

# CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

## DIPLOMA THESIS ASSIGNMENT

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Economics Policy and  
Administration Business  
Administration

Thesis title

**Assessment of the Financial Position and Performance of the Chosen Companies  
Operating in the Iron and Steel Industry in India**

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### **Objectives of thesis**

The aim of this thesis is to assess and compare the financial position and performance of three chosen Indian companies operating in the iron and steel industry, by analyzing the companies' financial statements with focus on the representation and changes of the reported assets, liabilities, expenses and revenues for a chosen period to identify the potential financial problems and the most significant factors influencing the profit from the company and industry point of view.

### **Methodology**

Methodology for the literature overview is based on data collection from the relevant legal framework, specialized publications and other written or online sources. The practical part of the thesis will be based on the information gained from the published annual reports of the chosen companies. Vertical and horizontal analysis and ratio analysis of the financial statements will be used to assess the financial position and performance of the companies and to prepare the practical part of the thesis. The methods of analysis, synthesis, comparison and deduction will be used to formulate the conclusions of the thesis.

## The proposed extent of the thesis

60 – 80

## Keywords

financial statements, financial position, balance sheet, assets, liabilities, equity, financial performance, income statement, expenses, revenues, profit, financial analysis, iron and steel industry.

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## Recommended information sources

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## **Declaration**

I declare that I have worked on my master's thesis titled "Assessment of the Financial Position and Performance of the Chosen Companies Operating in the Iron and Steel Industry in India " by myself and I have used only the sources mentioned at the end of the thesis. As the author of the master's thesis, I declare that the thesis does not break any copyrights.

In Prague on 25.11.2021

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RITAM BHOWMIK

## **Acknowledgement**

I would like to thank my supervisor Ing. Enikő Lőrinczová, Ph.D. for her valuable guidance and feedback throughout this thesis.

## **Assessment of the Financial Position and Performance of the Chosen Companies Operating in the Iron and Steel Industry in India**

### **Abstract**

This thesis examines the assessment of the financial position and performance of the three chosen companies operating in the Iron and Steel Industry in India which are Tata Steel, JSW Steel and Steel Authority India Limited (SAIL). The review will examine the characteristics of Income statement, Balance Sheet, Cash flow statement and selected financial ratios of financial analysis of the Iron and Steel production companies in India. The financial position which is represented by Balance sheet (reported assets, liabilities) and financial performance represented by Income statement (reported expenses, revenues and profit) covering financial years 2017 to 2021 will be used to determine the growth of any industry by using vertical and horizontal analysis. This is also true in the case of the iron and steel industry. Several elements impact an organization's financial success, including cost, revenue. Many elements of the steel industry's financial performance may be examined, including financial facts, financial ratios, financial health, and financial strength, among others. The steel industry's operational and financial efficiency, which are connected to cost and revenue elements, can have an impact on financial performance. Return on assets and equity, Revenues and other financial variables are the strongest measures of financial performance. As a result, the problem of the steel industry's financial performance is intertwined with a variety of factors such as cost, revenue, capital, assets, and other associated variables. This research study examines the financial performance of a few Indian iron and steel firms. If an examination of all elements of the iron and steel business yields a clear picture of financial performance, it may be utilized to identify the potential financial problems and the most significant factors influencing the profit. In this regard, the researcher examined the performance of India's steel sector in terms of profitability, performance growth, and financial strength.

### **Keywords:**

financial statements, financial analysis, financial position, Income statement, expenses, revenues, profit, balance sheet, assets, liabilities, equity, financial performance, iron and steel industry.

## Posouzení finanční pozice a výkonnosti vybraných společností působících v železářském a ocelářském průmyslu v Indii

### Abstrakt

Tato diplomová práce zkoumá hodnocení finanční pozice a výkonnosti tří vybraných společností působících v železářském a ocelářském průmyslu v Indii, kterými jsou Tata Steel, JSW Steel and Steel Authority India Limited (SAIL). Přezkum prozkoumá charakteristiky výkazu zisku a ztráty, rozvahy, výkazu peněžních toků a vybraných finančních poměrových ukazatelů finanční analýzy společností vyrábějících železo a ocel v Indii. Finanční pozice, kterou představuje rozvaha (vykázaná aktiva, pasiva) a finanční výkonnost reprezentovaná výsledovkou (vykázané náklady, výnosy a zisk) pokrývající finanční roky 2017 až 2021, bude použita pro stanovení růstu jakéhokoli odvětví pomocí vertikálních a horizontální analýza. To platí i v případě železářského a ocelářského průmyslu. Na finanční úspěch organizace má vliv několik prvků, včetně nákladů, výnosů. Lze zkoumat mnoho prvků finanční výkonnosti ocelářského průmyslu, včetně finančních faktů, finančních ukazatelů, finančního zdraví a finanční síly, mezi jinými. Provozní a finanční efektivita ocelářského průmyslu, která souvisí s nákladovými a výnosovými prvky, může mít dopad na finanční výkonnost. Rentabilita aktiv a vlastního kapitálu, výnosy a další finanční proměnné jsou nejsilnějšími měřítky finanční výkonnosti. V důsledku toho se problém finanční výkonnosti ocelářského průmyslu prolíná s řadou faktorů, jako jsou náklady, výnosy, kapitál, aktiva a další související proměnné. Tato výzkumná studie zkoumá finanční výkonnost několika indických železářských a ocelářských firem. Pokud prozkoumání všech prvků železářského a ocelářského podnikání poskytne jasný obraz finanční výkonnosti, lze jej využít k identifikaci potenciálních finančních problémů a nejvýznamnějších faktorů ovlivňujících zisk. V tomto ohledu výzkumník zkoumal výkonnost indického ocelářského sektoru z hlediska ziskovosti, růstu výkonnosti a finanční síly.

**Klíčová slova:** finanční výkazy, finanční analýza, finanční situace, rozvaha, aktiva, pasiva, vlastní kapitál, finanční výkonnost, výsledovka, náklady, výnosy, zisk, Železný a ocelářský průmysl.

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## List of abbreviations

Ind-AS - Indian Accounting Standards

ASB – Accounting Standards Board

IFRS – International Financial Reporting Standards

IPSAS – International Public Sector Accounting Standards

INR (₹) – Indian National Rupee

USD – United States Dollar

SME – Small Medium Enterprise

LE – Large Enterprise

MT – Million Tonnes

MTPA – Million Tonnes per Annum

TMT – Thermo Mechanical Treatment

EAF – Electric Arc Furnace

MW – Mega Watt

DRI – Direct Reduced Iron

MSM – Ministry of Steel and Mines

NSP – National Steel Policy

SAIL – Steel Authority of India

ROA – Return on Assets

ROE – Return on Equity

FY- Fiscal Year

## **1. Introduction**

Over the last five years, Indian iron and steel firms have made rapid progress based on solid foundations. The company is acquiring all of the necessary components for rapid expansion. The government is supporting the company with advantageous industrial changes, while the private sector is supporting it with billions of dollars in investments.

Even during periods of severe economic slowdown, the company was able to maintain its positive development momentum because to the strong foundations of domestic demand from the construction, car, and infrastructure industries. With a long and illustrious history, the nation has established itself as a respected brand in the global steel sector. This demonstrates the Indian iron and steel company's resilience and fortitude in the face of external risk factors. In terms of steel output, Indian steel firms are now ranked second in the world.

Iron and Steel is said to be the backbone of modern economics and human civilization. It is one of a country's major engines of economic progress. Increased usage of iron and steel leads to country-wide infrastructure development and fast industrialization. Iron and Steel consumption is considered a major indicator of the country's socioeconomic growth and level of living. This product is the result of a large and technologically complex trade poisoning in terms of material flows and stable revenues. The existence of strong industries concludes the economic status of industries, and therefore the growth of those industries from the outset is shaped by the iron and steel industries.

All sorts of building and manufacturing operations necessitate the use of iron and steel. It is used to make all kinds of machinery, electrical and metal products, transportation equipment, agricultural equipment, capital goods, and housing construction, among other things. As a result, all sectors must rely on iron and steel. With the steel industry as a forerunner, the industrial sector has achieved tremendous progress.

## **2. Objective of the study**

### **2.1 Objectives**

The study's major goals is to assess the financial position and performance of chosen Indian companies by analyzing the company's financial statements and to identify the possible financial problems and the most significant factors influencing the profit and to look at the profitability and efficiency ratios of three Indian iron and steel firms. Accordingly, the following are the study's main goals:

1. To evaluate the company's financial performance of Tata Steel, JSW Steel and Steel Authority of India (SAIL) using profitability, short-term solvency, and efficiency ratios.
2. Examine the iron and steel industry's profitability and liquidity ratio.
3. Determine the company's strong and weak aspects.

## 2.2 Methodology

Methodology for the literature review is based on information gathered from the published financial records of Indian steel firms. The study's additional information was obtained from a variety of periodicals, books, journals.

The practical part of the thesis will be based on the information gathered from the published annual reports of the chosen companies. To prepare the practical part of the thesis, Vertical and horizontal analysis of the financial statements will be used to assess the financial position and performance of the company and selected profitability and liquidity ratios of financial analysis will be calculated.

The assessment of financial position will be done by analyzing the Balance sheet (reported assets, liabilities) and assessment of financial performance will be done by analyzing the Income statement (reported expenses, revenues and profit) covering financial years 2017 to 2021 will be used to determine the growth of any industry by using vertical and horizontal analysis. In India, financial year is not same as calendar year, indian financial year ends on 31<sup>st</sup> March. Data are obtained from the company's annual reports. The results of the vertical and horizontal analysis will be in percentage (%) and for horizontal analysis, each item will be compared with the immediately preceding same item from the previous year i.e, by chain year calculation. And for vertical analysis, each item will be compared with the total assets or equity and liabilities. The definitions of the Balance Sheet, Income Statement, Cash flow statement, vertical and horizontal analysis, definition and formulas of the selected ratios of the financial analysis will be included in the literary review of this thesis.

The current analysis was limited in scope and focused on the financial performance of India's iron and steel sector as evidenced by publicly available financial data. Profitability, liquidity and financial strength were all used to analyse the steel industry's financial performance.

The correctness of the data obtained determines the study's dependability. Because the current analysis is based on data that has been published, the limitations of the public financial statements may also apply to this study. The management of working capital is critical to the success of any business. Because a large corporation's performance is influenced on how it manages its working capital and liquidity. As a result, today's financial managers spend the majority of their time managing current assets and obligations. There are many elements to liquidity, which is a vital role of the financial management; on the one hand, it ensures that the company's finances are in order, while on the other hand, it aids in boosting the company's profitability. A company with insufficient and poorly managed working capital would not be able to generate strong operating results. As a result, working capital should be sufficient to allow a company to run its operations without financial constraints as well as unexpected losses and financial disaster. Excessive working capital, on the other hand, may be unfavorable, as in the previous example, because unused money generates nothing. As a result, good working capital management is critical to guarantee that the amount spent in working capital is neither excessive nor insufficient.

### **3. Literature Review**

The literature review is a theoretical background for the thesis and will focus on the characteristics of the selected financial statements according to the Indian accounting standards. The literature review would explain selected methods of financial analysis as a base for the practical part of the thesis and outlines the characteristics of the Iron and Steel industry in India. As a result, the study attempted to examine the financial performance of a few Iron and Steel firms in India.

#### **3.1 The Indian accounting system**

Indian Accounting Standards is used by all Indian firms but not mandatory for Small and Medium sized enterprises and is issued and regulated by Accounting Standards Board (ASB) and it was established in 1977. The standards which were notified under Section 133 of the Companies Act 2013 were formulated with a goal of converge with the International Financial Reporting Standards (IFRS). Public accounting differs from private accounting. While the public sector focuses on service and openness in financial reporting, private enterprises focus on profit maximization and enhancing corporate value. Accounting for the public sector involves capturing, evaluating, categorizing, summing, conveying and analyzing financial data. India's current government accounting system is cash-based. The public sector is changing its accounting system to provide a transparent perspective of public finances. To retain worldwide credibility and openness, the country must follow international public sector accounting standards. India is gradually migrating to accrual accounting in the public sector. Only a few countries have embraced International Public Sector Accounting Standards (IPSAS), while many others have modified them.

Source: L, A.M., & P, A. (2020), 'A Conceptual Study on Public Sector Accounting System: Benefits and Challenges', VISION: Journal of Indian Taxation, vol. 7 , no. 1 , pp. 72-82.

#### **3.2 The mandatory financial statements in India**

A comprehensive set of 'Financial Statements' generally comprises a balance sheet, a profit and loss statement, a cash flow statement, and other statements and explanatory information. Their contents may also contain extra schedules and information based on or derived from such statements. Accountants agree that financial reporting in the form of financial statements is an important end-product of the accounting process. With growing separation between promoters and management of a public limited company and huge number of distributed shareholders, external financial reporting is becoming increasingly important in business. Similarly, current and potential investors/creditors rely heavily on external financial reports to make decisions. The adoption of correct accounting processes and procedures in the preparation of financial statements does not automatically assure their fairness unless all relevant financial information is revealed. Financial statement users, particularly those who are less familiar with accounting terminology, rely significantly on the disclosures provided in the financial statements to comprehend and analyses the financial information.

(Reserve Bank of India - Reports, 2021)

Source: Rbi.org.in. 2021. *Reserve Bank of India - Reports*. [online] Available at: <<https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?ID=50>> [Accessed 20 November 2021].

**The mandatory financial statements are:**

- Income Statement
- Balance Sheet
- Cash Flow Statement
- Statement of changes in Equity

**3.2.1 Income Statement**

The income statement is a financial statement that includes revenue, income, costs, expenses, profit, and losses for a certain time, generally a quarter or fiscal year. In other words, the income statement summarizes a company's financial performance over a certain time period. The statement calculates the amount of revenue earned and costs expended by a company for a certain reporting period, as well as any net profit or loss. These documents reveal a company's capacity (or inability) to produce profit via growing revenue, lowering costs, or both. Revenue, costs, profits, and losses are the four main components on the income statement.

An income statement's major function is to communicate to stakeholders the company's profitability and business operations; it also gives specific insights into the company's internals for comparison across other enterprises and industries.

Management can make choices based on income statements such as expanding into new territories, pushing sales, boosting manufacturing capacity.

<https://www.accountingtools.com/articles/2017/5/17/the-income-statement> , August 01, 2021

**3.2.2 Balance Sheet**

A balance sheet is a financial statement that shows the assets, liabilities, and shareholder equity of a corporation at a certain point in time. A report that outlines an entity's assets, liabilities and equity as of a specific date. Lenders, investors, and creditors commonly use it to evaluate a company's liquidity. A number of ratios obtained from a balance sheet may be used by investors to gain a sense of a company's financial health, including the debt-to-equity ratio and the Cash, Current / Working capital ratio, among others. A balance sheet contains information on a company's assets, liabilities, and shareholder equity. Assets and liabilities should always be equal, as should shareholder equity. A Balance Sheet's Components: Assets include both current and non-current assets. Current assets include cash and cash equivalents, marketable securities, accounts receivable, inventory, and prepaid costs. Non-current assets include property, plant, and equipment, long-term investments, and intangible assets. Accounts payable, interest payments, and current part of long-term debt are examples of current liabilities. Long-term liabilities can include things like long-term loans and borrowings, deferred tax obligations, and

long-term reserves, among other things. Shareholder equity is made up of things like shareholders equity, retained earnings, and additional paid-in capital, among other things.

<https://www.accountingtools.com/articles/2017/5/17/the-balance-sheet>, August 01, 2021

### **3.2.3 Cash Flow Statement**

The cash flow statement shows how much money is coming in and going out of the company. It focuses on the sorts of cash-generating and cash-using activities, such as operations, investments, and finance.

Inflows and outflows of cash and cash equivalents are referred to as cash flows.

Operating operations include the company's main revenue-generating activities as well as any other activity that aren't investing or financing.

The acquisition and sale of long-term assets and other investments that are not included in cash equivalents are referred to as investing operations.

Financing operations are those that result in changes in the quantity and composition of the owners' capital (including preference share capital in the case of a corporation) as well as the company's borrowings.

When combined with the other financial statements, a cash flow statement provides information that allows users to assess changes in an enterprise's net assets, financial structure (including liquidity and solvency), and ability to influence the amounts and timing of cash flows in order to adapt to changing circumstances and opportunities.

<https://www.accountingtools.com/articles/2017/5/17/statement-of-cash-flows-overview>

### **3.2.4 Statement of changes in Equity**

(According to Erich A. Helfert, a financial statement frequently presented by a corporation is an examination of the key changes in the shareholder's capital account or net worth within a certain time.) The reconciliation of the opening and closing balances of shareholder's equity is known as the Statement of Changes in Equity. It's a financial statement that summarises the transactions involving the shareholder's equity over the course of a fiscal year. The Statement of Equity gives specific information on changes in equity share capital over the course of an accounting period that is not available elsewhere in the financial statements. Also, when equity components are restated or applied retroactively in line with the IAS/Ind-AS, details of modifications and their impact are provided. Shareholders and investors will benefit from such information in making educated investment decisions.

<https://cleartax.in/s/statement-of-changes-in-equity>

### **3.3 Selected ratios of Financial Analysis**

Financial analysis is evaluating a company's performance and making recommendations for how it might improve in the future using financial data. Financial analysis is used to assess economic trends, formulate financial policy, develop long-

term company goals, and find potential investment projects or firms. (2019, Dr. V. Sugumar and Mrs. N. Prema)

The financial statements are evaluated using a variety of tools. Financial statement analysis entails using analytical tools and procedures to extract meaningful information from financial statements and other relevant data. Horizontal analysis, vertical analysis, and ratio analysis are three of the most widely utilized techniques. (Wild, 2008)

To get useful information about a firm, financial ratios are calculated using numerical numbers from financial statements. Ratios allow us to compare firms from various industries, both large and small, in order to determine their strengths and flaws. Liquidity, solvency, efficiency, profitability, market outlook, investment leverage, and coverage are the seven primary categories of financial ratios.

<https://corporatefinanceinstitute.com/resources/knowledge/finance/financial-ratios/>

**Vertical analysis** is a technique that entails looking at a single financial statement and expressing each item as a percentage of a large total. (Hermanson, Edwards, and Salmonson 1989, 781) Vertical analysis of an income statement reveals that each line item is represented as a percentage of sales, but vertical analysis of a balance sheet reveals that line item is represented as a percentage of the entire valuation (Patel, 2009).

**Horizontal analysis**, often known as trend analysis, is a technique for estimating a set of financial statement data across time. It examines the link between revenue and expense growth, or the increase in profits over the course of a year, as well as the expansion in a company's assets, liabilities, and capital. The oldest period is commonly regarded as the base period, and items on later period statements are compared to items on the base period's statements. (Joy Elly, 2017).

**Selected financial ratios used for the analysis of all three companies are:-**

**a. Cash ratio**

The cash ratio, also known as the cash coverage ratio, is a liquidity ratio that assesses a company's capacity to pay down current creditors entirely using cash and cash equivalents. The cash ratio is something that many creditors consider. They want to know if a firm has enough cash on hand to pay off all of its present debts when they are due. There are more current obligations than cash and cash equivalents if a company's cash ratio is less than one. When a company's cash ratio exceeds one, it means it has more cash and cash equivalents than current obligations.

<https://www.myaccountingcourse.com/financial-ratios/cash-ratio>

**b. Current Ratio**

The current ratio is a liquidity and efficiency ratio that assesses a company's capacity to repay short-term debts using current assets. This means that a corporation only has a certain amount of time to generate the finances necessary to pay off these debts. A lower current ratio than the industry norm might imply a higher risk of default

or trouble. Similarly, if a company's current ratio is unusually high relative to its peers, it suggests that management isn't making the best use of its assets. The corporation can decrease the locking up of money in working capital by optimising investments in current assets and by the level of current obligations, therefore improving the return on capital used in the business.

### **c. Return on Asset**

The most straightforward method of profitability analysis is to compare reported net profit (net income) to total assets on the balance sheet. The return on assets ratio, also known as the return on total assets, is a profitability ratio that compares net income to average total assets to determine the net income generated by total assets during a given time. To put it another way, the return on assets ratio, or ROA, assesses how well a corporation can manage its assets to generate profits over time. The return on total assets ratio compares the total assets of a firm to the amount of money it returns to its shareholders.

<https://www.investopedia.com/terms/r/returnonassets.asp> , 8<sup>th</sup> April 2021

### **d. Return on Equity**

Entire assets minus total liabilities equals shareholder equity. Shareholder equity is an accounting term that refers to the assets formed by the business's retained earnings and the owners' paid-in capital. The return on equity (ROE) is a measure of a company's profitability in proportion to its equity. The connection of net profit to equity, or total shareholders' investment, is used to calculate the return on the owners' investment.

