the company. So, the study on ratio analysis at Tata Consultancy Services, is taken as the study to measure the performance of the company.

3.3 OBJECTIVES THE STUDY

Primary objective

To study on ratio analysis towards the Tata Consultancy Services.

Secondary objectives

- To study the short-term liquidity positions of company.
- To study the efficiency of inventory management.
- To study the effectiveness of credit management of the company.
- To analyse the long-term solvency of the business concern.

- To study how best the working capital is utilized in the company.

3.4 SCOPE OF THE STUDY

- The scope of the study defined below in terms of concept adopted and period under focus.
- The study of management of working capital is only the Tata Consultancy Services., Chennai.
- Thus, the whole purpose of the project is to analyse the past and present performance of the company on various financial areas like cash, inventories and receivables.
- Since the past performance data essential for predicting future planning process
- it provides insights into a company's financial health and performance
- Ratio analysis is valuable for decision-making, financial planning, and comparing performance over time or with industry benchmarks.
- Its scope extends across industries, making it a fundamental tool for investors, creditors, and management.
- It involves analyzing relationships between various financial variables, helping stakeholders assess liquidity, profitability, solvency, and efficiency.

3.5 RESEARCH DESIGN

“A Research Design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with the economy in procedure”. In fact, the research design is the conceptual structure with in which research is conducted; it constitutes the blue print for the collection, measurement and analysis of data, the research design utilized in this study is analytical research.

3.6 PERIOD OF STUDY

The duration taken by the researcher for the data collection and analysis regarding the ratio analysis of Tata Consultancy Services. for three months. The data used are of last two years from 2021 – 2023.

3.7 METHOD OF COLLECTION

The study basically uses secondary data. Secondary data means the data that are already available. Generally speaking, secondary data is collected by some organizations or agencies which have already been processed when the researcher utilizes secondary data. the process of secondary data collection and analysis is called desk research.

3.8 TOOLS USED

RATIO ANALYSIS

A ratio is the quotient of two mathematical expressions and the relationship between two or more numbers. In financial analysis, a ratio is used as an index or yardstick for evaluating the financial position and performance of a firm. The relationship between the two accounting figures expressed mathematically is known as a financial ratio. It involves comparison for a useful interpretation of the financial statements and it should be compared with some standards

- Working capital ratio
- Inventory Turnover ratio

- Debtors' turnover ratio
- Average collection period
- Net profit ratio

CHAPTER 4 – DATA ANALYSIS AND INTERPRETATION

WORKING CAPITAL RATIO

The working capital ratio, also called the current ratio, is a liquidity ratio that measures a firm's ability to pay off its current liabilities with current assets. The working capital ratio is important to creditors because it shows the liquidity of the company.

$$\text{Working capital ratio} = \frac{\text{Net working capital}}{\text{Net assets}}$$

Year	Net Working capital	Net assets	Ratio
2021-2022	65959	76733	0.85
2022-2023	66712	76942	0.86

TABLE NO: 4.1.1 -WORKING CAPITAL RATIO

Interpretation

The above table indicates that the Working capital ratio is 0.85 in the year of 2021-2022. It has increased to 0.86 in the year of 2022-23