<https://www.thebalance.com/return-on-equity-roe-357601> , 28th October 2021

## **3.4 Iron and Steel Industry in India**

At the time of independence in 1947, India had just three steel plants: Tata Iron and Steel, Indian Iron and Steel, and Visveswaraya Iron and Steel Ltd. Until 1947, the country had a modest but profitable steel industry, with a capacity of around 1 million tonnes that was entirely private. India has grown from a one million tonnes capacity at independence to the world's 2nd biggest producer of crude steel and sponge iron. The Indian steel industry has grown from obscurity to global recognition for product excellence. Since independence, the Indian steel sector has reacted to the difficulties of business cycle highs and lows. The first big shift occurred during the first three Five-Year Plans, when the state took over the iron and steel industries. A huge integrated steel mill was built in the public sector in Bhilai, Durgapur, Rourkela, and Bokaro between 1950 and 1970.

1. Capacity control measures: Licensing of capacity, reserve of large-scale capacity creation for public sector entities.
2. The integrated, large-scale producers in both the commercial and state sectors had price and distribution control while the remainder of the industry was free-market.
3. Quantitative constraints and high tariffs
4. To ensure balanced regional industrial growth.



## 5. Import limitations on technology, capital goods, finance, and exports

In terms of output and exports, India's steel sector is one of the world's largest. Steel demand has aided the growth of the Indian steel market and the expansion of Indian steel firms throughout the world in recent years. The steel business in India has bright prospects, thanks to rising demand for high-quality steel in the electronics, construction, and logistics industries. India is one of the world's top steel-producing nations. India's steel businesses, such as TATA Steel, SAIL, and JSW Steel, are among the world's top ten steel producers. TATA Steel and SAIL jointly own Asia's largest steel factory. India exported more than \$15 million worth of steel ingots in 2019, making it a major player in the global steel industry. After China, India's steel manufacturing enterprises are currently the world's second-largest crude steel producers. Steel demand from the building and car industries is expanding at a rapid rate, owing to India's increased steel output to fulfill global demand.

Due to strong local demand, India's steel sector has grown rapidly in the previous decade. Since 2008, output has increased by 75% while demand has increased by 80%. Simultaneously, steelmaking capacity has grown organically. The Indian government has long backed the steel sector and in 2017 launched the National Steel Policy, which forecasts the industry's growth until 2030–31. The policy's broad outline is as follows:

- At 85% capacity, crude steel output should reach 255 million tonnes by 2030–31.
- 230 million tonnes of finished steel, assuming a 10% yield loss for conversion of crude steel to finished steel - a 90% conversion ratio.
- Steel usage per capita is expected to climb to 160 kg.
- An extra INR 10 lakh crore is planned.

While the Indian government's 2017 National Steel Policy is a vision document, it highlights the steel industry's potential for expansion.

### India's Steel Industry in Numbers and Facts

1. In 2019, India's steel manufacturing capacity was 137.975 million tonnes (MT). With crude steel output of 111.2 MT in 2019, India surpassed Japan to become the world's second largest steel producer.

2. In 2019, India's finished steel consumption reached 97.54 MT, while crude steel and finished steel production climbed to 106.56 MT and 131.57 MT, respectively, in the same year.

3. India's crude steel output was 100.78 MT in FY 2020, while finished steel production was 94.01 MT.

4. In 2019, India exported 6.36 MT of steel, while its completed steel exports and imports were 7.78 MT and 6.39 MT, respectively, in FY 2020.

#### **4. Practical Part**

The practical part of this diploma thesis analyses the financial position (represented by the Balance sheet) and financial performance (represented by the Statement of profit or loss) in a chosen Indian company, TATA Steel, JSW Steel and Steel Authority of India (SAIL) by using vertical and horizontal analysis of the selected financial statements of the company and calculating selected ratios of financial analysis and figures calculated is in Crores which is Indian numerical system. One crores equals to ten million in International numerical system.

##### **4.1 Information about TATA Steel**

Tata Steel (formerly Tata Iron & Steel Company) was founded in 1907. It is the country's largest integrated steel factory. Products include flat and long steel, tubes, bearings, ferro-alloys, minerals, and freight handling services. World Steel Dynamics placed Tata Steel top (for the second time) among 23 world class steel firms in June 2005. Tata Steel has a strong competitive advantage with its factory in Jamshedpur (Jharkhand) and captive iron ore mines and collieries nearby. The main facility in Jamshedpur produces 5 MTPA flat and long products, whereas NatSteel Asia, recently bought in Singapore, produces 2 MTPA steel in Singapore, China, Philippines, Malaysia, and Vietnam. In addition to its core steel division, Tata Steel's activities are organized into key profit areas like tubes and growth shops. The firm has been recognized for its operational efficiency, quality standards, labour relations, corporate social responsibility, corporate governance, leadership, knowledge management, and other critical features at national and worldwide forums. It has continuously modified its product portfolio to match shifting market realities. Despite its development and modernization efforts, it has maintained excellent levels of municipal and civic amenities in its planned township at Jamshedpur. Tata Sons, together with other Tata Group entities, own 26.72 percent of the corporation. The general public owns 26.98% of the corporation, while foreign institutional investors and Indian financial institutions own 40.89%.

##### **Brands and goods**

A wide range of Tata Steel products are available, from hot and cold rolled coils to galvanized sheets and wire rods.

Cars, white goods, construction and infrastructure markets are targeted. • Tata Wiron (wire rods for farming and fencing), Tata Steelium (cold rolled steel for auto ancillaries and general engineering), Tata Shaktee (corrugated galvanized sheets for rural house builders), Tata Tiscon (re-bars for individual house builders semi-urban), Tata Pipes (pipes for individual house builders and farming) (agricultural equipment for farming and construction segment).

The firm has concentrated on expanding sales of its branded items, which have increased in proportion to overall sales during the previous few years.

##### **Financial Analysis**

Increased capacity and a rise in steel pricing have boosted the company's income. In addition to its rich product mix (high-grade value-added cold-rolled products), the

company has enhanced operational efficiency (reduced raw material consumption, coke rate, specific refractory usage and business process reengineering). While increased input prices have impacted steel producers globally, the business has been able to benefit from its vertical integration by using its own mines and collieries. The company's finances have improved as a result of employee rightsizing and increased productivity through training, modernization, and automation.

#### **4.2 Information about JSW Steel**

JSW Steel Ltd. (JSW Steel), the flagship firm of the US\$ 13 billion JSW Group, is India's top crude steel producer. The firm exports to over 100 countries and has a large flat and lengthy product line. They make galvanized goods as well as tinsplate, non-grain oriented electrical steel, pre-painted galvanized products, TMT bars, wire rods, rails, grinding balls, and special steel bars. It is a major manufacturer and exporter of coated flat steel in India. JSW Steel now has 18 MTPA of crude steel capacity in India, 12.5 MTPA of flat products and 5.5 MTPA of long products. The Indian facilities are strategically positioned near raw material suppliers and/or well accessible via ports and railroads, allowing the Company to keep costs low. JSW Steel has overseas production plants in Baytown, Texas, Ohio, USA, and Italy. Baytown features a 1.2 MNTPA plate mill and a 0.55 MNTPA pipe mill. The Ohio plant has a 3 MNTPA hot rolling mill. It has a 1.5 MNTPA Electric Arc Furnace backward integration (EAF). With 1.3 MTPA capacity, the Italian plant produces long items including railway lines, bars and wire rods. JSW Steel wants to raise its domestic steel capacity to 45 MTPA over the next decade.

##### **Manufacturing and retail front-end integration**

It is an integrated manufacturer of a wide range of items using leading-edge technology. It boasts one of the industry's lowest conversion costs due to efficient operations, strong employee productivity, strategic location, and cutting-edge production facilities. Sintering and pelletisation factories, steel manufacturing and downstream value addition capabilities such as manufacture of cold rolled, galvanised and galvalume, colour-coated and tin plate products are all part of the JSW Steel Group. A consistent and cost-effective supply of raw materials and finished steel to the market is a natural competitive advantage for JSW Steel. Private power plants supply most of the Company's domestic production. The captive power generation at Vijayanagar Works is 865 MW, Dolvi Works has 67 MW and a long-term power purchase agreement with JSW Energy Limited, and Salem Works has 97 MW. The captive power plants generate 45-50 percent of their total capacity (1,029 MW) from waste gases and heat generated by operations, an ecologically beneficial and cost-effective source. The company's fully owned subsidiary JSW Industrial Gases Private Limited has utility and industrial gas agreements (previously known as JSW Praxair Oxygen Company Private Limited). JSW Steel won six iron ore mines in Karnataka in auctions held between October 2016 and October 2018. These mines started production in 2019-20. The Company was also named a 'preferred bidder' for seven more iron ore mines (three in Karnataka and four in Odisha) in the 2019-20 auctions held by the governments of Karnataka and Odisha.

A Mine Development and Production Agreement as well as Lease Agreements have been inked. The Company's activities in Odisha began on July 1, 2020. During the year, the Company also began production at the third newly purchased mine in Karnataka. This share increased to 35% in FY 2020-21, with captive iron ore output of 18.2 MT.

#### Technological Skills

JSW Steel is a technology innovator in India. In order to achieve excellent quality at low cost, the Company has used none recovery coke ovens, blast furnaces, DRI, twin shell Conarc, Corex, and Galvalume technologies, among others. At Vijayanagar Works, Corex is combined with blast furnace technology. Furthermore, the Company's Vijayanagar beneficiation facility can upgrade low-grade iron ore to higher-grade iron ore, providing for considerable cost savings and unit efficiency. Dolvi Works is the first plant in India to use Conarc technology for steelmaking and Compact Strip Production for hot rolled coil production. The use of advanced technologies allows the Company to blend coking coal of varying quality for coke production, produce pellets and sinter in iron ore agglomeration - use coal fines, generate power from waste heat, and produce Galvalume, all of which reduce costs. These modern technologies also allow the Company to take advantage of market variations in raw material availability and pricing, resulting in increased efficiency and operational stability.

### **4.3 Information about Steel Authority of India (SAIL)**

SAIL may be traced back to the early years of a rising nation, India. The founders of modern India laboured with a vision after independence: to create the groundwork for the country's fast industrialization. The steel industry was supposed to drive economic growth. On January 19, 1954, Hindustan Steel Limited was established. Hindustan Steel (HSL) was created with the intention of managing only one mill in Rourkela. The Iron and Steel Ministry did the preparatory work on the Bhilai and Durgapur Steel Plants. The management and administration of these two steel factories was also handed to Hindustan Steel in April 1957. Originally, the registered office was in New Delhi. In July 1956, it relocated to Calcutta, and then to Ranchi in December 1959.

By the end of December 1961, the 1 MT stages of the Bhilai and Rourkela Steel Plants were completed. After inauguration of the Wheel & Axle factory, the 1 MT phase of the Durgapur Steel Plant was completed in January 1962. HSL increased their crude steel output from 1.58 MT in 1959-60 to 1.6 MT in 1970. In January 1964, a new steel company, Bokaro Steel Limited, was formed to build and run the steel mill in Bokaro. The Wire Rod Mill was commissioned in September 1967, completing the second phase of the Bhilai Steel Plant. The Tandem Mill, the final unit of Rourkela's 1.8 MT phase, was commissioned in February 1968, while the 1.6 MT stage of Durgapur Steel Plant was completed in August 1969 when the Furnace in SMS was commissioned. With the completion of the 2.5 MT stage at Bhilai, the 1.8 MT stage at Rourkela, and the 1.6 MT stage at Durgapur, HSL's total crude steel production capacity was increased to 3.7 MT in 1968-69, and then to 4 MT in 1972-

73.

#### Holding Corporation

To develop a new paradigm for managing industry, the Ministry of Steel and Mines developed a policy statement. On December 2, 1972, the policy statement was submitted to Parliament. The idea of forming a holding company to control inputs and outputs under one roof was proposed on this premise. Steel Authority of India Ltd was formed as a result of this. The business, which was established on January 24, 1973 with a ₹ 2000 crore authorised capital, was tasked with managing five integrated steel mills in Bhilai, Bokaro, Durgapur, Rourkela, and Burnpur, as well as the Alloy Steel Plant and the Salem Steel Plant. SAIL was reorganized as an operational corporation in 1978.

SAIL has been essential in creating a strong infrastructure for the country's industrial growth since its beginnings. Furthermore, it has made a significant contribution to the advancement of technological and management competence. By consistently delivering inputs to the consuming industry, it has ignited the secondary and tertiary waves of economic expansion.

**Table 1: Vertical Analysis of Assets of TATA Steel**

<b>Standalone Statement of Financial Position of TATA Steel (₹ crores)</b>								
<b>Particulars</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>ASSETS</b>								
<b>Non-Current Assets</b>								
Property, plant and equipment	70,942.90	56.30	70,416.82	51.21	66,392.55	44.15	64,032.32	38.80
Capital work-in-progress	5,671.50	4.53	5,686.02	4.14	8,070.41	5.37	10,057.18	6.09
Intangible assets	786.18	0.63	805.02	0.59	727.72	0.48	839.33	0.51
Intangible assets under development	31.77	0.03	110.27	0.08	176.64	0.12	408.79	0.25
Investments in subsidiaries, associates and joint ventures	3,666.24	2.93	4,437.76	3.23	26,578.41	17.67	28,444.61	17.24
Financial Assets								0.00
Investments	5,970.32	4.77	34,491.49	25.09	20,282.50	13.49	22,621.66	13.71
Loans	213.50	0.17	231.16	0.17	199.26	0.13	7,509.33	4.55
Derivative assets	12.13	0.01	9.05	0.01	162.46	0.11	42.52	0.03
Other financial assets	21.21	0.02	310.65	0.23	60.42	0.04	91.66	0.06
Income tax assets (net)	1,043.84	0.83	1,428.38	1.04	1,557.82	1.04	1,645.10	1.00
Other assets	2,140.84	1.71	2,535.98	1.84	2,062.07	1.37	1,681.22	1.02
<b>Total Non-Current Assets</b>	<b>90,470.43</b>	<b>72.31</b>	<b>1,20,462.78</b>	<b>87.61</b>	<b>1,30,383.37</b>	<b>86.70</b>	<b>1,41,279.69</b>	<b>85.61</b>
<b>Current Assets</b>								0.00
Inventories	11,023.41	8.81	11,255.34	8.19	10,716.66	7.13	8,603.79	5.21
Financial Assets								0.00
Investments	14,640.37	11.70	477.47	0.35	3,235.16	2.15	6,404.46	3.88
Trade receivables	1,875.63	1.50	1,363.04	0.99	1,016.73	0.68	3,863.31	2.34
Cash and Cash equivalents	4,588.89	3.67	544.85	0.40	993.64	0.66	1,501.71	0.91
Other balances with Bank	107.85	0.09	173.26	0.13	233.33	0.16	170.00	0.10
Loans	74.13	0.06	55.92	0.04	1,607.32	1.07	1,555.95	0.94
Derivatives assets	30.07	0.02	14.96	0.01	209.96	0.14	66.93	0.04
Other financial assets	480.62	0.38	940.76	0.68	230.41	0.15	351.54	0.21
Other Assets	1,822.94	1.46	2,209.98	1.61	1,715.92	1.14	854.99	0.52
<b>Total Current Asset</b>	<b>34,643.91</b>	<b>27.69</b>	<b>17,035.58</b>	<b>12.39</b>	<b>19,959.03</b>	<b>12.37</b>	<b>23,372.68</b>	<b>14.16</b>
<b>Total Assets</b>	<b>125,114.34</b>	<b>100</b>	<b>137,498.36</b>	<b>100</b>	<b>150,392.56</b>	<b>100</b>	<b>1,65,035.99</b>	<b>100</b>

Source: Own processing based on Standalone Statement of Financial Position of TATA Steel (FY 2018 to 2021)

The Table 1 representing the Standalone Statement of Financial Position of TATA Steel which shows the proportion changes of non-current assets and current assets from 2018 to 2021. Some of the most significant changes can be observed in Property, Plant and Equipment, Investments in subsidiaries, associates and joint ventures and other Financial Investments.

From year 2018 to 2021 we can see that Property, Plant and Equipment take the biggest percentage from the non-current and total assets (In 2018 - 56.70%, 2019 - 51.21%, 2020 - 44.15% and 2021 - 38.80%). There has been constant decrease from year to year; the company had ₹ 70,942.90 crores in 2018, ₹ 70,416.82 in 2019, ₹66,392.55 in 2020 and ₹ 64,032.32 in 2021.

Investments in subsidiaries, associates and joint ventures we can see that (In 2018 - 2.93%, 2019 - 3.23%, 2020 - 17.67% and 17.24% in 2021) from 2018 until 2019 has slight increase but from 2019 to 2020 there was a significant increase the amount increased from ₹ 4,437.76 crores to ₹26,578.41 crores and very slight decrease from 2020 to 2021. Long term loans to subsidiaries, associates and joint ventures contributed 4.55% of the total assets in 2021.

Other Financial Non-current Investments (In 2018 - 4.77%, 2019 - 25.09%, 2020 - 13.49% and 2021 – 13.71%) from 2018 until 2019 has slight increase but from 2018 to 2019 company has invested huge on other financial investment such as preference shares, debentures and bonds and then, the amount dropped from ₹ 34,491.49 crores in 2019 to ₹20,282.50 crores in 2020 and also incremental contribution of 13.71% from the total assets in 2021.

In the current assets, Trade receivables constantly decreased slightly from 2018 to 2020 but in 2021 the contribution to Trade receivables was 2.34% which increased three times than the previous year. Cash and cash equivalents was 3.67% in 2018 and remained below 1% from 2019 to 2021. Rest all the other current asset items did not have remarkable proportional change.

The total non-current assets have been constantly increasing from 2018 to 2021. Current asset contributed 27.69% of the total contribution in 2018 which was highest among all other years; in 2021 the contribution was 14.16% of Total Assets. The current asset dropped from 2018 to 2019 and had slight increase from 2019 to 2021. Hence, the total assets have increasing constantly from 2018 to 2021 due to the fact that TATA Steel has increased its investment and provided long term loans to its subsidiaries, associates and joint ventures.

**Table 2: Vertical Analysis of Equity and Liabilities of TATA Steel**

<b>Standalone Statement of Financial Position of TATA Steel (₹ crores)</b>								
<b>Particulars</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>EQUITY</b>								
Equity Share Capital	1,146.12	0.92	1,146.12	0.83	1,146.13	0.76	1,198.78	0.73
Hybrid Perpetual Securities	2,275.00	1.82	2,275.00	1.65	2,275.00	1.51	775.00	0.47
Other Equity	60,368.72	48.25	69,308.59	50.41	73,416.99	48.82	89,293.33	54.11
<b>Total Equity</b>	<b>63,789.84</b>	<b>50.99</b>	<b>72,729.71</b>	<b>52.89</b>	<b>76,838.12</b>	<b>51.09</b>	<b>91,267.11</b>	<b>55.30</b>
<b>LIABILITIES</b>								
<b>Non-Current Liabilities</b>								
<b>Financial Liabilities</b>								
Borrowings	24,568.95	19.64	26,651.19	19.38	31,381.96	20.87	27,313.80	16.55
Derivative Liabilities	70.08	0.06	59.82	0.04	122.55	0.08	71.20	0.04
Other financial liabilities	19.78	0.02	125.07	0.09	293.59	0.20	413.66	0.25
Provisions	1,961.21	1.57	1,918.18	1.40	2,113.56	1.41	2,543.94	1.54
Retirement benefit Obligations	1,247.73	1.00	1,430.35	1.04	2,224.44	1.48	2,087.86	1.27
Deferred income	1,365.61	1.09	747.23	0.54	-	-	-	
Deferred Tax liabilities (net)	6,259.09	5.00	7,807.00	5.68	5,862.28	3.90	6,111.70	3.70
Other liabilities	224.71	0.18	436.16	0.32	684.76	0.46	5,913.40	3.58
<b>Total Non-current liabilities</b>	<b>35,717.16</b>	<b>28.55</b>	<b>39,715.00</b>	<b>28.88</b>	<b>42,683.14</b>	<b>28.38</b>	<b>44,455.56</b>	<b>26.94</b>
<b>Current Liabilities</b>								
<b>Financial Liabilities</b>								
Borrowings	669.88	0.54	8.09	0.01	7,857.27	5.22	-	-
Trade Payables	11,242.75	8.99	10,969.56	7.98	10,600.96	7.05	10,638.59	6.45
Derivatives Liabilities	16.41	0.01	139.57	0.10	81.69	0.05	69.39	0.04
Other financial liabilities	6,541.40	5.23	6,872.35	5.00	5,401.55	3.59	5,274.11	3.20
Provisions	735.28	0.59	778.23	0.57	663.86	0.44	1,074.43	0.65
Retirement benefit obligations	90.50	0.07	102.12	0.07	106.61	0.07	116.10	0.07
Deferred Income	-		-		6.15	0.00	34.44	0.02
Income tax liabilities (net)	454.06	0.36	358.14	0.26	277.26	0.18	4,093.26	2.48
Other Liabilities	5,857.06	4.68	6,365.59	4.63	5,875.95	3.91	8,013.00	4.86
<b>Total Current Liabilities</b>	<b>25,607.34</b>	<b>20.47</b>	<b>25,593.65</b>	<b>18.61</b>	<b>30,871.30</b>	<b>20.53</b>	<b>29,313.32</b>	<b>17.76</b>
<b>Total Liabilities</b>	<b>125,114.34</b>	<b>100</b>	<b>137,498.36</b>	<b>100</b>	<b>150,392.56</b>	<b>100</b>	<b>1,65,035.99</b>	<b>100.00</b>

Source: Own processing based on Standalone Statement of Financial Position of TATA Steel (FY 2018 to 2021)



Table 2 represents the proportion changes of Equity, non-current liabilities and current liabilities from 2018 to 2021. Some of the highest contribution from the total liabilities can be observed in Other Equity, Long-term borrowings and Trade payables.