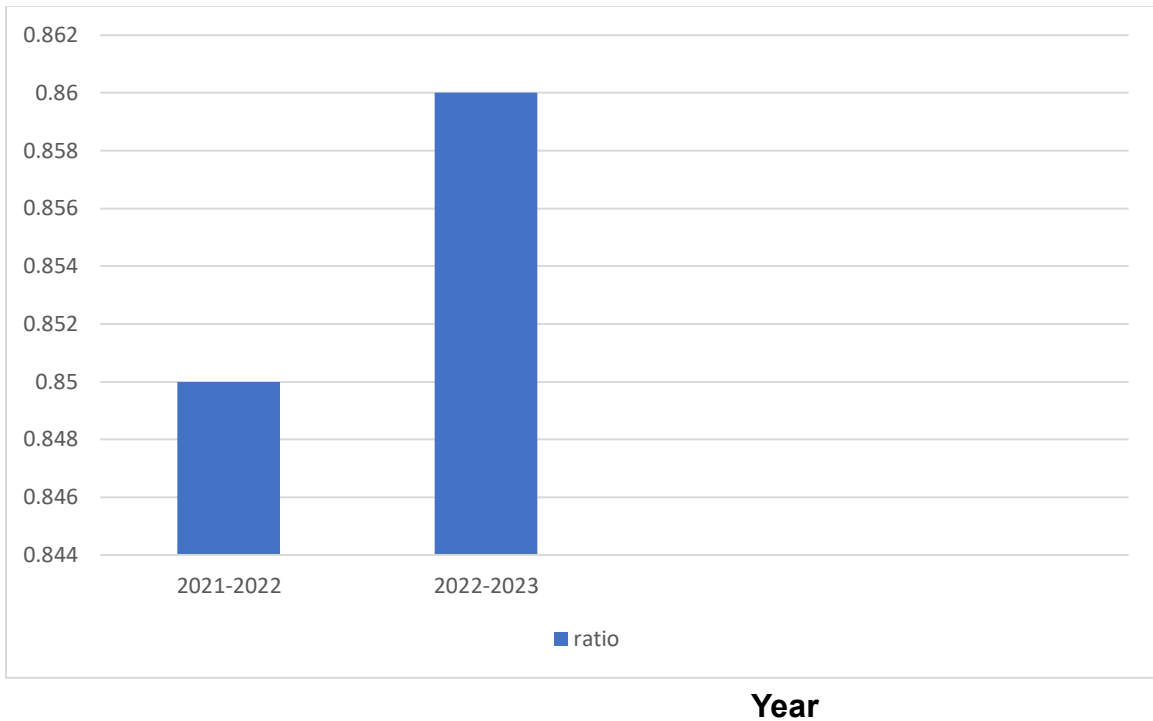


CHART NO: 4.1.1- WORKING CAPITAL RATIO

INVENTORY TURNOVER RATIO

This ratio indicates the efficiency of the firm in producing and selling its product. This ratio indicates the number of times inventory is replaced during the year. It measures how quickly inventory is sold. The inventory turnover reflects the efficiency of the firm

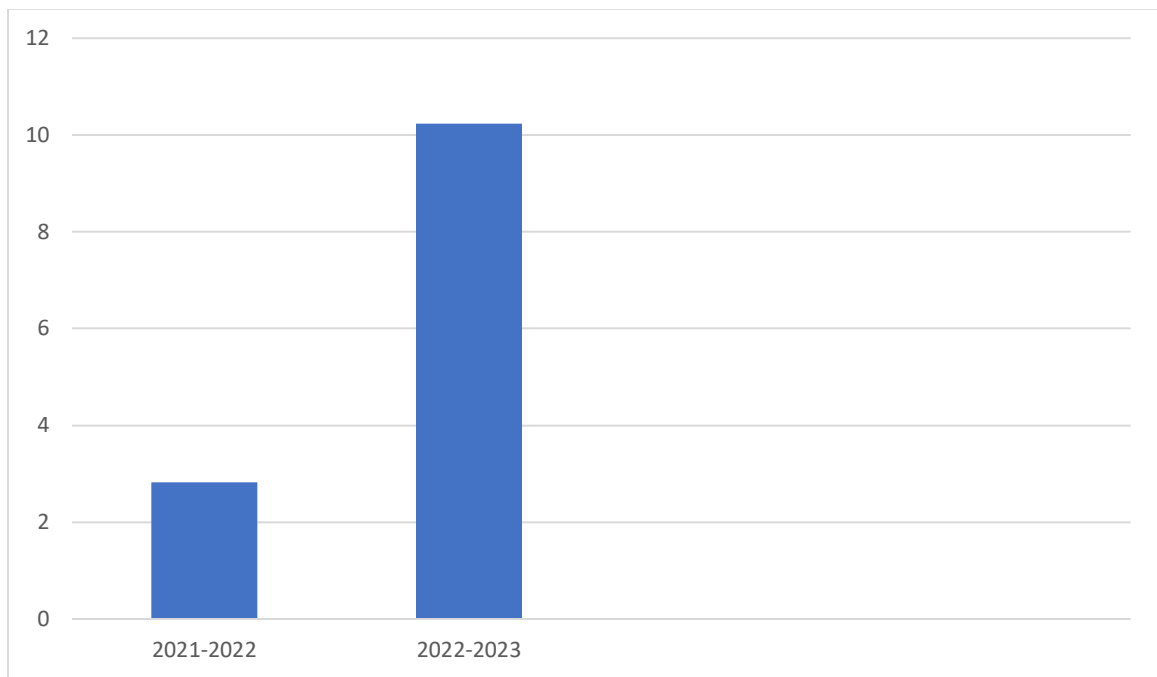
in producing and selling its products. This ratio indicates the velocity or the movement of goods during the year. It is calculated as follows.