There have been significant changes and holds largest part of total equity and liabilities in the item Other Equity which include a) Retained Earnings, b) Cash hedge reserves, c) Securities premium and general reserves (in 2018 ₹ 60,789.94 which is 48.25% of the total liabilities, in 2019 ₹ 69,308.59 which is 50.41% of the total liabilities, in 2020 ₹ 73,416.99 which is 48.82% of the total liabilities and in 2021 ₹ 89,293.33 which is 54.11% of the total liabilities).

And second largest part is taken by Long-term Borrowings which (in 2018 ₹ 24,568.95 which is 19.64% of the total liabilities, in 2019 ₹ 26,651.19 which is 19.38% of the total liabilities, in 2020 ₹ 31,381.96 which is 20.87% of the total liabilities and in 2021 ₹ 27,313.8 which is 16.55% of the total liabilities) the amount borrowed has been constantly increasing.

The third largest part is taken by current liabilities item- Trade payable which arose from 2017 to 2018 from ₹10,717.44 crores to ₹11,242.75 crores. And then gradually fell from ₹11,242.75 crores in 2018 to ₹10,600.96 in 2020. And short-term borrowings arose from ₹8.09 crores in 2019 to ₹7,857.27 crores in 2020.

Horizontal Analysis of Financial statements (Balance Sheet, Income Statement) of TATA Steel. I have used this analysis to notice the percentage change of all the line items year after year and used chain year for the horizontal analysis. This analysis helps us to depict the growth or decline of that item's financial performance and also whole company's financial position. It is also known as trend analysis as we can a company's trend and pattern of growth and decline.

<https://www.investopedia.com/terms/h/horizontalanalysis.asp>

**Table 3: Horizontal Analysis of Assets of TATA Steel**

<b>Standalone Statement of Financial Position of TATA Steel (₹ crores)</b>									
<b>Particulars</b>	<b>31.3.2017</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>ASSETS</b>									
<b>Non-Current Assets</b>									
Property, plant and equipment	71,778.97	70,942.90	-1.16	70,416.82	-0.74	66,392.55	-5.71	64,032.32	-3.55
Capital work-in-progress	6,125.35	5,671.50	-7.41	5,686.02	0.26	8,070.41	41.9	10,057.18	24.62
Intangible assets	788.18	786.18	-0.25	805.02	2.40	727.72	-9.60	839.33	15.34
Intangible assets under development	36.81	31.77	-13.6	110.27	247.1	176.64	60.2	408.79	131.43
Investments in subsidiaries, associates and joint ventures	3,397.83	3,666.24	7.90	4,437.76	21.04	26,578.41	498.9	28,444.61	7.02
<b>Financial Assets</b>									
Investments	4,958.07	5,970.32	20.42	34,491.49	477.7	20,282.50	-41.20	22,621.66	11.53
Loans	211.97	213.50	0.72	231.16	8.27	199.26	-13.80	7,509.33	3668.61
Derivative assets	0.12	12.13	-	9.05	-25.39	162.46	1695	42.52	-73.83
Other financial assets	79.49	21.21	-73.3	310.65	1364	60.42	-80.55	91.66	51.70
Income tax assets (net)	867.75	1,043.84	20.29	1,428.38	36.84	1,557.82	9.06	1,645.10	5.60
Other assets	3,108.67	2,140.84	-31.1	2,535.98	18.46	2,062.07	-18.69	1,681.22	-18.47
<b>Total Non-Current Assets</b>	<b>91,335.01</b>	<b>90,470.43</b>	<b>-0.95</b>	<b>1,20,462.78</b>	<b>33.15</b>	<b>1,30,383.37</b>	<b>8.24</b>	<b>1,41,279.69</b>	<b>8.36</b>
<b>Current Assets</b>									
Inventories	10,236.85	11,023.41	7.68	11,255.34	2.10	10,716.66	-4.79	8,603.79	-19.72
<b>Financial Assets</b>									
Investments	5,309.81	14,640.37	175.7	477.47	-96.74	3,235.16	577.5	6,404.46	97.96
Trade receivables	2,006.52	1,875.63	-6.52	1,363.04	-27.33	1,016.73	-25.41	3,863.31	279.97
Cash and Cash equivalents	905.21	4,588.89	406.9	544.85	-88.13	993.64	82.37	1,501.71	51.13
Other balances with Bank	65.10	107.85	65.67	173.26	60.65	233.33	34.67	170.00	-27.14
Loans	27.14	74.13	173.1	55.92	-24.56	1,607.32	2774	1,555.95	-3.20
Derivatives assets	6.26	30.07	380.3	14.96	-50.23	209.96	1303	66.93	-68.12
Other financial assets	315.06	480.62	52.55	940.76	95.74	230.41	-75.51	351.54	52.57
Other Assets	1,238.45	1,822.94	47.20	2,209.98	21.23	1,715.92	-22.36	854.99	-50.17
<b>Total Current Assets</b>	<b>20,110.40</b>	<b>34,643.91</b>	<b>72.27</b>	<b>17,035.58</b>	<b>-50.83</b>	<b>19,959.03</b>	<b>17.16</b>	<b>23,372.68</b>	<b>17.10</b>
<b>Asset held of Sale</b>	<b>-</b>	<b>-</b>		<b>-</b>		<b>50.16</b>			
<b>Total Assets</b>	<b>111,465.41</b>	<b>125,114.34</b>	<b>12.24</b>	<b>137,498.36</b>	<b>9.90</b>	<b>150,392.56</b>	<b>9.38</b>	<b>1,65,035.99</b>	<b>9.74</b>

Source: Own processing based on the Standalone Statement of Financial Position of TATA Steel (FY 2017-2021)

Table 3 shows the horizontal analysis of assets from 2018 to 2020 keeping 2017 as the base year for calculation the percentage change in the assets of 2018. Basically the previous year becomes the base year for calculation of the next year.

It can be seen that Property, Plant and Equipment had dropped with -1.16 % in 2018 from 2017 and then continuously shrinking from 2018 to 2021 with -3.55% that means TATA Steel has not been investing largely on it and the value of these non-current assets depreciated as they aged.

Investments increased from 7.90 % in 2018 to 498.91% in 2020 and again increased by 7.02 % in 2021 as the company had largely invested into subsidiaries, associates and joint ventures with a desire to gain access to another market, increase investment assets or take ownership stake in other companies. The company has invested hugely on equity on its subsidiaries, associates and joint venture companies like Tata BlueScope Steel Private Limited, Jamshedpur Continuous Annealing & Processing Company Private Limited, Bamnival Steel Limited and Bhubaneswar Power Private Limited etc.

The trend in the percentage change in other Investments we see from 2017 to 2021 is that TATA Steel had invested a lot in 2019 which 477.72% more than 2018 and reduced their investment by -41.20% in 2020 and again increased by 11.53% in 2021.

The incremental change in the Inventory from ₹ 10,236.85 crores in 2017 to ₹11,255.34 crores in 2019 and then declined by -4.79% in 2020 and also further drop of -19.72% in 2021 which shows that the company is unable to convert its inventory into cash as quickly as it did in the past years.

The Short-term Loans given to its subsidiaries and joint ventures, loan primarily given to employees increased from ₹55.92 crores in 2019 to ₹1,607 crores 2020 and dipped by ₹ 1,555.95 crores in 2021.

The total current assets percentage change is 72.27% in 2018, -50.83% in 2019, 17.16% in 2020 and 17.10% in 2021. The total non-current assets percentage change is -0.95% in 2018, 33.15% in 2019, 8.24% in 2020 and 8.36% in 2021. We can assume that 2020, 2021 was wealthier year than 2019 as both non-current and current asset percentage change increased because of the huge investments the company made.

**Table 4: Horizontal Analysis of Equity and Liabilities of TATA Steel**

<b>Standalone Statement of Financial Position of JSW Steel (₹ crores)</b>									
<b>Particulars</b>	<b>31.3.2017</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>EQUITY</b>									
Equity share capital	971.41	1,146.12	17.99	1,146.12	0.00	1,146.13	0.00	1,198.78	4.59
Hybrid Perpetual Securities	2,275.00	2,275.00	0.00	2,275.00	0.00	2,275.00	0.00	775.00	-65.93
Other Equity	48,687.60	60,368.72	23.99	69,308.59	14.81	73,416.99	5.93	89,293.33	21.62
<b>Total Equity</b>	<b>51,934.01</b>	<b>63,789.84</b>	<b>22.83</b>	<b>72,729.71</b>	<b>14.01</b>	<b>76,838.12</b>	<b>5.65</b>	<b>91,267.11</b>	<b>18.78</b>
<b>Non-current liabilities</b>									
<b>Financial liabilities</b>									
Borrowings	24,694.37	24,568.95	-0.51	26,651.19	8.48	31,381.96	17.75	27,313.80	-12.96
Derivative liabilities	179.33	70.08	-60.9	59.82	-14.6	122.55	104.8	71.20	-41.90
Other financial liabilities	18.22	19.78	8.56	125.07	532.3	293.59	134.74	413.66	40.90
Provisions	2,024.74	1,961.21	-3.14	1,918.18	-2.19	2,113.56	10.19	2,543.94	20.36
Retirement benefit obligations	1,484.21	1,247.73	-15.9	1,430.35	14.64	2,224.44	55.52	2,087.86	-6.14
Deferred Income	1,885.19	1,365.61	-27.5	747.23	-45.2	-	-	-	-
Deferred tax liabilities (net)	6,111.27	6,259.09	2.42	7,807.00	24.73	5,862.28	-24.91	6,111.70	4.25
Other non-current liabilities	77.74	224.71	189.1	436.16	94.10	684.76	57.00	5,913.40	763.57
<b>Total non-current liabilities</b>	<b>36,475.07</b>	<b>35,717.16</b>	<b>-2.08</b>	<b>39,715.00</b>	<b>11.19</b>	<b>42,683.14</b>	<b>7.47</b>	<b>44,455.56</b>	<b>4.15</b>
<b>Current liabilities</b>									
<b>Financial liabilities</b>									
Borrowings	3,239.67	669.88	-79.3	8.09	-98.7	7,857.27	9703	-	-
Trade Payables	10,717.44	11,242.75	4.90	10,969.56	-2.43	10,600.96	-3.36	10,638.59	0.35
Derivative liabilities	270.17	16.41	-93.3	139.57	750.5	81.69	-41.47	69.39	-15.06
Other financial liabilities	4,062.35	6,541.40	61.03	6,872.35	5.06	5,401.55	-21.4	5,274.11	-2.36
Provisions	700.60	735.28	4.95	778.23	5.84	663.86	-14.70	1,074.43	61.85
Retirement benefit obligations	90.50	90.50	0.00	102.12	12.84	106.61	4.40	116.10	8.90
Deferred Income	-	-	-	-	-	6.15	-	34.44	460.00
Income tax liabilities (net)	465.72	454.06	-2.50	358.14	-21.1	277.26	-22.58	4,093.26	1376.33

Other current liabilities	3,543.80	5,857.06	65.28	6,365.59	8.68	5,875.95	-7.69	8,013.00	36.37
<b>Total current liabilities</b>	<b>23,056.33</b>	<b>25,607.34</b>	<b>11.06</b>	<b>25,593.65</b>	<b>-0.05</b>	<b>30,871.30</b>	<b>20.62</b>	<b>29,313.32</b>	<b>-5.05</b>
<b>Total Liabilities</b>	<b>1,11,465.41</b>	<b>1,25,114.34</b>	<b>12.24</b>	<b>1,37,498.36</b>	<b>9.90</b>	<b>150,392.56</b>	<b>9.38</b>	<b>1,65,035.99</b>	<b>9.74</b>

Source: Own processing based on the Standalone Statement of Financial Position of TATA Steel (FY 2017-2021)

Table 4 shows the horizontal analysis of Equity and Liabilities from 2018 to 2021 keeping 2017 as the base year for calculation the percentage change in the assets of 2017. Basically the previous year becomes the base year for calculation of the next year.

Other Equity holds the highest part of the Total Equity which was ₹51,934.01 crores in 2017 and constantly increasing with 23.99%, 14.81%, 5.93% and 18.78% in 2018, 2019, 2020 and 2021 respectively.

Long term Borrowings is in fluctuating trend; dropped in 2018 and grew in 2019, 2020 and again dropped in 2021. In 2020, it was ₹31,381.96 which is 17.75% of the amount of borrowings in 2019 which relatively quite high as compared to the change in past years. Short term Borrowings had been significantly low during 2018, 2019 but has risen to ₹7,857.27 crores in 2020. During 2021, the company paid out all its short term borrowings and which is very good for the company and shows their financial strength in paying out its short term debts.

For Trade payables, in 2018 percentage increase was 4.90% from 2017 and which was brought down to -2.43% in 2019, -3.36% in 2020 we can say that the company paying off prior debts faster than its purchases of raw materials and etc. made on credit until 2020 but the trade payable increased slightly by 0.35% in 2021.

The Total Equity percentage change from 2017 is 22.83% in 2018, 14.01% in 2019, 5.65% in 2020 and 18.78% in 2021. The total non-current liabilities percentage change is -2.08% in 2018, 11.19% in 2019, 7.47% in 2020 and 4.15% in 2021. The total current liabilities percentage change is 11.06% in 2018, -0.05% in 2019, 20.62% in 2020 and -5.05% in 2021.

**Table 5: Horizontal Analysis of Income Statement of TATA Steel**

<b>Standalone Statement of Income of TATA Steel (₹ crores)</b>									
<b>Particulars</b>	<b>31.3.2017</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
Revenue from operations	53,260.96	60,519.37	13.63	70,610.92	16.67	60,435.97	-14.4	64,869.00	7.34
Other Income	414.46	763.66	84.25	2,405.08	214.9	404.12	-83.2	637.89	57.85
<b>Total Income</b>	<b>53,675.42</b>	<b>61,283.03</b>	<b>14.17</b>	<b>73,016.00</b>	<b>19.15</b>	<b>60,840.99</b>	<b>-16.6</b>	<b>65,506.89</b>	<b>7.67</b>
<b>Expenses</b>									
Raw material consumed	12,496.78	16,877.63	35.06	19,840.29	17.55	17,407.03	-12.3	13,868.60	-20.33
Purchases of finished, semi-finished and other products	881.18	647.21	-26.5	1,807.85	179.3	1,563.10	-13.5	1,146.05	-26.68
Changes in stock of finished goods, work-in-progress and stock-in-trade	(1,329.65)	545.36	-141	(554.33)	-201	(564.40)	1.82	1,464.12	-359.41
Employee benefits expenses	4,605.13	4,828.85	4.86	5,131.06	6.26	5,036.62	-1.84	5,198.82	3.22
Finance costs	2,688.55	2,810.62	4.54	2,823.58	0.46	3,031.01	7.35	3,393.84	11.97
Depreciation and amortization expenses	3,541.55	3,727.46	5.25	3,802.96	2.03	3,920.12	3.08	3,987.32	1.71
Other expenses	24,949.09	22,178.02	-11.1	24,622.81	11.02	23,803.18	-3.33	22,747.30	-4.44
<b>Total Expenses</b>	<b>47,615.11</b>	<b>51,615.15</b>	<b>8.40</b>	<b>56,674.52</b>	<b>9.80</b>	<b>52,525.53</b>	<b>-7.32</b>	<b>51,806.05</b>	<b>-1.37</b>
<b>Profit before exceptional items and tax</b>	<b>6,060.31</b>	<b>10,004.54</b>	<b>65.08</b>	<b>16,341.48</b>	<b>63.34</b>	<b>8,314.56</b>	<b>-49.1</b>	<b>15,022.08</b>	<b>80.67</b>
<b>Exceptional Items</b>	(703.38)	(3,366.29)	378.59	(114.23)	-96.6	(1,703.58)	1391	2,773.	-262.7
<b>Profit before tax</b>	<b>5,356.93</b>	<b>6,638.25</b>	<b>23.93</b>	<b>16,227.25</b>	<b>144.4</b>	<b>6,610.98</b>	<b>-59.3</b>	<b>17,795.13</b>	<b>169.2</b>
<b>Tax Expenses</b>									
Current Tax	1,400.54	1,586.78	13.30	6,297.11	296	1,787.95	-17.6	3,949.05	120.87
Deferred Tax	511.84	881.92	72.30	(603.05)	-168	(1,920.77)	218.5	239.46	-112.47
<b>Total Tax Expenses</b>	<b>1,912.38</b>	<b>2,468.70</b>	<b>29.09</b>	<b>5,694.06</b>	<b>130.6</b>	<b>(132.82)</b>	<b>-102</b>	<b>4,188.51</b>	<b>-3253</b>
<b>Profit for the year</b>	<b>3,444.55</b>	<b>4,169.55</b>	<b>21.05</b>	<b>10,533.19</b>	<b>152.6</b>	<b>6,743.80</b>	<b>-35.9</b>	<b>13,606.62</b>	<b>101.7</b>

Source: Own processing based on the Standalone Statement of Financial Position of TATA Steel (FY 2017-2021)

Table 5 shows the horizontal analysis of Income Statement from 2018 to 2021 keeping 2017 as the base year for calculation the percentage change in the Revenues, expenses, profit/loss and total taxes of 2018. And 2018 becomes the base year for 2019, 2020 and finally 2020 base year for 2021 for the comparison in the same way as we did for horizontal analysis of assets, equity and liabilities.

From our analysis we find that during 2018 the revenue from operations increased by 13.63% and decreased by -14.41% in 2020 and increase of 7.34% in 2021. Other incomes also fell down from ₹ 2,405.08 crores to ₹ 404.12 crores which is 83.20%

highest drop ever since last 3 years but surprisingly increased by ₹ 637.89 crores and which is 57.85% in 2021.

Well, simultaneously total expenses also dropped from ₹ 56,674.52 crores to ₹ 51,806.05 crores which is -1.37% in 2021. TATA Steel has done quite well in reducing the expenses.

The total taxes expenses was highest during 2021 ₹ 4,188.51 crores, TATA steel paid huge taxes from the profits it made during the year, current tax was just doubled from the previous year.

The net profit grew from ₹ 3,444.55 crores to ₹ 4,169.55 crores in 2018 from the base year 2017. There was a huge change in the profit of the company ₹ 4,169.55 in 2018 to ₹ 10,533.19 crores, percentage change of 152.62%, in 2020 it decreased by -35.98% but during 2021 TATA Steel performed magnificently well with almost doubling their profit; the profit raised from ₹ 6,743.8 to ₹ 13,606.62 in 2021.

**Table 6: Vertical Analysis of Revenues of TATA Steel**

Standalone Statement of Revenues (₹ crores)								
Particulars	31.3.2018	%	31.3.2019	%	31.3.2020	%	31.3.2021	%
Revenue From Operations	60,519.37	98.75	70,610.92	96.71	60,435.97	99.33	64,869.00	99.03
Other Income	763.66	1.25	2,405.08	3.29	404.12	0.66	637.89	0.97
<b>Total Income</b>	<b>61,283.03</b>	<b>100</b>	<b>73,016.00</b>	<b>100</b>	<b>60,840.99</b>	<b>100</b>	<b>65,506.89</b>	<b>100</b>

Source: Own processing based on the Standalone Statement of Income of TATA Steel (FY 2018-2021)

Table 6 represents the vertical analysis of only revenues of Tata Steel which came from Sale of products and other income – income dividend, some financial incomes. During the past 4 years the most part of the total income came from revenues from sales of products highest was on 2021 with 99.03% of the total Income.

**Table 7: Vertical Analysis of Expenses of TATA Steel**

Standalone Statement of Expenses (₹ crores)								
Particulars	31.3.2018	%	31.3.2019	%	31.3.2020	%	31.3.2021	%
<b>Expenses:</b>								
Raw Materials Consumed	16,877.63	31.40	19,840.29	31.81	17,407.03	33.22	13,868.60	26.77
Purchases of finished, semi-finished and other products	647.21	1.20	1,807.85	2.90	1,563.10	2.98	1,146.05	2.21
Changes in stock of finished goods, stock- in-trade and work-in-progress	545.36	1.01	(554.33)	-0.89	(564.40)	-1.08	1,464.12	2.83
Employee Benefits Expense	4,828.85	8.98	5,131.06	8.23	5,036.62	9.61	5,198.82	10.04
Finance Costs	2,810.62	5.23	2,823.58	4.53	3,031.01	5.79	3,393.84	6.55
Depreciation and Amortization expenses	3,727.46	6.94	3,802.96	6.10	3,920.12	7.48	3,987.32	7.70
Other expenses	22,178.02	41.26	24,622.81	39.48	23,803.18	45.43	22,747.30	43.91
<b>Total Exceptional Items</b>	<b>(3,366.29)</b>	<b>-6.26</b>	<b>(114.23)</b>	<b>-0.18</b>	<b>(1,703.58)</b>	<b>-0.18</b>	<b>2773.05</b>	<b>5.35</b>
<b>Tax Expense</b>								
Current Tax	1,586.78	2.95	6,297.11	10.10	1,787.95	3.41	3,949.05	7.62
Deferred Tax	881.92	1.64	(603.05)	-0.97	(1,920.77)	-0.97	239.46	0.46
<b>Total Tax Expenses</b>	<b>2,468.70</b>	<b>4.59</b>	<b>5,694.06</b>	<b>9.13</b>	<b>(132.82)</b>	<b>-0.25</b>	<b>4,188.51</b>	<b>8.08</b>
<b>Total Expenses</b>	<b>53,747.19</b>	<b>100</b>	<b>62,368.58</b>	<b>100</b>	<b>52,392.71</b>	<b>100</b>	<b>51,806.05</b>	<b>100.00</b>

Source: Own processing based on the Standalone Statement of Income of TATA Steel (FY 2018-2021)

Table 7 shows the horizontal analysis of all the expenses incurred by TATA Steel during the period 2018 to 2021.

The highest part of total expenses comes from Other Expenses which are (fuel expense, repairs of buildings, machinery, rent, excise duty etc.) 41.26% in 2018, 39.48% in 2019, 45.43% in 2020 and 43.91% in 2021. The second highest part is taken by Raw materials consumed which are 31.40% in 2018, 31.81% in 2019, 33.22% in 2020 and 26.77% in 2021 of the total expense.

Besides, other expenses and raw material consumed, Employee benefit expenses takes the next place in the percentage of total expenses 8.98% in 2018, 8.23% in 2019, 9.61% in 2020 and 10.04% in 2021 of the Total expenses incurred.

Depreciation and Amortization expenses which calculated by straight-line method, Purchases of finished, semi-finished and other products, finance costs remained almost the same. Though, current tax arose 10.10% in 2019 from 2.95% in 2018 which impacted the total tax expense during 2019 with overall 9.13% rise. And also TATA Steel paid huge current taxes in 2021 ₹ 3,949.05 which contributed 7.62% and together with Deferred taxes, total contribution from Taxes in 8.08% of the Total expenses for the year 2021.



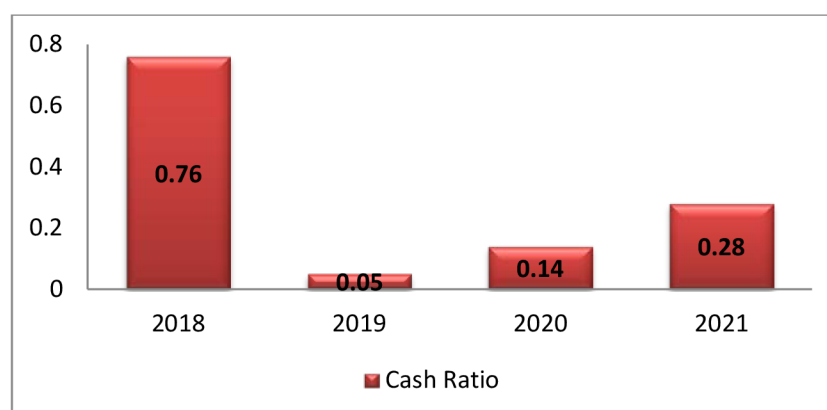
#### 4.5 The Financial ratios analysis calculated to understand the Company's Liquidity, Return on Equity (ROE) & Return on Assets (ROA) from the period 2018 to 2021.

**Table 8: Cash Ratio Analysis**

Particulars	2018	2019	2020	2021
Investments	14,640.37	477.47	3,235.16	6,404.46
Cash and Cash Equivalents	4,588.89	544.85	993.64	1,501.71
Other balances with Bank	107.85	173.26	233.33	170.00
Total Current Liabilities	25,607.34	25,593.65	30,871.30	29,313.32
<b>Cash Ratio</b>	<b>0.76</b>	<b>0.05</b>	<b>0.14</b>	<b>0.28</b>

Above figures of (Total Current Liabilities, Cash and Cash Equivalents, Other balances with Bank, Investments) are all in ₹ crores.

**Figure 1: Cash Ratio Analysis of TATA Steel (FY 2018 to 2021)**



Source: Own processing as per Table 8

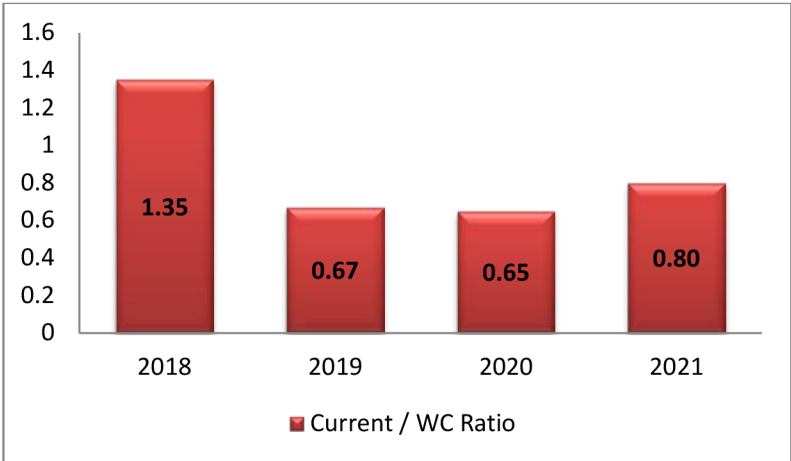
From the above figure of Cash Ratio we can understand the TATA Steel's cash ratio is less than 1. In 2018, the ratio was 0.76 which was considerably fine but during 2019, 2020 and 2021 is very low which shows the company is not liquid enough in terms of Cash and Cash equivalents assets and don't have sufficient liquid assets to pay its debts.

**Table 9: Current/Working Capital Ratio Analysis**

Particulars	2018	2019	2020	2021
Current Assets	34,643.91	17,035.58	19,959.03	23,372.68
Current Liabilities	25,607.34	25,593.65	30,871.30	29,313.32
<b>Current / WC Ratio</b>	<b>1.35</b>	<b>0.67</b>	<b>0.65</b>	<b>0.80</b>

Above figures (Total Current Liabilities & Total Current Assets) are all in ₹ crores.

Figure 2: Current / Working Capital Ratio Analysis of TATA Steel (FY 2018 to 2021)



Source: Own processing as per Table 9

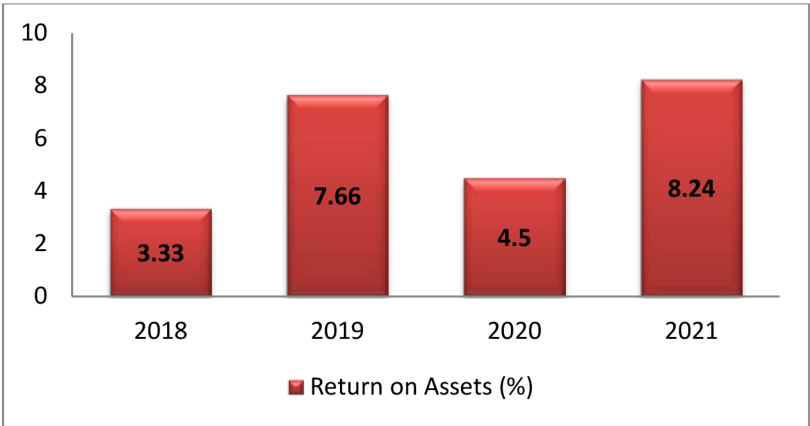
From the figure of Current / Working capital ratio we see that during 2018 the Current ratio is 1.35 wherein the company is able to pay its debt as the current ratio is greater than 1. And, during 2019, 2020 and 2021 the ratio is below 1 and hence, in these years the company doesn't have sufficient liquid assets to pay off its debts within the year. The ratio greater than 1 is considered healthy for any company.

Table 10: Return on Assets (ROA)

Particulars	2018	2019	2020	2021
Net Income	4,169.55	10,533.19	6,743.80	13,606.62
Total Assets	1,25,114.34	1,37,498.36	1,50,392.56	1,65,035.99
Return on Assets (%)	3.33	7.66	4.48	8.24

Above figures (Net Income & Total Assets) are all in ₹ crores and Return on Assets in (%).

Figure 3: Return on Assets (%) of TATA Steel (FY 2018 to 2021)



Source: Own processing as per Table 10

Figure above is the Return on Assets (%) this shows how the company manages assets to gain more net income. Any positive percentage and ideally 5% is

considered good for the company.

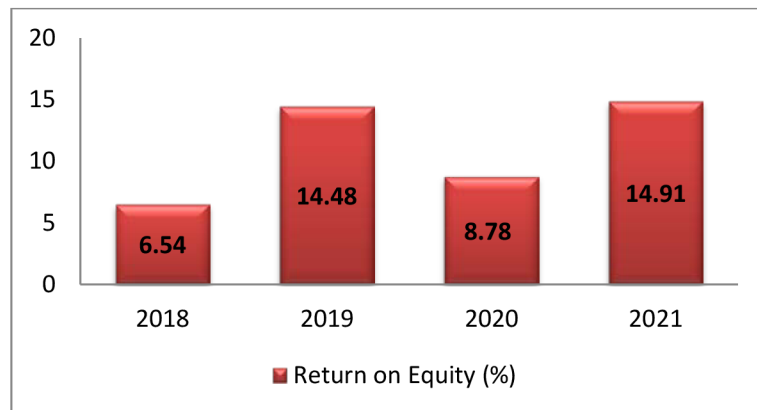
So, the ROA trend from 2018 to 2021 is considered good as company has boosted its profit on investment on assets. TATA Steel did very well during 2019 and 2021 with ROA of 7.66% and 8.24% respectively, in 2020 dropped to 4.5% and the company was incapable to make profitable return on assets as compared to 2019.

**Table 11: Return on Equity (ROE)**

Particulars	2018	2019	2020	2021
Net Income	4,169.55	10,533.19	6,743.80	13,606.62
Total Equity	63,789.84	72,729.71	76,838.12	91,267.11
<b>Return on Equity (%)</b>	<b>6.54</b>	<b>14.48</b>	<b>8.78</b>	<b>14.91</b>

Above figures (Net Income & Total Equity) are all in ₹ crores and Return on Equity in (%).

**Figure 4: Return on Equity (%) of TATA Steel (FY 2018 to 2021)**



Source: Own processing as per Table 11

As we can see from the above figure, the trend of Return on Equity (%) has been fluctuating; ROE from 2019 had highest inclination up to 14.48%, declined to 8.78% in 2020 and again inclined to 14.91% in 2021.

It means that company was very efficient in generating profit in 2019, 2021 and was less efficient in 2018, 2020 and could not use the equity capital as good as it did in 2019 and 2021.

The decline in ROE (%) in 2020 can be seen due to the fact that TATA Steel's net income dropped and the total equity rise in 2019.

**Table 12: Vertical Analysis of Assets of JSW Steel**

<b>Standalone Statement of Financial Position of JSW Steel (₹ Crores)</b>								
<b>Particulars</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>ASSETS</b>								
<b>Non-Current Assets</b>								
Property, plant and equipment	49,503	57.86	51,600	48.03	46,117	37.39	46,117	34.61
Capital work-in-progress	3,071	3.59	10,099	9.40	23,810	19.51	28,914	21.70
Intangible assets	65	0.08	172	0.16	323	0.26	1,614	1.21
Intangible assets under development	321	0.38	344	0.32	331	0.27	128	0.10
Investments in subsidiaries, associates and joint ventures	3,848	4.41	3,980	3.70	4,757	3.90	6,676	5.01
<b>Financial Assets</b>								
Investments	1,030	1.20	1,417	1.32	1,242	1.02	5,782	4.34
Loans	5,165	6.04	7,675	7.14	8,705	7.13	5,382	4.04
Other financial assets	746	0.87	48	0.04	562	0.46	1,971	1.48
Income tax assets (net)	250	0.29	217	0.20	340	0.28	230	0.17
Other non-current assets	2,299	2.69	3,475	3.23	2,378	1.95	2,394	1.80
<b>Total Non-Current Assets</b>	<b>66,298</b>	<b>77.50</b>	<b>79,027</b>	<b>73.56</b>	<b>92,667</b>	<b>75.93</b>	<b>103,529</b>	<b>77.71</b>
<b>Current Assets</b>								
Inventories	10,082	11.78	10,815	10.07	9,623	7.88	10,692	8.03
<b>Financial Assets</b>								
Investments	-	-	-	-	-	-	-	-
Trade receivables	4,692	5.48	6,770	6.30	3,166	2.59	3,333	2.50
Cash and Cash equivalents	451	0.53	5,366	5.00	3,438	2.83	11,121	8.35
Other balances with Bank	150	0.18	447	0.42	7,963	6.53	625	0.47
Loans	158	0.18	136	0.13	321	0.26	733	0.55
Derivative assets	147	0.17	229	0.21	275	0.23	86	0.06
Other financial assets	503	0.59	2,644	2.46	2,794	2.29	1,348	1.01
Other Assets	3,070	3.59	1,991	1.85	1,795	1.47	1,765	1.32
<b>Total Current Assets</b>	<b>19,253</b>	<b>22.50</b>	<b>28,398</b>	<b>26.44</b>	<b>29,375</b>	<b>24.07</b>	<b>29,703</b>	<b>22.29</b>
<b>Total Assets</b>	<b>85,551</b>	<b>100</b>	<b>107,425</b>	<b>100</b>	<b>122,042</b>	<b>100</b>	<b>133,232</b>	<b>100.00</b>

Source: Own processing based on Standalone Statement of Financial Position of JSW Steel (FY 2018 to 2021)

Table 12 denotes the Vertical analysis of Assets of the company from 2017 to 2020. As we can observe that Property, plant and equipment contributes the highest percentage of the Total Assets of all preceding years which makes 57.86% in 2018, 48.03% in 2019, 37.79% in 2020 and 34.61% in 2022. The contribution had been decreasing year after year is because the company's assets had been depreciating and company has not invested more in acquiring newer assets.

Capital work-in-progress has been gradually growing from 3.59% in 2018 to 19.51% in 2020 and to 21.70% in 2021 of the total assets, so here we can see that the fixed assets was 34.61% but the company invested on building Steel plants and they are still in progress.

Investments in subsidiaries, associates and joint ventures and Long-term loans to

subsidiaries, related parties and other corporate bodies combining contribution is up to 10% during 2018 to 2021.

Among Current Assets, Inventories contributes 11.78% in 2018, 10.07% in 2019, 7.88% in 2020 and 8.03% in 2021. The company's investment in inventory decreased in proportion to revenues. Trade Receivables made 5.48% in 2018, 6.30% in 2019, 2.59% in 2020 and 2.50% in 2021.

All other current assets have not made significant contribution to Total assets.

Hence, we can conclude from the table that Non-current assets contributes largely making total of 77.50% in 2018, 73.56% in 2019, 75.93% in 2020 and 77.71% in 2021 of the Total Assets and non-current assets contributes lesser which is 22.50% in 2018, 26.44% in 2019, 24.07% in 2020 and 22.29% in 2021.

**Table 13: Vertical Analysis of Equity and Liabilities of JSW Steel**

<b>Standalone Statement of Financial Position of JSW Steel (₹ Crores)</b>								
<b>Particulars</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>EQUITY</b>								
Equity Share Capital	302	0.35	301	0.28	301	0.25	302	0.23
Other Equity	27,605	32.27	34,592	32.20	38,061	31.19	46,675	35.03
<b>Total Equity</b>	<b>27,907</b>	<b>32.62</b>	<b>34,893</b>	<b>32.48</b>	<b>38,362</b>	<b>31.43</b>	<b>46,977</b>	<b>35.26</b>
<b>LIABILITIES</b>								
<b>Non-Current Liabilities</b>								
<b>Financial Liabilities</b>								
Borrowings	29,551	34.54	27,666	25.75	39,247	32.16	39,551	29.69
Lease liabilities	-	-	-	-	2,716	2.23	2,413	1.81
Derivative liabilities	-	-	-	-	130	0.11	57	0.04
Other financial liabilities	698	0.82	1,030	0.96	1,308	1.07	1,173	0.88
Provisions	115	0.13	235	0.22	322	0.26	753	0.57
Deferred Tax liabilities (net)	2,071	2.42	3,331	3.10	1,315	1.08	3,095	2.32
Other non-current liabilities	4	0.00	4,083	3.80	3,048	2.50	2,173	1.63
<b>Total Non-current liabilities</b>	<b>32,439</b>	<b>37.92</b>	<b>36,345</b>	<b>33.83</b>	<b>48,086</b>	<b>39.40</b>	<b>49,215</b>	<b>36.94</b>
<b>Current Liabilities</b>								
<b>Financial Liabilities</b>								
Borrowings	2,172	2.54	5,371	5.00	6,813	5.58	1,285	0.96
Trade Payables	13,988	16.35	13,354	12.43	13,128	10.76	12,155	9.12
Derivative liabilities	90	0.11	332	0.31	189	0.15	96	0.07
Other financial liabilities	7,111	8.31	15,471	14.40	11,980	9.82	925	0.69
Lease liabilities	-	-	-	-	773	0.63	18,550	13.92
Provisions	111	0.13	53	0.05	64	0.05	243	0.18
Other current liabilities	1,381	1.61	1,639	1.53	2,302	1.89	3,254	2.44
Income tax liabilities (net)	352	0.41	193	0.18	119	0.10	537	0.40
<b>Total Current Liabilities</b>	<b>25,205</b>	<b>29.46</b>	<b>36,187</b>	<b>33.69</b>	<b>35,594</b>	<b>29.17</b>	<b>37,040</b>	<b>27.80</b>
<b>Total Liabilities</b>	<b>85,551</b>	<b>100</b>	<b>107,425</b>	<b>100</b>	<b>122,042</b>	<b>100</b>	<b>133,232</b>	<b>100.00</b>

Source: Own processing based on Standalone Statement of Financial Position of JSW Steel (FY 2018 to 2021)

Table 13 depicts the vertical analysis of equity and liabilities of JSW Steel. Equity share capital does not have much contribution to Total Equity and Liabilities, the most contribution is from the Other Equity (General Reserves, Retained Earnings) which makes 32.27% in 2018, 32.20% in 2019, 31.19% in 2020 and 35.03% in 2021.

Long term borrowings make the highest contribution among all the items, 34.54% in 2018, 25.75% in 2019, 32.16% in 2020 and 29.69% in 2021. From the notes, found out that these are term loans (unsecured and secured) taken by banks and other financial institutions.

The third largest part is contributed by Trade Payables which makes 16.35% in 2018, 12.43% in 2019, 10.76% in 2020 and 9.12% in 2021. Other financial liabilities (rental and other deposits) make 8.31% in 2018, 14.40% in 2019, and 9.82% in 2020, in 2021 JSW Steel paid out most of its other financial liabilities.

So, the contribution of Total Equity is 32.62% in 2018, 32.48% in 2019, 31.43% in 2020 and 35.26% in 2021 of Total Equity and Liabilities. Total Non-Current liabilities are 37.92% in 2018, 33.83% in 2019, 39.40% in 2020 and 36.40% in 2021. Total Current Liabilities is 32.27% in 2017, 29.46% in 2018, 33.69% in 2019 and 29.17% in 2020 and 27.80% in 2021.