$$\text{Inventory turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

TABLE NO 4.1.2.			
INVENTORY TURNOVER RATIO			
Year	Cost of goods sold	Average inventory	Ratio
2021-2022	1979	69938.5	2.82
2022-2023	6721	65588.5	10.24

Interpretation

The above table indicates that the inventory turnover ratio is 2.82 in the year of 2021-2022. It has increased to 10.24 in the year of 2022-2023 respectively.



Year

CHART NO 4.1.2 INVENTORY TURNOVER RATIO

DEBTORS TURNOVER RATIO

Ratio of net credit sales to average trade debtors is called **debtors turnover ratio**. It is also known as **receivables turnover ratio**. This ratio is expressed in times. It can be calculated as

$$\text{Debtors' turnover ratio} = \frac{\text{sales}}{\text{debtors}}$$

TABLE NO: 4.1.3			
DEBTORS TURNOVER RATIO			
Year	Sales	Debtors	Ratio

2021-2022	106341	8045	13.2
2022-2023	190354	9068	20.9

Interpretation

The above table indicates that the debtor's turnover ratio is 13.2 in the year of 2021-2022. It has increased to 20.9 in the year of 2022-2023 respectively.

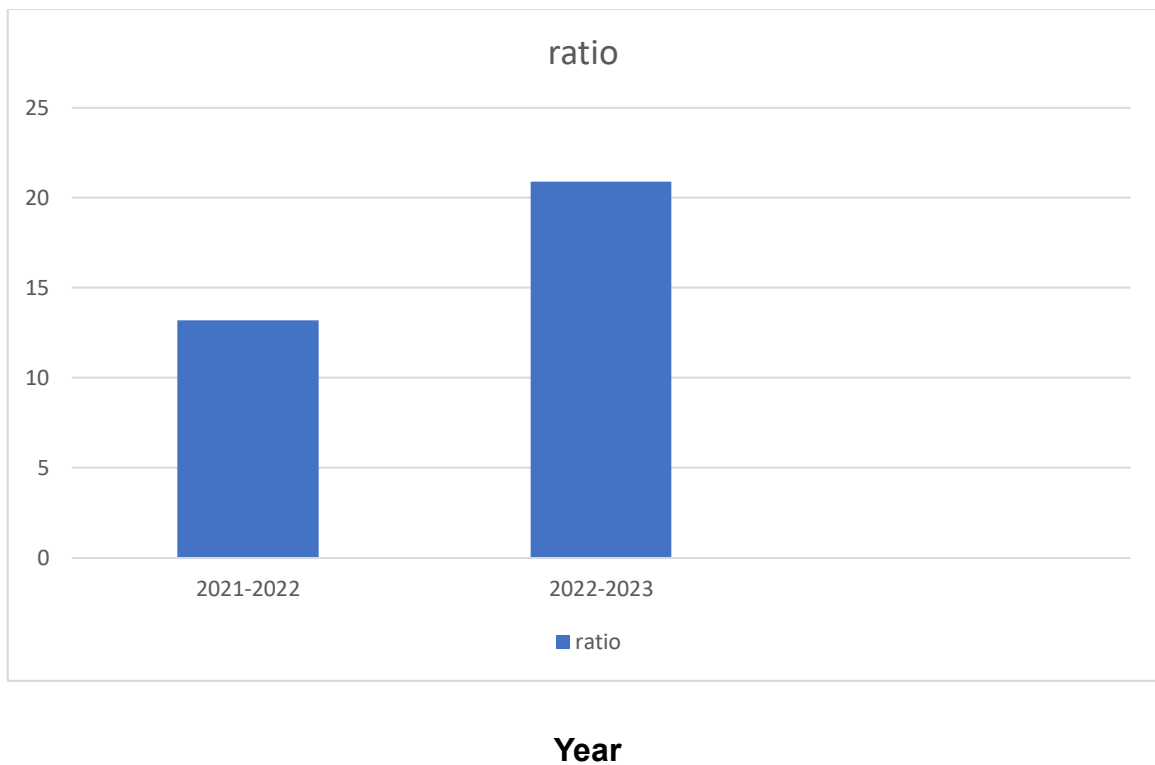


CHART NO 4.1.3 DEBTORS TURNOVER RATIO

AVERAGE COLLECTION PERIOD

The average collection period is the approximate amount of time that it takes for a business to receive payments owed in terms of accounts receivable. The average collection period is calculated by dividing the average balance of accounts receivable by total net credit sales for the period and multiplying the quotient by the number of days in the period. To find the collection period

$$\text{Collection Period} = \frac{360}{\text{Debtors Turnover Ratio}}$$

Debtors' turnover ratio

TABLE NO: 4.1.4			
AVERAGE COLLECTION PERIOD			
Year	Days in a year	Debtors' turnover ratio	Debt collection period (days)
2021-2022	365	13.2	27.2
2022-2023	365	20.9	17.1

Interpretation

The above table indicates that the average collection period is 27.2 in the year of 2021-2022. It has decreased to 17.15 in the year of 2022-2023 respectively.

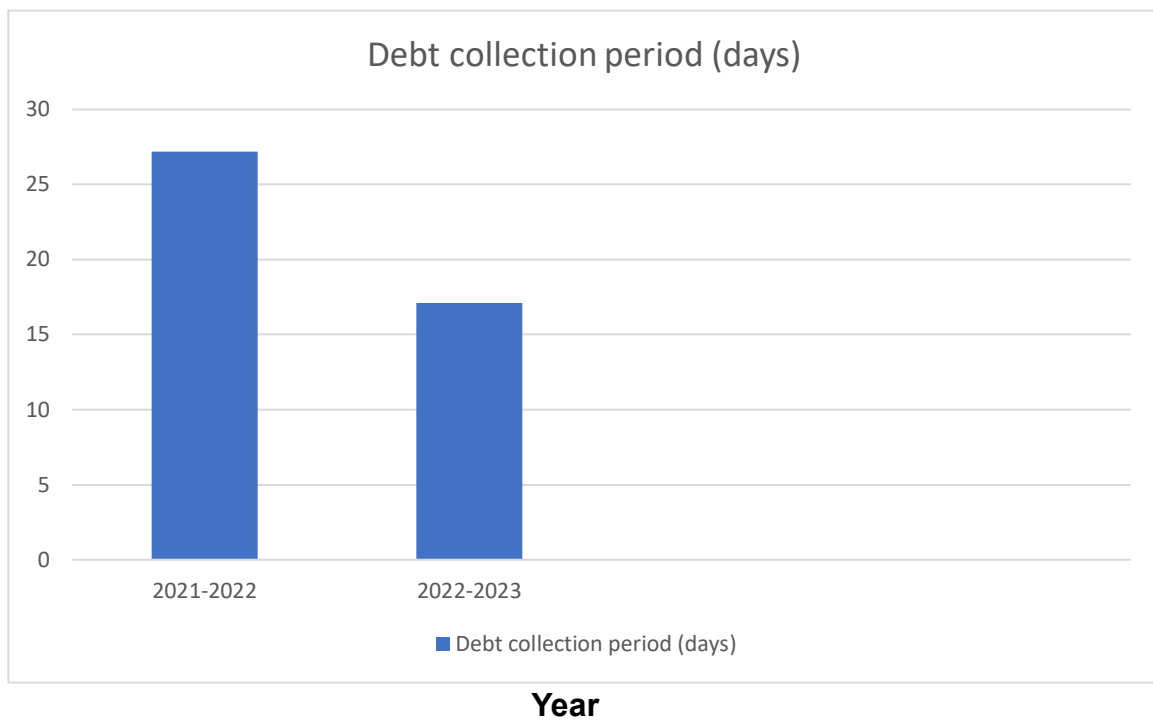


CHART NO: 4.1.4 AVERAGE COLLECTION PERIOD

NET PROFIT RATIO

Net profit is obtained when operating expenses interest and taxes are subtracted from the gross profit. The ratio is measured as