**Table 14: Horizontal Analysis of Assets of JSW Steel**

Standalone Statement of Financial Position of JSW Steel (₹ Crores)									
Particulars	31.3.2017	31.3.2018	%	31.3.2019	%	31.3.2020	%	31.3.2021	%
<b>ASSETS</b>									
<b>Non-Current Assets</b>									
Property, plant and equipment	50,215	49,503	-1.4	51,600	4.2	46,117	-11	46,117	0
Capital work-in-progress	2,745	3,071	11.8	10,099	228	23,810	135	28,914	21.44
Intangible assets	51	65	27.5	172	164	323	87.8	1,614	399.69
Intangible assets under development	282	321	13.8	344	7.1	331	-3.8	128	-61.33
Investments in subsidiaries, associates and joint ventures	3,772	3,848	2.01	3,980	3.4	4,757	19.5	6,676	40.34
<b>Financial Assets</b>									
Investments	978	1,030	5.3	1,417	37.5	1,242	-12	5,782	365.54
Loans	2,771	5,165	86.3	7,675	48.6	8,705	13.4	5,382	-38.17
Other financial assets	648	746	15.1	48	-93	562	1070	1,971	250.71
Income tax assets (net)	303	250	-17	217	-13	340	56.7	230	-32.35
Other non-current assets	1,396	2,299	64.7	3,475	51.1	2,378	-31	2,394	0.67
<b>Total Non-Current Assets</b>	<b>63,161</b>	<b>66,298</b>	<b>4.97</b>	<b>79,027</b>	<b>19.2</b>	<b>92,667</b>	<b>17.3</b>	<b>103,529</b>	<b>11.72</b>
<b>Current Assets</b>									
Inventories	9,270	10,082	8.76	10,815	7.27	9,623	-11	10,692	11.11
<b>Financial Assets</b>									
Investments	-	-	-	-	-	-	-		
Trade receivables	3,948	4,692	18.8	6,770	44.3	3,166	-53	3,333	5.27
Cash and Cash equivalents	712	451	-36	5,366	1089	3,438	-36	11,121	223.47
Other balances with Bank	315	150	-52	447	198	7,963	1681	625	-92.15
Loans	121	158	30.6	136	-14	321	136	733	128.35
Derivative assets	434	147	-66	229	55.8	275	20.1	86	-68.73
Other financial assets	328	503	55.3	2,644	425	2,794	5.67	1,348	-51.75
Other Assets	2,370	3,070	29.5	1,991	-35	1,795	-9.8	1,765	-1.67
<b>Total Current Assets</b>	<b>17,798</b>	<b>19,253</b>	<b>8.18</b>	<b>28,398</b>	<b>47.5</b>	<b>29,375</b>	<b>3.44</b>	<b>29,703</b>	<b>1.12</b>
<b>Total Assets</b>	<b>80,959</b>	<b>85,551</b>	<b>5.67</b>	<b>1,07,425</b>	<b>25.6</b>	<b>1,22,042</b>	<b>13.2</b>	<b>133,232</b>	<b>9.17</b>

Source: Own processing based on the Standalone Statement of Financial Position of JSW Steel (FY 2017-2021)

Table 14 represents the Horizontal analysis of JSW Steel's Assets keeping base year 2017 for percentage change calculation.

We took Property, Plant and Equipment at first as it contributes the highest in total assets. We can see that there has been increased by 4.24% in 2019 and decrease by -1.42% in 2018 and -10.63% in 2020 and has no change from 2020 to 2021, it remained the same. During 2019, 2021 company has invested in to newer assets and during 2018 and 2020, decrease can be seen due to depreciation.

On the other hand, Capital work-in progress - JSW Steel invested hugely on steel plants and buildings and percentage changed to incremental 11.88% in 2018, 228.85% in 2019, 135.77% in 2020 and 21.44% in 2021 which are still under construction.

Investments in subsidiaries, associates and joint ventures - JSW Steel have increased its investment on other companies, good increase by 19.52% in 2020 and 40.34% in 2021. The company has investment on equity and debenture instruments hugely on subsidiaries like JSW Utkal Steel Limited, JSW Vallabh Tinplate Private Limited and around ₹ 98 crores in its newest subsidiaries and joint venture with Piombino Steel Limited.

Inventories had been in increasing trend until 2019 and it decreased in 2020 by - 11.02%. Trade receivables are also in the same trend during 2020 it decreased by - 53.23. But then Inventories increased by 11.11% in 2021 and Trade receivables increased by 5.27%.

Though the company has sales from operation decreased but they received more payments by cash or cheques which directly reflects the increase figure of Cash and Cash equivalents and other balances with Bank which increased from ₹ 11,401 crores in 2020 to ₹ 11,746 crores in 2021.

The company has increased its total Non-current assets by 4.97% in 2018, 19.20% in 2019, 17.26% in 2020 and 11.72% in 2021. Total of current assets increased by 8.18% in 2018, 47.50% in 2019, 3.44% in 2020 and 1.12% in 2021. And this impacted directly on the increase of Total Assets.

**Table 15: Horizontal Analysis of Equity and Liabilities of JSW Steel**

<b>Standalone Statement of Financial Position of JSW Steel (₹ Crores)</b>									
<b>Particulars</b>	<b>31.3.2017</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>EQUITY</b>									
Equity Share Capital	301	302	0.33	301	-0.3	301	0	302	0.33
Other Equity	23,797	27,605	16.0	34,592	25.31	38,061	10.03	46,675	22.63
<b>Total Equity</b>	<b>24,098</b>	<b>27,907</b>	<b>15.8</b>	<b>34,893</b>	<b>25.03</b>	<b>38,362</b>	<b>9.94</b>	<b>46,977</b>	<b>22.46</b>
<b>LIABILITIES</b>									
<b>Non-Current Liabilities</b>									
<b>Financial Liabilities</b>									
Borrowings	28,358	29,551	4.21	27,666	-6.4	39,247	41.86	39,551	0.77
Lease liabilities	-	-	-	-	-	2,716	-	2,413	-11.16
Derivative liabilities	-	-	-	-	-	130	-	-	-
Provisions	969	698	-27.9	1,030	47.6	1,308	26.99	1,173	-10.32
Other financial liabilities	74	115	55.4	235	104	322	37.02	753	-82.30
Deferred Tax liabilities (net)	1,329	2,071	55.8	3,331	60.8	1,315	-60.5	3,095	-42.74
Other non-current liabilities	3	4	33.3	4,083	101.97	3,048	-25.4	2,173	1.54
<b>Total Non-current liabilities</b>	<b>30,733</b>	<b>32,439</b>	<b>5.55</b>	<b>36,345</b>	<b>12.0</b>	<b>48,086</b>	<b>32.30</b>	<b>49,215</b>	<b>2.35</b>
<b>Current Liabilities</b>									
<b>Financial Liabilities</b>									
Borrowings	4,875	2,172	-55.5	5,371	147	6,813	26.85	1,285	-81.14
Trade Payables	11,604	13,988	20.5	13,354	-4.5	13,128	-1.69	12,155	-7.41
Derivative liabilities	382	90	-76.4	332	269	189	-43.1	96	-49.21
Other financial liabilities	8,112	7,111	-12.3	15,471	117	11,980	-22.5	925	-92.28
Lease liabilities	-	-	-	-	-	773	-	18,550	2299.7
Provisions	132	111	-15.9	53	52.3	64	20.75	243	279.6
Other current liabilities	989	1,381	39.6	1,639	18.6	2,302	40.45	3,254	41.36
Income tax liabilities (net)	34	352	935	193	-45.2	119	-38.3	537	351.26
<b>Total Current Liabilities</b>	<b>26,128</b>	<b>25,205</b>	<b>-3.5</b>	<b>36,187</b>	<b>43.5</b>	<b>35,594</b>	<b>-1.64</b>	<b>37,040</b>	<b>4.06</b>
<b>Total Liabilities</b>	<b>80,959</b>	<b>85,551</b>	<b>5.67</b>	<b>1,07,425</b>	<b>25.5</b>	<b>1,22,042</b>	<b>13.61</b>	<b>133,232</b>	<b>9.17</b>

Source: Own processing based on the Standalone Statement of Financial Position of JSW Steel (FY 2017-2021)

Table 15 represents the Horizontal analysis of Equity and Liabilities and the calculation has been done in the same way as Assets keeping 2017 as the base year calculation. From the table we observed that there has been no change in percentage change of Equity share capital but there have been significant change in other Equity with an increase of 16% in 2018, 25.31% in 2019, 10.03% in 2020 and 22.63% in 2021. Long-term Borrowings initially grew in 2018 by 4.21% and then dropped in 2019 but has grown up to 41.86% in 2020 and 0.77% in 2021 as company took unsecured and secured loans for investments. Other financial liabilities increased from 2018 to 2020 and then dropped in 2021; JSW Steel paid out most of its long term financial liabilities. Provisions decreased by -27.97% in 2018, increased in 2019 and 2020 and percentage dropped by -10.32% in 2021. Short term borrowings are also secured and unsecured loans from banks for working capital requirements and it can be seen there is an increase by 147.28% in 2019 and 26.85% in 2020 and as we can see from the above table in 2021, JSW Steel paid out



81.14% its short term loans from banks. Trade payables have been slightly decreasing during 2019, 2020 and 2021; the company has paid out more to its suppliers and other debtors than 2018.

The Total Current Liabilities shows fluctuating trend dropped by -3.53% in 2018, increased by 43.57%, again dropped by -1.64% in 2020 and finally increased slightly by 4.06% in 2021. The Total of Equity and Liabilities can be seen in increasing trend from 2018 to 2021 due to the fact that Non-current liabilities had been continuously increasing.

**Table 16: Horizontal Analysis of Income Statement of JSW Steel**

<b>Standalone Statement of Income of JSW Steel (₹ Crores)</b>									
<b>Particulars</b>	<b>31.3.2017</b>	<b>31.03.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
Revenue from operations	56,913	66,234	16.3	77,187	16.54	64,262	-16.7	70,727	10.06
Other Income	255	213	-16.4	405	90.1	628	55.1	669	6.53
<b>Total Income</b>	<b>57,168</b>	<b>66,467</b>	<b>16.2</b>	<b>77,592</b>	<b>16.74</b>	<b>64,890</b>	<b>-16.3</b>	<b>71,396</b>	<b>10.03</b>
<b>Expenses</b>									
Cost of materials consumed	28,400	35,995	26.7	39,179	8.85	33,073	-15.6	28,743	-13.09
Purchases of stock-in-trade	945	1,063	12.5	499	-53.1	420	-15.8	199	-52.62
Changes in inventories of finished goods, work-in-progress and stock-in-trade	(1,390)	412	-129	(180)	-43.7	(27)	-85	(872)	3129.6
Employee benefits expenses	1,168	1,260	7.88	1,435	13.89	1,496	4.25	1,501	0.33
Finance costs	3,643	3,591	-1.43	3,789	5.51	4,022	6.15	3,565	-11.36
Depreciation and amortization expenses	3,025	3,054	0.96	3,421	12.02	3,522	2.95	3,781	7.35
Other expenses	16,246	13,763	-15.2	17,742	28.91	16,783	-5.41	14,925	-11.07
<b>Total Expenses</b>	<b>52,037</b>	<b>59,138</b>	<b>13.6</b>	<b>65,885</b>	<b>11.41</b>	<b>59,289</b>	<b>-10.01</b>	<b>58,814</b>	<b>-0.80</b>
<b>Profit before exceptional items and tax</b>	<b>5,131</b>	<b>7,309</b>	<b>42.4</b>	<b>11,707</b>	<b>60.17</b>	<b>5,601</b>	<b>-52.16</b>	<b>12,582</b>	<b>124.64</b>
<b>Exceptional Items</b>	<b>-</b>	<b>234</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,309</b>	<b>-</b>	<b>386</b>	<b>-70.51</b>
<b>Profit before tax</b>	<b>5,131</b>	<b>7,075</b>	<b>37.8</b>	<b>11,707</b>	<b>65.47</b>	<b>4,292</b>	<b>-63.3</b>	<b>12,196</b>	<b>184.16</b>
<b>Tax Expenses</b>									
Current Tax	(53)	1,578	-307	2,356	49.30	789	-66.5	2,162	174.02
Deferred Tax	1,607	872	-45.7	1,230	41.06	(1,788)	-245	1,641	-191.78
<b>Total Tax Expenses</b>	<b>1,554</b>	<b>2,450</b>	<b>57.6</b>	<b>3,586</b>	<b>46.37</b>	<b>(999)</b>	<b>-127</b>	<b>3,803</b>	<b>-480.68</b>
<b>Profit for the year</b>	<b>3,577</b>	<b>4,625</b>	<b>29.3</b>	<b>8,121</b>	<b>75.6</b>	<b>5,291</b>	<b>-34.8</b>	<b>8,393</b>	<b>58.63</b>

Source: Own processing based on the Standalone Statement of Financial Position of JSW Steel (FY 2017-2021)

Table 16 represents the Horizontal Analysis of Income Statement of JSW Steel for FY 2018 to 2021 keeping 2017 as the base year for 2018 percentage change and

previous year becomes the base year for the following year.

Revenue from operations increased by 16.38% in 2018, and 16.54% in 2019 and decreased by -16.75% in 2020 and revenue increased by 10.07% in 2021 and other income decreased by -16.47% in 2018 and then increased by 90.14% in 2019, 55.06% in 2020 and 6.53% in 2021. During 2021, the company experienced increase in sales even if Covid-19 that struck the country and economic growth slowed down and from the notes, found out that the revenue came from Export turnover which was more than 2020.

Cost of material consumed is in same trend of Revenue from operations there has been increase until 2019 and dropped in 2020 which is proportionate to the sales but it is exceptional that during 2021 the cost of material decreased and is not proportionate to sales which could be because the raw materials being cheaper.

Employee benefits expenses have been increasing year after year 7.88% in 2018, 13.89% in 2019, 4.25% in 2020 and 0.33% in 2021.

Finance costs slight drop in 2018 and then finance costs increased slightly during 2019 and 2020 and again dropped by -11.36% in 2021 which is due to Banks reduced the interest rate during the Covid-19 which hit India in the most worst possible way.

Depreciation and amortization expenses have been constantly increasing 0.96% in 2018, and 12.02% in 2019 and 2.95% in 2020, 7.35% in 2021, Depreciation is measured by straight line method and as we found in non-current assets analysis, the company did not invest on newer PPE and depreciation cannot be done for capital work-in progress.

Other Expenses (Power & fuel, repairs and maintenance, transportation cost and etc.) is in fluctuating trend -15.28% decrease in 2018, 28.91% increase in 2019 and then in 2020, 2021 it decreased by -5.41% & -11.07% respectively. JSW Steel reduced expenses on Stores and spares consumed, Power and fuel and repair and maintenance on plant and machinery and gains from foreign currency transactions.

Total expenses can be seen increasing from 2018 to 2019 and then decreased in 2020 by -10.01% and -0.80% in 2021. Total Tax Expense decreased during 2020 by -72.14% while there was increase of 66% in 2018, 46.37% in 2019 and 280.68% in 2021.

Profit for the year is in increasing trend until 2019 until the profit for the year in 2020 decreased by -34.85%. The company incurred Loss during 2016 but since 2017 the company grew and had profit of ₹ 3,577 crores which is 201.33% growth from 2016 and then for the preceding years company earned profit with a growth percentage change of 29.30% in 2018, 75.59% in 2019 and during 2021 JSW Steel made a profit of ₹ 8,393 which 58.63% higher than the profit earned in 2020.

By analysing the line items (Revenues from operations, Expenses items and Tax Expenses) of the income statement we can find the reason for the growth and profit.

**Table 17: Vertical Analysis of Revenues of JSW Steel**

Standalone Statement of Revenues (₹ Crores)								
Particulars	31.3.2018	%	31.3.2019	%	31.3.2020	%	31.3.2021	%
Revenue From Operations	66,234	99.65	77,187	99.48	64,262	99.03	70,727	99.06
Other Income	213	0.32	405	0.52	628	0.97	669	0.94
<b>Total Income</b>	<b>66,467</b>	<b>100</b>	<b>77,592</b>	<b>100</b>	<b>64,890</b>	<b>100</b>	<b>71,396</b>	<b>100.00</b>

Source: Own processing based on the Standalone Statement of Income of JSW Steel (FY 2018-2021)

Table 17 indicates the Vertical analysis of only Total Income of the company. The highest part of the Total Income comes from Revenue from operations (Sale of products and export turnover) which take 99.65% in 2018, 99.48% in 2019, 99.03% in 2020 and 99.06% of the total income in 2021. Other income contributes minutely and does not make any major change in generating total income.

**Table 18: Vertical Analysis of Expenses of JSW Steel**

<b>Standalone Statement of Expenses (₹ Crores)</b>								
<b>Particulars</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>Expenses:</b>								
Cost of materials consumed	35,995	58.4	39,179	56.4	33,073	56.7	28,743	48.87
Purchases of stock-in-trade	1,063	1.73	499	0.73	420	0.72	199	0.34
Changes in inventories of finished goods, stock- in-trade and work-in-progress	412	0.67	(180)	-0.26	(27)	-0.05	-872	-1.48
Employee Benefits Expense	1,260	2.05	1,435	2.07	1,496	2.57	1,501	2.55
Finance Costs	3,591	5.83	3,789	5.45	4,022	6.90	3,565	6.06
Depreciation and Amortization expenses	3,054	4.96	3,421	4.92	3,522	6.04	3,781	6.43
Other expenses	13,763	22.35	17,742	25.54	16,783	28.79	14,925	25.38
<b>Total Exceptional Items</b>	<b>234</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,309</b>	<b>-</b>	<b>386</b>	<b>0.66</b>
<b>Tax Expense</b>								
Current Tax	1,578	2.56	2,356	3.39	789	1.35	2,162	3.68
Deferred Tax	872	1.42	1,230	1.77	(1,788)	-3.07	1,641	2.79
<b>Total Tax Expenses</b>	<b>2,450</b>	<b>3.98</b>	<b>3,586</b>	<b>5.16</b>	<b>(999)</b>	<b>-1.71</b>	<b>3,803</b>	<b>6.47</b>
<b>Total Expenses</b>	<b>61,588</b>	<b>100</b>	<b>69,471</b>	<b>100</b>	<b>58,290</b>	<b>100</b>	<b>58,814</b>	<b>100</b>

Source: Own processing based on the Standalone Statement of Income of JSW Steel (FY 2018-2021)

Table 18 indicates the vertical analysis of all expenses incurred by the company during 2018 to 2021 and we can see which line items contribute what percentage of the total expenses.

The biggest contribution is made by Cost of materials consumed which is 58.44% of total expenses in 2018, 56.40% in 2019, 56.74% in 2020 and 48.87% in 2021.

Other Expenses are Rent, Repairs and maintenance, Power and fuel, stores and spares consumed and etc. has made remarkable contribution 22.35% in 2018, 25.54% in 2019, 28.79% in 2020 and 25.38% in 2021.

Employee Benefits Expense, Finance Costs, Depreciation and Amortization expenses has not made significant contribution to Total Expenses throughout from 2018 to 2021 their contribution was below 7%. Total tax expense made the smallest contribution with 6.47% highest contribution in 2021 and other years found to be lesser than 3%.

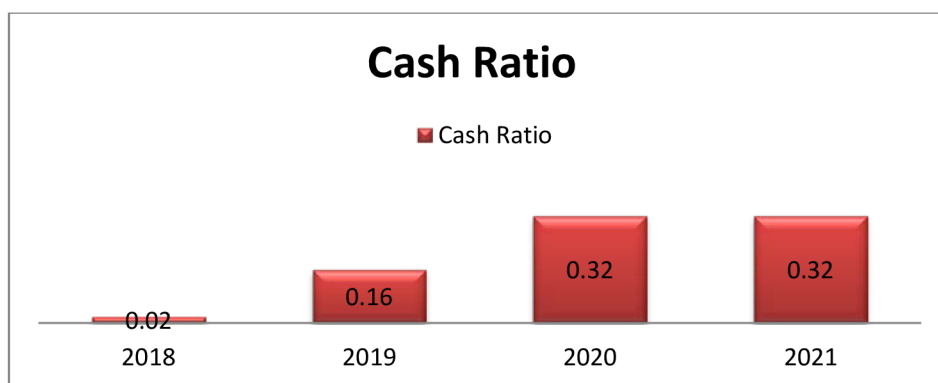
**4.5 The Financial ratios analysis calculated to understand the JSW Steel's Liquidity, Return on Equity (ROE) & Return on Assets (ROA) from the period 2018 to 2021.**

**Table 19: Cash Ratio Analysis**

Particulars	2018	2019	2020	2021
Cash and Cash Equivalents	451	5,366	3,438	11,121
Other balances with Bank	150	447	7,963	625
Total Current Liabilities	25,205	36,187	35,594	37,040
<b>Cash Ratio</b>	<b>0.02</b>	<b>0.16</b>	<b>0.32</b>	<b>0.32</b>

Above figures of (Total Current Liabilities, Cash and Cash Equivalents, Other balances with Bank) are all in ₹ crores.

Figure 5: Cash Ratio Analysis of JSW Steel (FY 2018 to 2021)



Source: Own processing as per Table 8

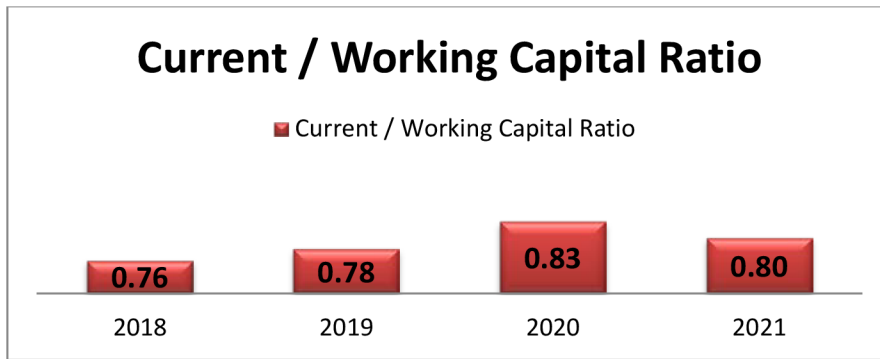
From the above figure we can see that JSW Steel's Cash ratio is way below 1, the company liquid assets (Cash and cash equivalents and other balances with bank) is very less and is not liquid enough to pay of its obligations.