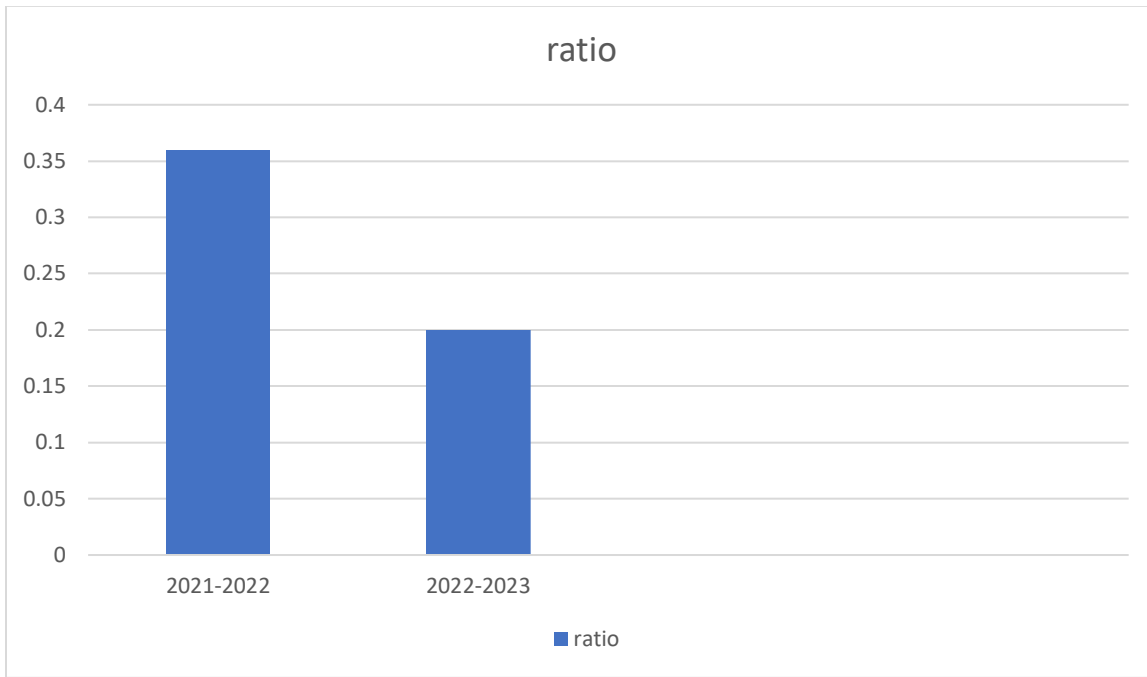
$$\text{Net profit margin} = \frac{\text{profit after tax}}{\text{Sales}}$$

This ratio is established a relationship between net profit and sales and indicates managements efficiency in manufacturing, administrating and selling the products. This ratio is the overall measure of the firm's ability to turn each rupee sales into net profit.

TABLE NO: 4.1.5			
NET PROFIT RATIO			
Year	Net profit	Net sales	Ratio
2021-2022	38327	106341	0.36
2022-2023	39106	190354	0.20

Interpretation

The above table indicates that the net profit ratio is 0.36 in the year of 2021-2022. It has decreased to 0.20 in the year of 2022-2023.



Year

CHART NO: 4.1.5 - NET PROFIT RATIO

CHAPTER 5 – FINDINGS, SUGGESTIONS AND CONCLUSION

5.1. FINDINGS

- The working capital ratio is 0.85 in the year of 2021 and it has increased to 0.86 in the year of 2022.
- The inventory turnover is 2.82 in the year of 2021 and it has increased to 10.24 in the year of 2022.
- The debtor's turnover ratio is 13.20 in the year of 2021 and it has increased to 20.90 in the year of 2022.
- The average collection period is 27.2 in the year of 2021 and it has decreased to 17.1 in the year of 2022.
- The net profit ratio is 0.36 in the year of 2021 and it has decreased to 0.20 in the year of 2022.
- The return on total assets ratio is 0.36 in the year of 2021 and it has decreased to 0.25 in the year of 2022.
- The return-on-investment ratio is 0.53 in the year of 2021 and it has increased to 0.59 in the year of 2022.
- The return on shareholders' ratio is 0.38 in the year of 2021 and it has increased to 0.59 in the year of 2022.
- The solvency ratio is 0.29 in the year of 2021 and it has increased to 0.30 in the year of 2022.
- The gross profit ratio is 0.28 in the year of 2021 and it has decreased to 0.12 in the year of 2022.
- The operation profit ratio is 0.33 in the year of 2021 and it has decreased to 0.31 in the year of 2022.

5.2 SUGGESTIONS

- Tata Consultancy Services., Chennai within a short span of time is making very good progress. The company trademark was its highest ever turns over during the progress, further the capacity utilization of the plants and the various operational efficiency achievements further the capacity signifies growth of the organization .it can take up the following suggestions based on the study.
- Liquidity ratio here reflects the firm ability to meet short term current obligation. Analysis of these ratio revealed that the liquidity position has been satisfactory.
- Turnover ratio indicates the turnover position of the company, here ratio reflects high turnover on the basis of five years is good.
- The financial performance of the company is good, so this company capture high market share and growth.
- Fund is proper allocated to fixed assets and current assets. It should possible for the company to carry on the work smoothly.

5.3 LIMITATIONS OF THE STUDY

1. Ratios Account for one Variable:

Since ratios account for only one variable, they cannot always give correct picture since several other variables such Government policy, economic conditions, availability of resources etc. should be kept in mind while interpreting ratios.

2. Limitations of Financial Statements:

Ratios are calculated from the information recorded in the financial statements. But financial statements suffer from a number of limitations and may, therefore, affect the quality of ratio analysis.

3. Changes in Price Level:

Fixed assets show the position statement at cost only. Hence, it does not reflect the changes in price level. Thus, it makes comparison difficult.

4. Different Accounting Policies:

Different accounting policies regarding valuation of inventories, charging depreciation etc. make the accounting data and accounting ratios of two firms non-comparable.

- The project work study was mainly based upon the information from the secondary, mainly balance sheet, profit and loss account, the annual report and accounts book by only giving limited information regarding the performance of the company.
- The study has been restricted span of time 2 years only.

5.4. CONCLUSION

A Successful management of the working capital in any concern will ensure the success of business. In The Tata Consultancy Services., working capital management is in good condition. the level of profit is increasing in nature. After covid (By analysing the balance sheet 2019-2020) the profit level has been increased consistently. However, to show the better business result, the management may concentrate on increases of sales, sales level before changing credit policy variable, credit policy helps to retained its old customer and create new customer by coming them away from competitors. Better co-ordination between each department is very important, like sales, production, purchase because it helps to avoid the credit risk and it decrease the debt collection days.

REFERENCES

- www.tcs.com
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- www.industrytrend.com
- www.mbanotes.com

BALANCE SHEET

2021-2022

Consolidated Balance Sheet

		(₹ crore)				(₹ crore)	
	Note	As at March 31, 2022	As at March 31, 2021		Note	As at March 31, 2022	As at March 31, 2021
ASSETS							
Non-current assets							
Property, plant and equipment	10(a)	10,774	11,110	Trade receivables			
Capital work-in-progress	10(a)	1,205	926	Billed	8(b)	34,074	30,079
Right-of-use assets	9	7,636	7,633	Unbilled		7,736	6,583
Goodwill	10(b)	1,787	1,798	Cash and cash equivalents	8(c)	12,488	6,858
Other intangible assets	10(c)	1,101	480	Other balances with banks	8(d)	5,733	2,471
Financial assets				Loans	8(e)	6,445	11,472
Investments	8(a)	223	213	Other financial assets	8(f)	1,390	1,394
Trade receivables				Income tax assets (net)		11	19
Billed	8(b)	145	55	Other assets	10(d)	10,151	11,236
Unbilled		55	273	Total current assets		1,08,310	99,280
Loans	8(e)	311	29	TOTAL ASSETS		1,41,514	1,30,759
Other financial assets	8(f)	2,253	1,573	EQUITY AND LIABILITIES			
Income tax assets (net)		1,983	1,845	Equity			
Deferred tax assets (net)	17	3,708	3,931	Share capital	8(m)	366	370
Other assets	10(d)	2,023	1,613	Other equity	11	88,773	86,063
Total non-current assets		33,204	31,479	Equity attributable to shareholders of the Company		89,139	86,433
Current assets							
Inventories	10(e)	20	8	Non-controlling interests		707	675
Financial assets				Total equity		89,846	87,108
Investments	8(a)	30,262	29,160				