**Table 20: Current/Working Capital Ratio Analysis**

Particulars	2018	2019	2020	2021
Current Assets	19,253	28,398	29,375	29,703
Current Liabilities	25,205	36,187	35,594	37,040
<b>Current / WC Ratio</b>	<b>0.76</b>	<b>0.78</b>	<b>0.83</b>	<b>0.80</b>

Above figures of (Total Current Liabilities, Current Assets) are all in ₹ crores.

Figure 6: Current / Working Capital Ratio Analysis of JSW Steel (FY 2018 to 2021)



Source: Own processing as per Table 9

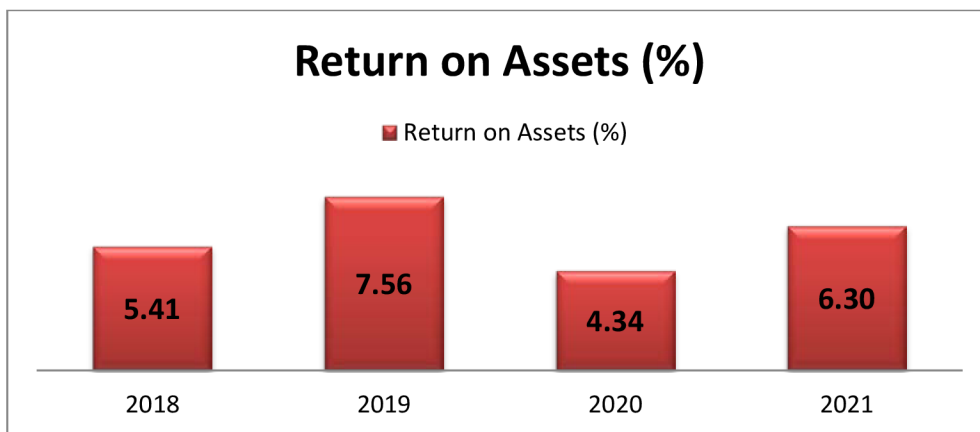
Above figure reflects the Current/ Working capital ratio and we can see that it is below 1. Though it is higher than 0.75 during 2018 to 2021 is not considered so poor but idle current ratio is 1. And, the company is able to meet its working capital requirements.

**Table 21: Return on Assets (ROA)**

Particulars	2018	2019	2020	2021
Net Income	4,625	8,121	5,291	8,393
Total Assets	85,551	1,07,425	1,22,042	1,33,232
Return on Assets (%)	5.41	7.56	4.34	6.30

Above figures (Net Income & Total Assets) are all in ₹ crores and Return on Assets in (%).

Figure 7: Return on Assets (%) of JSW Steel (FY 2018 to 2021)



Source: Own processing as per Table 10

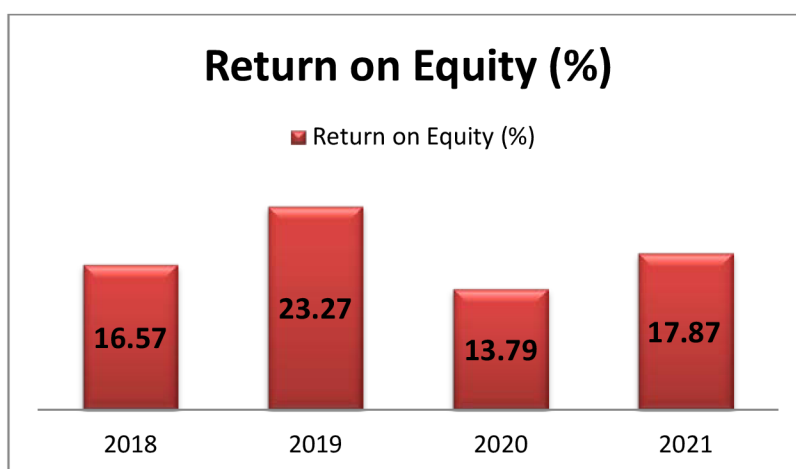
Figure above is the Return on Assets (%) this shows how the company manages assets to gain more net income. Since, ideally 5% is considered good for the company. The company's ROA is 5.41, 7.56 and 6.30 in 2018, 2019 and 2021 respectively is considered very well. In 2020 is slightly below 5% so the profitable ROA is less than that of 2018, 2019, 2021.

**Table 22: Return on Equity (ROE)**

Particulars	2018	2019	2020	2021
Net Income	4,625	8,121	5,291	8,393
Total Equity	27,907	34,893	38,362	46,977
<b>Return on Equity (%)</b>	<b>16.57</b>	<b>23.27</b>	<b>13.79</b>	<b>17.87</b>

Above figures (Net Income & Total Equity) are all in ₹ crores and Return on Equity in (%).

Figure 8: Return on Equity (%) of JSW Steel (FY 2018 to 2021)



Source: Own processing as per Table 11

As we can see from the above figure, the trend of Return on Equity (%) has been fluctuating; for a company, ROE between 15-20% is ideal and JSW Steel has managed to earn profit from equities during 2018, 2019 and 2021. Though, it decreased during 2020; in 2020 the company was less efficient to earn profit from equities than the previous years.

**Table 23: Vertical Analysis of Assets of SAIL**

Standalone Statement of Financial Position of SAIL								
Particulars	31.3.2018	%	31.3.2019	%	31.3.2020	%	31.3.2021	%
<b>ASSETS</b>								
<b>Non-Current Assets</b>								
Property, plant and equipment	57,156.09	50.05	59,907.26	51.45	65,369.42	52.25	64,115.26	54.72
Capital work-in-progress	18,395.43	21.85	16,013.50	13.75	8,751.56	7.00	8,878.48	7.58
Right use of assets	-		-		2,205.08	1.76	2,054.13	1.75
Intangible assets	1,454.63	1.43	1,450.86	1.25	1,443.42	1.15	1,429.28	1.22
Investment property	0.83	0.00	1.09	0.00	1.12	0.00	1.09	0.00
Inventories	-		-		-		4,236.26	3.62
<b>Financial Assets</b>								
Investments	1,491.30	1.31	1,584.75	1.36	1,584.98	1.27	1,595.01	1.36
Loans	451.46	0.40	563.98	0.48	664.59	0.53	756.23	0.65
Other financial assets	166.18	0.15	258.41	0.22	446.56	0.36	334.21	0.29
Income tax assets (net)	4,375.58	3.83	3,052.01	2.62	2,231.34	1.78	216.78	0.19
Other non-current assets	1,060.10	0.93	1,356.60	1.17	1,481.29	1.18	1,566.81	1.34
<b>Total Non-Current Assets</b>	<b>84,551.60</b>	<b>74.04</b>	<b>84,188.46</b>	<b>72.30</b>	<b>84,179.36</b>	<b>67.29</b>	<b>85,183.54</b>	<b>72.71</b>
<b>Current Assets</b>								
Inventories	16,996.67	14.88	19,441.80	16.70	23,747.20	18.98	15,272.04	13.04
<b>Financial Assets</b>								
Trade receivables	3,869.94	3.39	4,495.05	3.86	8,812.39	7.04	7124	6.08
Cash and Cash equivalents	79.45	0.07	34.59	0.03	153.43	0.12	468.4	0.40
Other balances with Bank	174.61	0.15	184.83	0.16	209.82	0.17	212.12	0.18
Loans	63.41	0.06	53.24	0.05	49.67	0.04	50.47	0.04
Other financial assets	2,787.20	2.44	2,160.88	1.86	2,188.99	1.75	2,478.11	2.12
Other current assets	5,634.42	4.93	5,867.41	5.04	5,729.75	4.58	6,353.97	5.42
<b>Total Current Assets</b>	<b>29,605.70</b>	<b>25.93</b>	<b>32,237.80</b>	<b>27.69</b>	<b>40,891.25</b>	<b>32.69</b>	<b>31,959.11</b>	<b>27.28</b>
<b>Total Assets</b>	<b>114,189.90</b>	<b>100</b>	<b>116,437.73</b>	<b>100</b>	<b>125,097.81</b>	<b>100</b>	<b>117,159.66</b>	<b>100.00</b>

Source: Own processing based on Standalone Statement of Financial Position of SAIL (FY 2018 to 2021)

Table 23 shows the Standalone Statement of Financial Position of Steel Authority India Limited (SAIL) from 2018 to 2021 and the vertical analysis of Assets.

We can see that Property, plant and equipment takes highest percentage of Total Assets ₹57,156.09 which is 50.05% 2018, ₹59,907.26 51.45% in 2019, ₹65,369.42 52.25% in 2020 and ₹64,115.26 54.72% in 2021. The Large part of the fixed assets is coming from SAIL's Land, Steel plant and machinery which can be found on notes. Followed by is the contribution from Capital work-in-progress which was 21.85% in 2018, 13.75% in 2019, 7% in 2020 and 7.58% in 2021. Capital work-in-progress is steel plants & units and also stores and spares units which are under construction.

Investment property increased hugely as the SAIL invested huge on Buildings and leasing property and the rental income. Inventories which have been with the company for more than one year are the Iron ore fines, Slag dump and also raw materials of Slime made 3.62% of contribution to total assets which is ₹4,236.26 crores. And, Inventories had been increasing

from 2018 to 2020, 14.88% in 2018, 16.70% in 2019, 18.98% in 2020 and 13.04% in 2021 of the Total Assets. It means the company's products might not being sold and company purchased more raw materials than it is sold in the previous years. Trade receivables increased from 3.39% in 2018 to 7.04% in 2020 which double of 3.86% in 2019. The company sold goods more on credit in 2020 and then there was a drop of 6.08% in 2021. Overall, Total Non-current Assets percentage decreased from 74.04% in 2018 to 67.29% in 2020 and then increased with 72.71% in 2021 and Total Current Assets percentage increased from 25.93% in 2018 to 32.69% in 2020 and then decreased with 27.28% in 2021.

**Table 24: Vertical Analysis of Equity and Liabilities of SAIL**

<b>Standalone Statement of Financial Position of SAIL</b>								
<b>Particulars</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>EQUITY</b>								
Equity Share Capital	4,130.53	9.52	4,130.53	3.55	4,130.53	3.30	4,130.53	3.53
Other Equity	31,583.14	27.66	34,021.04	29.22	35,646.85	28.50	39,364.35	33.60
<b>Total Equity</b>	<b>35,713.67</b>	<b>31.28</b>	<b>38,151.57</b>	<b>32.77</b>	<b>39,777.38</b>	<b>31.80</b>	<b>43,494.88</b>	<b>37.12</b>
<b>LIABILITIES</b>								
<b>Non-Current</b>								
<b>Financial Liabilities</b>								
Borrowings	29,777.16	26.08	30,802.66	26.45	34,560.03	27.63	19,725.96	16.84
Other financial liabilities	1,179.36	1.03	1,330.62	1.14	1,295.59	1.04	1,231.07	1.05
Provisions	3,973.28	3.48	4,295.41	3.69	4,108.80	3.28	4,525.89	3.86
Other non-current liabilities	138.33	0.12	253.19	0.22	397.51	0.32	439.97	0.38
<b>Total Non-current liabilities</b>	<b>35,074.51</b>	<b>30.72</b>	<b>36,688.70</b>	<b>31.51</b>	<b>40,368.59</b>	<b>32.37</b>	<b>27,176.05</b>	<b>23.20</b>
<b>Current Liabilities</b>								
<b>Financial Liabilities</b>								
Borrowings	12,244.32	10.72	10,631.22	9.13	16,640.78	13.30	15,850.24	13.53
Trade Payables	7,540.50	6.60	7,257.99	6.23	6,320.38	5.05	7,013.41	5.99
Other financial liabilities	14,170.20	12.41	14,693.31	12.62	13,732.40	10.98	14,017.14	11.96
Provisions	2,304.18	2.02	2,308.77	1.98	2,354.93	1.88	7,555.04	6.45
Other current liabilities	7,142.42	6.25	6,708.17	5.76	5,723.85	4.58	2,039.84	1.74
Tax liabilities (net)	-		-		179.50	0.14	12.06	0.01
<b>Total Current Liabilities</b>	<b>43,401.62</b>	<b>38.01</b>	<b>41,597.46</b>	<b>35.73</b>	<b>44,951.84</b>	<b>35.93</b>	<b>46,488.73</b>	<b>39.68</b>
<b>Total Liabilities</b>	<b>114,189.80</b>	<b>100</b>	<b>116,437.73</b>	<b>100</b>	<b>125,097.81</b>	<b>100</b>	<b>117,159.66</b>	<b>100.00</b>

Source: Own processing based on Standalone Statement of Financial Position of SAIL (FY 2018 to 2021)

Table 24 shows the vertical analysis of Equity and Liabilities of SAIL. Equity Share Capital and Other Equity make 31.28% in 2018, 32.77% in 2019, 31.80% in 2020 and 37.12% in 2021 of the Total Equity & Liabilities. General reserves and Retained Earnings made the largest part of the contribution to total equity. Long-term Borrowings contribute 26.08% in 2018, 26.45% in 2019, 27.63% in 2020 and 16.84% in 2021. The increasing trend shows the company is using its capital on some investments without impacting the operational cash flow in that particular year. Short-term Borrowings has decreased from 10.72% in 2018 to 9.13% in 2019 of the Total Current liabilities but has increased to 13.30% in 2020 and 13.53% in 2021 which shows some increased secured and unsecured loans to be paid in 2021. Trade



Payable had been fluctuating between 4.90% and 6.60% but doesn't have major change towards the contribution of Current liabilities.

Other financial liabilities are Employees related dues, current maturities of long-term debts, security deposit, Payable for capital work, Royalties also makes good contribution to total current assets 12.41% in 2018, 12.62% in 2019, 10.98% in 2020 and 11.96% in 2021. The Total Current percentage contribution was 38.01% in 2018, 35.73% in 2019, 35.93% in 2020 and 39.68% in 2021 making it the most contributed of the Total Equity & Liabilities.

**Table 25: Horizontal Analysis of Assets of SAIL**

<b>Standalone Statement of Financial Position of SAIL</b>									
<b>Particulars</b>	<b>31.3.2017</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>ASSETS</b>									
<b>Non-Current Assets</b>									
Property, plant and equipment	48,762.03	57,156.09	17.21	59,907.26	4.81	65,369.42	9.12	64,115.26	-1.92
Capital work-in-progress	23,275.39	18,395.43	-20.9	16,013.50	-12.9	8,751.56	-45.4	8,878.48	1.45
Right use of assets	-	-		-		2,205.08		2,054.13	-6.85
Intangible assets	1,522.58	1,454.63	-4.46	1,450.86	-0.26	1,443.42	-0.51	1,429.28	-0.98
Investment property	0.86	0.83	-3.49	1.09	31.33	1.12	2.75	4,236.26	3781
<b>Financial Assets</b>									
Investments	1,395.48	1,491.30	6.87	1,584.75	6.27	1,584.98	0.01	1,595.01	0.63
Loans	453.52	451.46	-0.45	563.98	24.92	664.59	17.84	756.23	13.79
Other financial assets	262.42	166.18	-36.6	258.41	55.50	446.56	72.81	334.21	-25.2
Income tax assets (net)	4,241.65	4,375.58	3.16	3,052.01	-30.3	2,231.34	-26.9	216.78	-90.3
Other non-current assets	1,080.12	1,060.10	-1.85	1,356.60	27.97	1,481.29	9.19	1,566.81	5.77
<b>Total Non-Current Assets</b>	<b>80,994.05</b>	<b>84,551.60</b>	<b>4.39</b>	<b>84,188.46</b>	<b>-0.43</b>	<b>84,179.36</b>	<b>-0.01</b>	<b>85183.54</b>	<b>1.19</b>
<b>Current Assets</b>									
Inventories	15,771.35	16,996.67	7.77	19,441.80	14.39	23,747.20	22.15	15,272.04	-35.7
<b>Financial Assets</b>									
Trade receivables	2,921.69	3,869.94	32.46	4,495.05	16.15	8,812.39	96.05	7,124	-19.2
Cash and Cash equivalents	120.93	79.45	-34.3	34.59	-56.5	153.43	343.5	468.4	205.3
Other balances with Bank	168.16	174.61	3.84	184.83	5.85	209.82	13.52	212.12	1.10
Loans	61.47	63.41	3.16	53.24	-16.1	49.67	-6.7	50.47	1.61
Other financial assets	2,267.85	2,787.20	22.90	2,160.88	-22.4	2,188.99	1.30	2,478.11	13.21
Other current assets	4,282.03	5,634.42	31.58	5,867.41	4.14	5,729.75	-2.35	6,353.97	10.89
<b>Total Current Assets</b>	<b>25,533.48</b>	<b>29,605.70</b>	<b>15.95</b>	<b>32,237.80</b>	<b>8.89</b>	<b>40,891.25</b>	<b>26.84</b>	<b>31,959.11</b>	<b>-21.8</b>
<b>Total Assets</b>	<b>106,539.47</b>	<b>114,189.90</b>	<b>7.18</b>	<b>116,437.73</b>	<b>1.97</b>	<b>125,097.81</b>	<b>7.44</b>	<b>117,159.66</b>	<b>-6.35</b>

Source: Own processing based on Standalone Statement of Financial Position of SAIL (FY 2017 to 2021)

Table 25 shows the horizontal analysis of assets of SAIL from the FY 2018 to 2021 keeping 2017 as the base year calculation for 2018.

The company always increased its Property, Plant and Equipment by 17.21% in 2018, 4.81% in 2019 and 9.12% in 2020 as the company purchased more and more PPE but SAIL's PPE has decreased by -1.92% in 2021 because of the fact that the company has not bought any newer plants or machineries whereas the existing PPE depreciated.

The company reduced its costs on Capital work-in-progress from year after year which was -20.97% in 2018, -12.95% in 2019, huge decrease of -45.35% in 2020 but we can see that there is a slight rise with 1.45% in 2021.

Long term investment had also increased with 6.87% in 2018 from 2017 and during 2019, 2020 and 2021 there can be no change seen. The company has increased its long term financial assets (derivative assets, loans and advances etc.) with 55.50% in 2019, 72.81% in 2020 and decreased by -25.16% in 2021.

SAIL's Loans increased from year after year, the loans were lesser in 2018 but from 2019 the loans have been increasing ₹ 563.98 crores in 2019, ₹ 664.59 in 2020 and ₹ 756.23 crores in 2021.

The company's inventories seem to be in increasing trend which can be due to the company purchasing more materials than that it can sell. Hence, near about 7.5% increase during 2018 but during 2019 it increased by 14.39% and in 2020 increased by 22.15% but SAIL did well with its inventories, inventories reduced by 35.69% where SAIL performed well in turning these raw materials into finished goods.

Trade receivables increased 32.46% in 2018 to 96.05% in 2020. So, during 2018 to 2020, the company sold more goods on credits and during 2021 the trade receivables reduced to -19.16%.

Hence, the total non-current assets has risen by 4.39% in 2018 and remained almost same in 2019 to 2021. The current assets arose with 15.95% in 2018, 8.89% in 2019, and 26.84% in 2020 and reduced by 21.84% in 2021 because in 2021, SAIL converted its raw materials into finished goods and even purchases or materials consumed for production were lesser than the previous year.

The total assets increased from ₹ 100,340.27 crores in 2016 to ₹ 125,097.81 crores in 2020 and decreased to ₹ 117,159.66 in 2021.

**Table 26: Horizontal Analysis of Equity and Liabilities of SAIL**

<b>Standalone Statement of Financial Position of SAIL</b>									
<b>Particulars</b>	<b>31.3.2017</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
<b>EQUITY</b>									
Equity Share Capital	4,130.53	4,130.53	0	4,130.53	0	4,130.53	0	4130.53	0
Other Equity	31,878.53	31,583.14	-0.93	34,021.04	7.72	35,646.85	4.78	39,364.35	10.43
<b>Total Equity</b>	<b>36,009.06</b>	<b>35,713.67</b>	<b>-0.82</b>	<b>38,151.57</b>	<b>6.83</b>	<b>39,777.38</b>	<b>4.26</b>	<b>43,494.88</b>	<b>9.35</b>
<b>LIABILITIES</b>									
<b>Non-Current</b>									
<b>Financial Liabilities</b>									
Borrowings	19,087.48	29,777.16	56.0	30,802.66	3.44	34,560.03	12.20	19,725.96	-42.9
Other financial liabilities	1,365.93	1,179.36	-13.6	1,330.62	12.83	1,295.59	-2.63	1,231.07	-4.98
Provisions	3,593.94	3,973.28	10.55	4,295.41	8.11	4,108.80	-4.34	4,525.89	10.15
Other non-current liabilities	151.29	138.33	-8.6	253.19	83.03	397.51	57.0	439.97	10.68
<b>Total Non-current liabilities</b>	<b>24,206.00</b>	<b>35,074.51</b>	<b>44.90</b>	<b>36,688.70</b>	<b>4.60</b>	<b>40,368.59</b>	<b>10.03</b>	<b>27,176.05</b>	<b>-32.7</b>
<b>Current Liabilities</b>									
<b>Financial Liabilities</b>									
Borrowings	19,813.04	12,244.32	-38.2	10,631.22	-13.2	16,640.78	56.5	15,850.24	-4.75
Trade Payables	5,219.20	7,540.50	44.48	7,257.99	-3.75	6,320.38	-12.9	7,013.41	10.97
Other financial liabilities	12,765.62	14,170.20	11.00	14,693.31	3.69	13,732.40	-6.54	14,017.14	2.07
Provisions	2,914.77	2,304.18	-20.9	2,308.77	0.20	2,354.93	2.00	2,039.84	-13.4
Other current liabilities	5,607.26	7,142.42	27.38	6,708.17	-6.08	5,723.85	-14.7	7,555.04	31.9
Tax liabilities (net)	4.52	-		-		179.50		12.06	-93.2
<b>Total Current Liabilities</b>	<b>46,324.41</b>	<b>43,401.62</b>	<b>-6.31</b>	<b>41,597.46</b>	<b>-4.16</b>	<b>44,951.84</b>	<b>8.06</b>	<b>46,488.73</b>	<b>3.42</b>
<b>Total Liabilities</b>	<b>106,539.47</b>	<b>114,189.80</b>	<b>7.18</b>	<b>116,437.73</b>	<b>1.97</b>	<b>125,097.81</b>	<b>7.44</b>	<b>117,159.66</b>	<b>-6.35</b>

Source: Own processing based on the Standalone Statement of Financial Position of SAIL (FY 2017-2021)

Table 26 shows the horizontal analysis of Equity and Liabilities; In the Equity share capital no change can be seen. The major changes can be seen in Other Equity (Reserves and surplus, General reserves and Retained earnings etc.) which fell during 2018 from 2017 to -0.93% but the company grew it to 7.72% in 2019, 4.26% in 2020 and 10.43% in 2021. Hence, same trend can be seen with the Total Equity.

SAIL's Long-term Borrowings constantly increased by 56% in 2018 from 2017 and till 12.20% in 2020 from 2019. The most part of the borrowings are from the Term loans (secured and unsecured) from Banks but during 2021 as we can see from the above table there has been a dip of -42.92% which is because SAIL paid out half of their Term loans from bank.

Other non-current liabilities was -8.67% in 2018 from the previous year but it grew by 83.03% in 2019, 57% in 2020 and with 10.68% in 2021.

Short term borrowings have been fluctuating trend -38.290% in 2018, -13.17% in 2019, and 56.53% in 2020 and -4.75% in 2021, some part of the bank secured loans

was paid out and SAIL totally closed their foreign currency loans.

Trade Payables increased with 30.16% in 2017 from 2016, 44.48% in 2018 and then decreased with -3.75% in 2019 and -12.92% in 2020 which can be due to the payments have been made by their customers for the goods sold or some other factor like cash discounts or goods returns and in 2021 there was a rise of 10.97% maybe because company has sold its goods on credit.

In 2021, the other financial liabilities and other current liabilities increased from 2020 as there was increase by ₹ 7,555.04 crores from ₹ 5,723.85 crores in the employee related dues, security deposit, royalties and other performances related to pay, income received in advance from customers, general sales tax payable.

Whereas Provisions decreased in the year 2021 because of the provisions for accrued leave liability, post medical & retirement benefits and also because of the provisions of foreign exchange fluctuations. And tax liabilities (net) reduced because of the tax liabilities already being paid in 2020 and the opening balance was ₹ 179.50 crores for 2021.

The total non-current liabilities kept growing until 2020 and then dropped in 2021, the current liabilities were going down during 2018 and 2019 but they grew in 2020 and 2021.

The Total Equity & Liabilities increased by 7.18% in 2018, 1.97% in 2019, 7.44% in 2020 but decreased by -6.35% in 2021.

**Table 27: Horizontal Analysis of Income Statement of SAIL**

<b>Standalone Statement of Income of SAIL</b>									
<b>Particulars</b>	<b>31.3.2017</b>	<b>31.3.2018</b>	<b>%</b>	<b>31.3.2019</b>	<b>%</b>	<b>31.3.2020</b>	<b>%</b>	<b>31.3.2021</b>	<b>%</b>
Revenue from operations	49,767.10	58,962.36	18.5	66,967.3	13.6	61,660.55	-7.92	69,110.1	12.08
Other Income	535.61	484.45	-9.5	532.82	9.98	985.20	84.90	1,011.69	2.69
<b>Total Income</b>	<b>50,302.7</b>	<b>59,446.8</b>	<b>18.1</b>	<b>67,500.1</b>	<b>13.6</b>	<b>62,645.8</b>	<b>-7.19</b>	<b>70,121.7</b>	<b>11.93</b>
<b>Expenses</b>									
Cost of materials consumed	21,125.70	26,678.81	26.3	32,290.91	21.04	29,212.87	-9.53	23,136.2	-20.8
Changes in inventories of finished goods, work-in-progress	120.63	1,135.49	841	(2,716.6)	-339	(5,555.82)	104.5	4,268.58	-176
Employee benefits expenses	8,947.83	8,850.07	-1.1	8,830.34	-0.22	8,871.32	0.46	10,445.9	17.75
Finance costs	2,527.82	2,822.75	11.6	3,154.92	11.7	3,486.76	10.52	2,817.14	-19.2
Depreciation and amortization expenses	2,679.95	3,064.92	14.3	3,384.72	10.43	3,755.05	10.94	4,102	9.24
Other expenses	14,220.21	16,276.24	14.5	18,828.5	15.6	19,023.17	1.03	18,531.3	-2.5
<b>Total Expenses</b>	<b>54,936.83</b>	<b>60,232.2</b>	<b>9.64</b>	<b>63,772.8</b>	<b>5.88</b>	<b>58,703.5</b>	<b>-7.95</b>	<b>63,301.1</b>	<b>7.8</b>
<b>Profit before exceptional items and tax</b>	<b>(4,634.12)</b>	<b>(785.37)</b>	<b>83</b>	<b>3,727.29</b>	<b>574</b>	<b>3,942.42</b>	<b>5.77</b>	<b>6,820.6</b>	<b>73.0</b>
<b>Exceptional Items</b>	<b>(216.74)</b>	<b>(26.43)</b>	<b>88</b>	<b>389.40</b>	<b>157</b>	<b>771.76</b>	<b>98.2</b>	<b>-58.43</b>	<b>-107</b>
<b>Profit before tax</b>	<b>(4,850.86)</b>	<b>(758.94)</b>	<b>84</b>	<b>3,337.89</b>	<b>539</b>	<b>3,170.66</b>	<b>-5.01</b>	<b>6,879.03</b>	<b>116</b>
<b>Tax Expenses</b>									
Current Tax	15.14	35.73	136	4.84	-86	224.14	4531	12.05	-94.6
Deferred Tax	(2,032.76)	(312.96)	85	1,154.23	-468	1,073.73	-6.97	3,016.96	180.9
<b>Total Tax Expenses</b>	<b>(2,017.62)</b>	<b>(277.23)</b>	<b>86</b>	<b>1,159.07</b>	<b>518</b>	<b>1,149.12</b>	<b>-0.86</b>	<b>3,029.01</b>	<b>163.5</b>
<b>Profit for the year</b>	<b>(2,833.24)</b>	<b>(481.71)</b>	<b>83</b>	<b>2,178.82</b>	<b>552</b>	<b>2,021.54</b>	<b>-7.22</b>	<b>3,850.02</b>	<b>90.45</b>

Source: Own processing based on the Standalone Statement of Financial Position of SAIL (FY 2017-2021)

Table 27 represents the Horizontal Analysis of Income Statement for FY 2017 to 2021 keeping 2017 as the base year for 2018 and used chain year for the calculation.

Revenue from operations increased by 18.98% in 2018, 13.58% in 2019 and 12.08% in 2021 but there was a fall in the revenue by -7.92% in 2020. Though there was a fall in revenue from operations but the company managed to increase its other income with 84.90% in 2020 which came from Income from interests (loans and advances to customers, bank deposits, dividend income from subsidiaries and investments). And during 2021, other income increased by only 2.68% but the Revenue from operations was remarkable.

Cost of material consumed increased by 26.29% in 2018, 21.04% in 2019 and decreased by -9.53% in 2020 and -20.80% in 2021, During 2021 SAIL has made efforts in negotiating or cost of materials in the market were cheaper than previous year. Changes in inventories of finished goods, work-in-progress in 2021 is ₹ 4,485.02 the opening stock was more than the closing stock whereas in 2020 it was just the opposite and the figure was in negative. Employee benefits expenses, Depreciation and amortization expenses increased with slight percentage change of

up to 10-15% from the previous years. Finance cost and other expenses reduced by -19.24% and -2.59% in 2021 as SAIL paid the foreign currency loans, commercial papers and non-convertible bonds and SAIL somehow managed to reduce their expenses on stores and spares consumption, power and fuel.

Total tax (including current and deferred tax) fell by -86.26% in 2018 and grew to 518% in 2019 and again dropped slightly by 0.86% in 2020 and again grew by 163.6% in 2021. The company incurred Loss of ₹ -481.71 crores in 2018 and from 2019 the company started to earn profit. Profit of ₹ 2,178.82 crores in 2019 and profit dropped by -7.22% in 2020 and earned ₹ 3,850.02 in 2021 which is 90.45% higher than the previous year.

**Table 28: Vertical Analysis of Revenues of SAIL**

Standalone Statement of Revenues of SAIL (in Cr.)								
Particulars	31.3.2018	%	31.3.2019	%	31.3.2020	%	31.3.2021	%
Revenue From Operations	58,962.36	99.19	66,967.31	99.21	61,660.55	98.43	69,110.02	98.56
Other Income	484.45	0.81	532.82	0.79	985.20	1.57	1,011.69	1.44
<b>Total Income</b>	<b>59,446.81</b>	<b>100</b>	<b>67,500.13</b>	<b>100</b>	<b>62,645.77</b>	<b>100</b>	<b>70,121.71</b>	<b>100.00</b>

Source: Own processing based on the Standalone Statement of Income of SAIL (FY 2018-2021)

Table 6 represents the vertical analysis of Income. From the table we can see that Revenue from operations (sale of products in domestic and international market) brought more contribution to the total income. In 2018, Revenue from operations contributed 99.19%, in 2019 99.21% and in 2020 it made 98.43% and 98.56% in 2021 of the Total Income.

**Table 29: Vertical Analysis of Expenses of SAIL**

Particulars	31.3.2018	%	31.3.2019	%	31.3.2020	%	31.3.2021	%
<b>Expenses</b>								
Cost of materials consumed	26,678.81	44.52	32,290.91	53.26	29,212.87	44.72	23,136.17	36.55
Changes in inventories of finished goods and work-in-progress	1,135.49	1.89	(2,716.62)	-4.48	(5,555.82)	-8.51	4,268.58	6.74
Employee Benefits Expense	8,850.07	14.77	8,830.34	14.57	8,871.32	13.58	10,445.98	16.50
Finance Costs	2,822.75	4.71	3,154.92	5.20	3,486.76	5.34	2,817.14	4.45
Depreciation and Amortization expenses	3,064.92	5.11	3,384.72	5.58	3,755.05	5.75	4,102	6.48
Other expenses	16,276.24	27.16	18,828.57	31.06	19,023.17	29.12	18,531.28	29.27
<b>Total Exceptional Items</b>	<b>(26.43)</b>	<b>-0.04</b>	<b>389.40</b>	<b>0.64</b>	<b>771.76</b>	<b>1.18</b>	<b>-58.43</b>	<b>-0.09</b>
<b>Tax Expense</b>								
Current Tax	35.73	0.06	4.84	0.01	224.14	0.34	12.05	0.02
Deferred Tax	(312.96)	-0.5	1,154.23	1.90	1,073.73	1.64	3,016.96	4.77
<b>Total Tax Expenses</b>	<b>(277.23)</b>	<b>-0.5</b>	<b>1,159.07</b>	<b>1.91</b>	<b>1,149.12</b>	<b>1.76</b>	<b>3,029.01</b>	<b>4.79</b>
<b>Total Expenses</b>	<b>59,928.52</b>	<b>100</b>	<b>60,624.23</b>	<b>100</b>	<b>65,321.31</b>	<b>100</b>	<b>63,301.11</b>	<b>100.00</b>

Source: Own processing based on the Standalone Statement of Income of SAIL (FY 2018-2021)

Table 29 shows the vertical analysis of Expenses of SAIL from 2018 to 2021. Here we had calculated the percentage contributed by each expense on the total expenses incurred by the company.

The highest contribution is made by Cost of materials consumed which 44.52% in

2018, 53.26% in 2019, 44.72% in 2020 and 36.55% in 2021. The cost of materials includes the purchasing cost incurred by the company to buy Iron ore, Coal, Aluminium and other raw materials to produce SAIL's finished goods. The next highest contribution comes from Other Expenses (repairs & maintenance, remuneration to auditors etc.) which contributed 27.16% in 2018, 31.06% in 2019, 29.12% in 2020 and 29.27% in 2021 of the total expense. The third highest is made by Employee benefit expenses 14.77% in 2018, 14.57% in 2019, 13.58% in 2020 and 16.50% in 2021. Depreciation and Amortization expenses, Finance Costs and Total Tax Expenses made only little part of the contribution throughout, they remained below 6% from 2018 to 2021 in respect to their contribution to Total expenses.

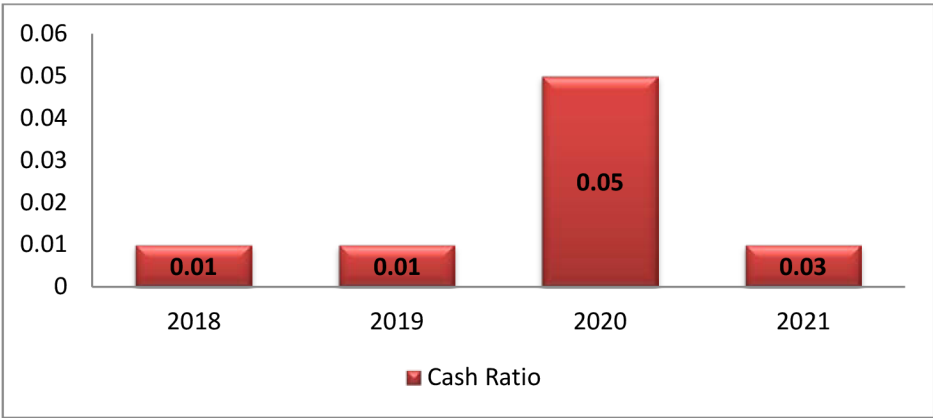
**4.5 The Financial ratios analysis calculated to understand the SAIL's Liquidity, Return on Equity (ROE) & Return on Assets (ROA) from the period 2018 to 2021.**

**Table 30: Cash Ratio Analysis**

Particulars	2018	2019	2020	2021
Cash and Cash Equivalents	79.45	34.59	153.43	468.4
Other balances with Bank	174.61	184.83	2019.82	212.12
Total Current Liabilities	<b>43,401.62</b>	<b>41,597.46</b>	<b>44,951.84</b>	<b>46,488.73</b>
<b>Cash Ratio</b>	<b>0.01</b>	<b>0.01</b>	<b>0.05</b>	<b>0.01</b>

Above figures of (Total Current Liabilities, Cash and Cash Equivalents, Other balances with Bank) are all in ₹ crores.

Figure 9: Cash Ratio Analysis of SAIL (FY 2018 to 2021)



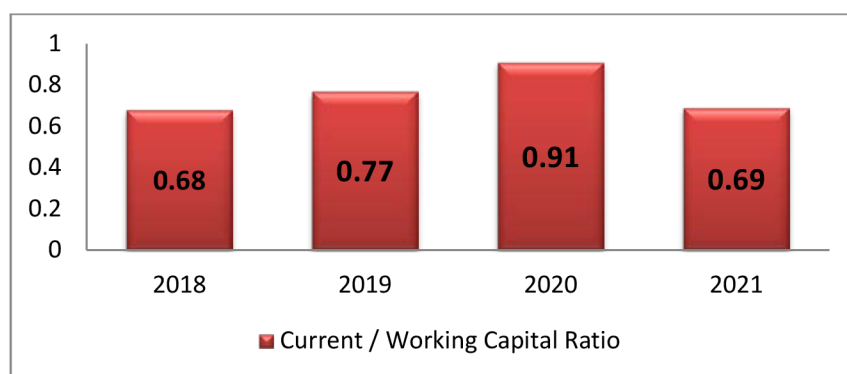
Source: Own processing as per Table 8

From the above figure of Cash Ratio we can understand the SAIL's cash ratio is way less than 1. During 2018 to 2021 the ratio was close to zero, which is considered unhealthy for the company and SAIL was not able to meet its current obligations.

**Table 31: Current/Working Capital Ratio Analysis**

Particulars	2018	2019	2020	2021
Current Assets	29,605.70	32,237.80	40,891.25	31,959.11
Current Liabilities	<b>43,401.62</b>	<b>41,597.46</b>	<b>44,951.84</b>	<b>46,488.73</b>
<b>Current / WC Ratio</b>	<b>0.68</b>	<b>0.77</b>	<b>0.91</b>	<b>0.69</b>

Above figures (Total Current Liabilities & Total Current Assets) are all in ₹ crores.

**Figure 10: Current / Working Capital Ratio Analysis of SAIL (FY 2018 to 2021)**

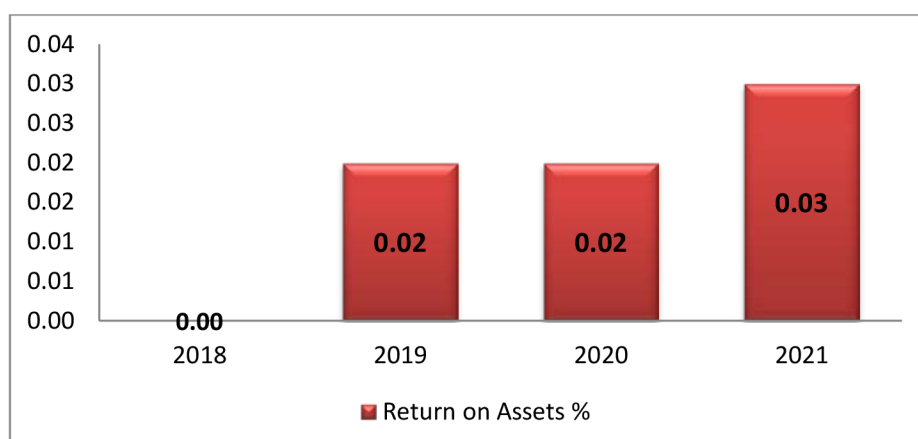
Source: Own processing as per Table 9

From the figure of Current / Working capital ratio we see that during 2018 to 2021 the Current ratio is below 1. This means that SAIL has more than twice as much as current liabilities as current assets which makes the company not liquid and company struggles to pay its short term debts/obligations. Though in 2020, the company did have sufficient current assets but again in 2021, SAIL current assets dropped.

**Table 32: Return on Assets % (ROA)**

Particulars	2018	2019	2020	2021
Net Income / Loss	-481.71	2,178.82	2,021.54	3,850.02
Total Assets	114,189.90	116,437.73	125,097.81	1,17,159.66
<b>Return on Assets (%)</b>	<b>0.00</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03</b>

Above figures (Net Income & Total Assets) are all in ₹ crores and Return on Assets in (%).

**Figure 11 : Return on Assets (%) of SAIL (FY 2018 to 2021)**



Source: Own processing as per Table 10

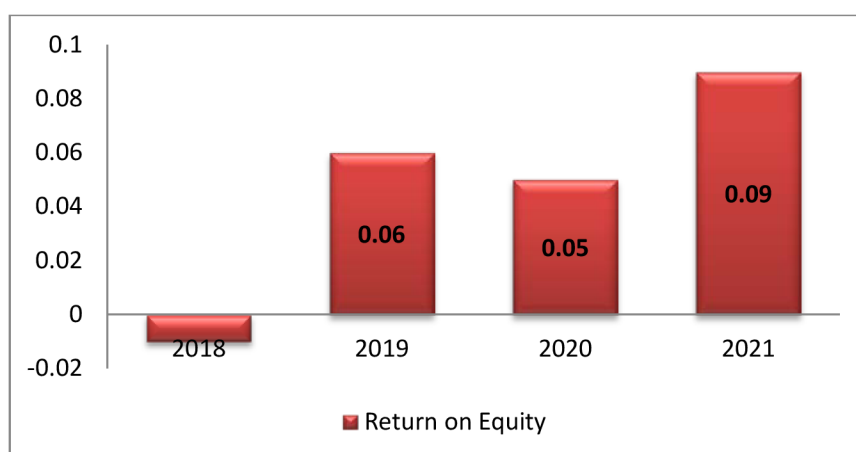
Figure above is the Return on Assets (%) this shows how the company manages assets to gain more net income. Here we can see that during 2018, SAIL ROA was 0.00 and during 2019, 2020 was close to 0.03 which is considered unprofitable more likely loss making company. The company ROA went slightly up to 0.03 in 2021 but it is not considered profitable for SAIL. As we can see the company has Net Loss from the table 10.