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Consolidated Balance Sheet

				(₹ crore)	
	Note	As at March 31, 2022	As at March 31, 2021		
Liabilities					
Non-current liabilities					
Financial liabilities					
Lease liabilities		6,368	6,503		
Other financial liabilities	8(h)	572	280		
Employee benefit obligations	14	677	749		
Deferred tax liabilities (net)	17	590	767		
Unearned and deferred revenue		1,110	1,197		
Total non-current liabilities		9,317	9,496		
Current liabilities					
Financial liabilities					
Lease liabilities		1,450	1,292		
Trade payables	8(g)	8,045	7,860		
Other financial liabilities	8(h)	7,687	6,150		
Unearned and deferred revenue		3,635	3,650		
Other liabilities	10(f)	8,392	4,068		
Provisions	10(g)	1,411	1,394		
Employee benefit obligations	14	3,810	3,498		
Income tax liabilities (net)		7,921	6,243		
Total current liabilities		42,351	34,155		
TOTAL EQUITY AND LIABILITIES		1,41,514	1,30,759		

NOTES FORMING PART OF CONSOLIDATED FINANCIAL STATEMENTS			
As per our report of even date attached		For and on behalf of the Board	
For B S R & Co. LLP	Rajesh Gopinathan	N Ganapathy Subramaniam	
Chartered Accountants	CEO and	COO and Executive Director	
Firm's registration no: 101248W/W-100022	Managing Director		
Amit Somani	Samir Seksaria	Pradeep Manohar Gaitonde	
Partner	CFO	Company Secretary	
Membership No. 060154			
Mumbai, April 11, 2022		Mumbai, April 11, 2022	

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2022-2023

Consolidated Balance Sheet

		(₹ crore)	
Note	As at March 31, 2023	As at March 31, 2022	
ASSETS			
Non-current assets			
Property, plant and equipment	10(a)	10,230	10,774
Capital work-in-progress	10(a)	1,234	1,205
Right-of-use assets	9	7,560	7,636
Goodwill	10(b)	1,858	1,787
Other intangible assets	10(c)	867	1,101
Financial assets			
Investments	8(a)	266	223
Trade receivables			
Billed	8(b)	149	145
Unbilled		199	55
Loans	8(e)	173	311
Other financial assets	8(f)	2,149	2,253
Income tax assets (net)		2,583	1,983
Deferred tax assets (net)	17	3,307	3,708
Other assets	10(d)	2,806	2,023
Total non-current assets		33,381	33,204
Current assets			
Inventories	10(e)	28	20
Financial assets			
Investments	8(a)	36,897	30,262
Trade receivables			
Billed	8(b)	41,049	34,074
Unbilled		8,905	7,736
Cash and cash equivalents	8(c)	7,123	12,488
Other balances with banks	8(d)	3,909	5,733
Loans	8(e)	1,325	6,445
Other financial assets	8(f)	1,319	1,390
Income tax assets (net)		8	11
Other assets	10(d)	9,707	10,151
Total current assets		1,10,270	1,08,310
TOTAL ASSETS		1,43,651	1,41,514
EQUITY AND LIABILITIES			
Equity			
Share capital	8(k)	366	366
Other equity		90,058	88,773
Equity attributable to shareholders of the Company		90,424	89,139
Non-controlling interests		782	707
Total equity		91,206	89,846
Liabilities			
Non-current liabilities			
Financial liabilities			
Lease liabilities	8(g)	6,203	6,368
Other financial liabilities		353	572
Employee benefit obligations	13	536	677
Deferred tax liabilities (net)	17	792	590
Unearned and deferred revenue		1,003	1,110
Total non-current liabilities		8,887	9,317
Current liabilities			
Financial liabilities			
Lease liabilities		1,485	1,450
Trade payables		10,515	8,045
Other financial liabilities	8(g)	9,068	7,687
Unearned and deferred revenue		3,843	3,635
Other liabilities	10(f)	4,892	8,392
Provisions	10(g)	345	1,411
Employee benefit obligations	13	4,065	3,810
Income tax liabilities (net)		9,345	7,921
Total current liabilities		43,558	42,351
TOTAL EQUITY AND LIABILITIES		1,43,651	1,41,514

NOTES FORMING PART OF CONSOLIDATED FINANCIAL STATEMENTS