**Table 33: Return on Equity % (ROE)**

Particulars	2018	2019	2020	2021
Net Income / Loss	-481.71	2,178.82	2,021.54	3,850.02
Total Equity	35,713.67	38,151.57	39,777.38	43,494.88
Return on Equity (%)	-0.01	0.06	0.05	0.09

Above figures (Net Income & Total Equity) are all in ₹ crores and Return on Equity in (%).

Figure 12: Return on Equity (%) of SAIL (FY 2018 to 2021)



Source: Own processing as per Table 11

As we can see from the above figure, return on equity (%) in 2018 the company ROE was in negative figure these are the years the company made Net losses. Well, during 2019, 2020 and 2021 the ROE was 0.06, 0.05 and 0.09 respectively, since ROE is profitability indicator, these values is a sign that company is in financial distress.

## **5. Results and Discussion**

From the Practical part we assessed the financial position and performance of the three companies. Based on the data and calculation of Balance Sheet we have assessed the financial position and through Income Statement we have assessed the financial performance. In this part, we will discuss about the comparative assessment of financials and ratios of TATA Steel, JSW Steel and SAIL and what are the factors influencing the profit in the company (internal and external) factors taking in account the short-term and long-term debts, expenses and exchange rates etc.

### **5.1 Comparative assessment of financial position of TATA Steel, JSW Steel & SAIL.**

The financial position of the three companies are analysed by vertical and horizontal analysis of Balance Sheet.

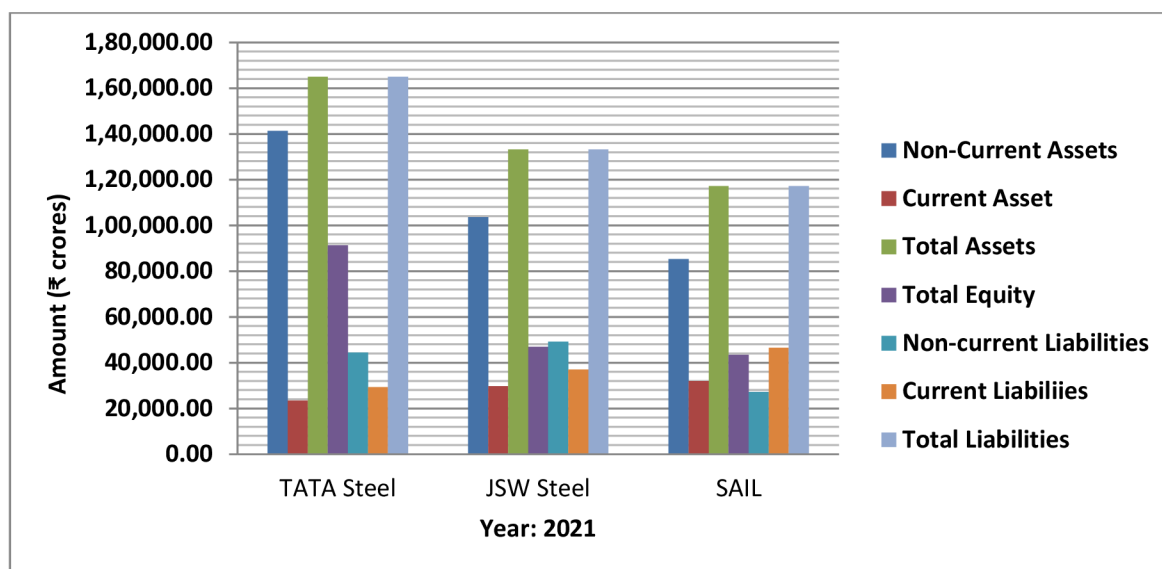
In the vertical analysis of TATA Steel Balance sheet indicates the most significant contribution to total assets came from the non-current assets; Property, Plant and Equipment which contributes the highest in all the years 56.70% in 2018 to 38.80% in 2021 whereas company has invested on Capital work-in-progress in 2021 higher than previous years, the contribution subsequently by Investments in subsidiaries, associates and joint ventures which made 17% and then by financial assets-investments which contributes 13% of the Total Assets and in total non-current assets contributes the highest among all assets making TATA Steel's strong hold of almost 86% on its non-current assets. As we can see from Table 1, Current Assets contributed least only 13 to 14% in all the years (2018 to 2021). Now we see the Equity & Liabilities, most of the contribution came from Other Equities ( General reserves and Retained Earnings) nearly making 55% and in Non-current liabilities, Long-term Borrowings makes the most significant contribution among other liabilities 16 to 20% of the Total Equity & Liabilities.

In case of JSW Steel, the most significant contribution is also made by Property, plant and equipment which ranges from 57% in 2018 to 35% in 2021 of the Total Assets and then by Capital work-in-progress during 2020 and 2021 making 21% of

the total assets. JSW Steel does not have huge investments in subsidiaries, associates and joint ventures as TATA Steel. We can see from the Table 4 JSW Steel's current assets makes the one-fourth of the total assets in all the years and three-fourth is contributed by non-current assets.

And in the case of SAIL, the most significant contribution also made from Property, Plant and Equipment nearly 55% of the Total assets, followed by Capital work-in-progress making 7% to 13% from 2019 to 2021. SAIL also does not have huge investment in subsidiaries, associates and joint venture unlike TATA Steel. The non-current asset makes approximately 72% of the Total Assets. And under Current assets item, Inventory contributes larger part 13-16% in all the years followed by Trade receivables making 3 to 7% of the Total Assets. Among Equity and Liabilities, Other equity makes the most remarkable contribution of 30% of the total equity and liabilities which is then followed by long-term borrowings making 17-26% of the total. SAIL's current liabilities contribution was always higher than their non-current liabilities (Table 24).

Figure 13: Assets and Liabilities of TATA Steel, JSW Steel and SAIL (FY 2021)



Source: Own processing from the financial position tables of TATA Steel, JSW Steel and SAIL

Now if we compare the vertical analysis of the three Iron and steel companies as per Table 1, Table 12, Table 23 and also as an example taken in the Figure 13 for the year 2021, we can see that TATA Steel's Total Non-current assets are higher than JSW Steel and SAIL in all the years and in terms of Current Assets, SAIL has slightly more current assets than TATA Steel and JSW Steel. Total Assets, Total Equity of TATA Steel are higher than that of the JSW Steel and SAIL. Wherein, in

terms of Non-current liabilities JSW steel has slightly more and current liabilities are more in SAIL.

TATA Steel long term Borrowings was between 16 to 20% from 2018 to 2021 and short term Borrowings was almost negligible (Table no 2). Whereas, Long-term and short-term Borrowings of SAIL and JSW Steel was higher from 2018 to 2020 which was in total contributing 36-42% of the Total liabilities and during 2021 it came down to 30%, the company paid out most of its interests on loans or might have closed some of their banks loans (Table no 13 & 24).

In the horizontal analysis of TATA Steel, Property, plant and equipment has been decreasing year after year during 2018 TATA Steel had ₹ 70,942.9 and in 2021 had ₹ 64,032.32. Capital work-in-progress changed 24.62% in 2021 from the previous year. But the highest percentage change can be seen in Intangible assets under development, Long-term loans to its subsidiaries and joint venture, inventories, short-term investments, trade receivables, cash and cash equivalents and other financial assets (Table 3). Other equity (Reserves & surplus, general reserve and retained earnings) changed from ₹ 60,368.72 2018 and ₹ 89,293.33 in 2021 and among them retained earnings brought major change. Apart from Income tax liabilities (net) which had significant change from ₹ 277.26 crores in 2020 to ₹ 4,093.26 crores in 2021 whereas, all the other liabilities has no such significant change (Table no.4) .

In case of JSW Steel, Property, Plant and Equipment has been decreasing in 2017 the amount was ₹ 50,215 crores and it was ₹ 46,117 crores in 2021 but there has been major change in Capital Work-in-progress ₹ 2,745 crores in 2017 to ₹ 28,918 crores; JSW Steel had huge gains from exchange fluctuation and borrowings which got capitalised during the year. Company's investment in equity instruments, preference shares and government securities increased from ₹ 1,030 crores in 2017 to ₹ 5,782 crores in 2021. Loans to related parties and other corporate parties reduced. The term deposit made a huge impact on the Cash and Cash equivalents which was ₹ 712 crores in 2017 and total term deposit was ₹ 10,415 crores in 2021. (Table no.15 & 26) Equity share capital remained the same whereas the other equity had a huge percentage from 2017 to 2021, in this part the general and capital reserve did not make huge change but the huge change was brought by retained earnings (profit left with the company after paying dividends paid to shareholders) which kept increasing from year to year making the figure double ₹ 23,797 crores to

₹ 46,675 crores in other equity. Other non-current liabilities changed from ₹ 3 crores in 2017 to ₹ 3,095 crores in 2021 and all other liabilities did not make major percentage change. (Table no.15)

In SAIL, Property, plant and equipment increased from ₹ 48,762.03 in 2017 to ₹ 64,115.26 in 2021 and Capital work-in progress gradually by 61% reduced from 2017 to 2021. Long term income tax (assets) net reduced as deferred tax assets reduced because of offsetting tax future income and tax depreciation. Trade receivables, other financial and current assets increased from 2017 to 2021 because of advances to contractors, suppliers, company's deposit with government authorities and general sales tax receivables whereas Loans, cash and cash equivalents, inventories did not change much from 2017 to 2020. (Table no.26). Equity share capital remained the same throughout the years; the only change was on other equity- retained earnings which kept growing from 2019, general and capital reserve, securities premium was same. Long term and short term borrowing kept fluctuating during 2020, SAIL had highest borrowings in respect to other years. Trade payables increased from ₹ 5,219.20 crores in 2017 to ₹ 7,013.41 in 2021. Other financial and current liabilities did not change much during the years.

## **5.2 Comparative assessment of financial performance of TATA Steel, JSW Steel & SAIL.**

The financial performance of the three companies are analysed by vertical and horizontal analysis of Income Statement.

In the vertical analysis of TATA Steel, JSW Steel and SAIL the huge part or percentage of total income is coming from the revenue from operations (sale of products and services) in the domestic and international market. Other income contributes less than 5% which comes from Interest incomes from loans and advances to other companies and dividends income from investing on subsidiaries and associates, bank deposits. In the vertical analysis of the Expenses, highest part of the expenses is from Cost of materials consumed (purchase of iron ore, coal, coke, limestone, aluminium, Silico manganese etc.) and other expenses. The other expenses for TATA Steel is 40 to 50% of the total expense, for JSW Steel is 22 to 30% and for SAIL is 26 to 31% from 2017 to 2021. The consumption of stores and spares, repairs to machinery, purchase of power, freight and handling charges by

rail, ship and trucks are biggest part of the other expenses. Even, Employee benefit expenses plays a vital part from the total expenses nearly 10% each year for TATA Steel and 14 to 17% for SAIL whereas JSW Steel does not have much of this expense.

In horizontal analysis, all the three company's revenue increased from 2020 in 2021 which is due to Covid-19 struck India in 2020 and there was severe economic slowdown and lockdowns all the three companies had lesser revenue than 2019. Revenue had been always in an increasing trend from 2017 to 2019. Though the revenue increased but the cost of materials consumed lowered for all the three companies during 2021 which was higher in other years which could be due to price of raw materials were lower.

The most significant changes can be seen for Exceptional items and Total taxes (current and deferred tax) deferred tax increased during 2021 for all the companies. All the other items did not make significant changes.

During 2021, JSW Steel and SAIL have tried to minimize their expenses whereas TATA Steel's expenses went slightly higher but the profit for all the companies were in incremental trend from 2017 to 2019 and dropped in 2020 and then again raised in 2021. (Table no.5,16 & 27)

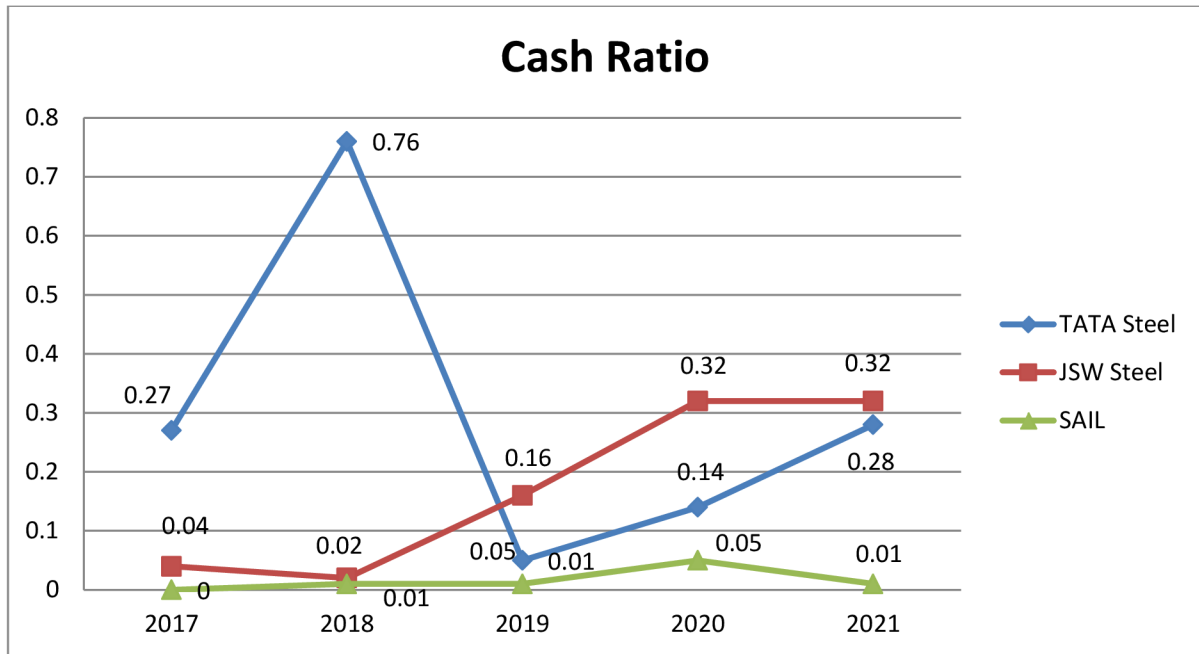
### 5.3 Comparative assessment of selected financial ratios of TATA Steel, JSW Steel & SAIL.

**Table 34: Cash Ratio Analysis of TATA Steel, JSW Steel and SAIL**

Particulars	2017	2018	2019	2020	2021
TATA Steel	0.27	0.76	0.05	0.14	0.28
JSW Steel	0.04	0.02	0.16	0.32	0.32
SAIL	0.00	0.01	0.01	0.05	0.01

Source: Own processing

Figure 14: Cash Ratio (TATA Steel, JSW Steel and SAIL FY 2018 to 2021)



Source: Own processing

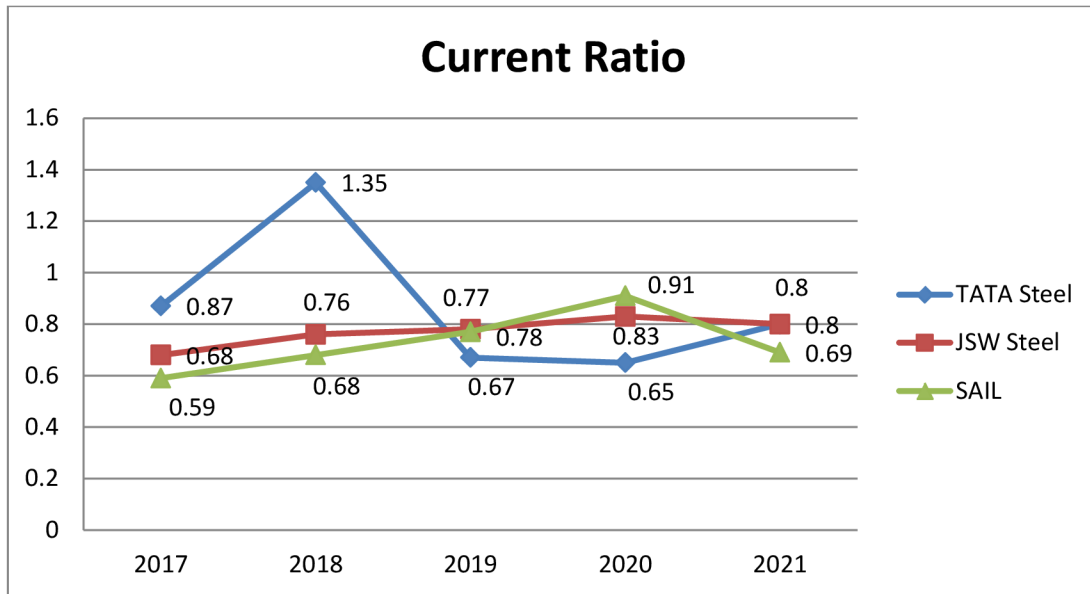
TATA Steel had better cash ratio in 2018 whereas the ratio decreased in 2020 and 2021, JSW Steel's cash ratio seems to be improving from 2019 whereas SAIL has the lowest cash ratio. Cash ratio equal to 1 is considered very well for the company but as we can see from the figure and table none of the company has adequate cash and cash equivalents to meet their short-term obligations and all three companies has more current liabilities as compared to the cash and cash equivalents.

**Table 35: Current Ratio Analysis of TATA Steel, JSW Steel and SAIL**

Particulars	2017	2018	2019	2020	2021
<b>TATA Steel</b>	0.87	1.35	0.67	0.65	0.80
<b>JSW Steel</b>	0.68	0.76	0.78	0.83	0.80
<b>SAIL</b>	0.59	0.68	0.77	0.91	0.69

Source: Own processing

Figure 15: Cash Ratio (TATA Steel, JSW Steel and SAIL FY 2017 to 2021)



Source: Own processing

From the table and figure, we can interpret that TATA Steel has the better current ratio and the company is able to fulfill its working capital requirements, during 2019, 2020 current ratio was lesser but during 2021 the company has kept more current assets. JSW Steel has always kept its current ratio between 0.68 - 0.80 which is still considered good for the company. SAIL current ratio was lowest in 2017, 2021 the company does not have sufficient current assets to meet their short term liabilities.

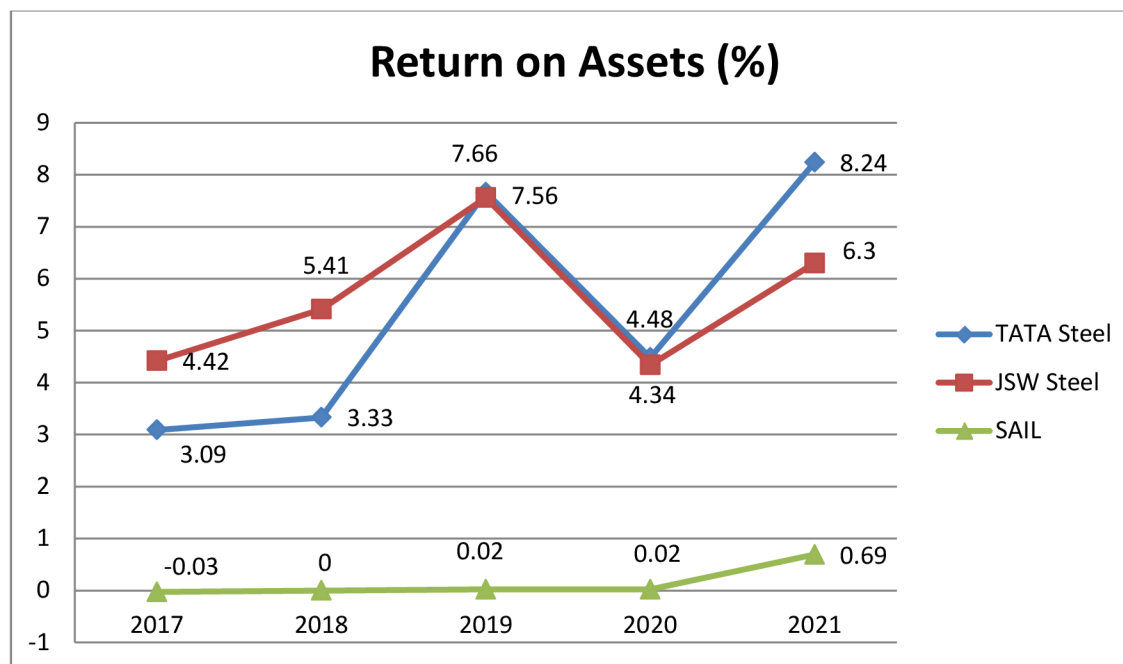
**Table 36: Return on Assets (%) of TATA Steel, JSW Steel and SAIL**

Particulars	2017	2018	2019	2020	2021
<b>TATA Steel</b>	3.09	3.33	7.66	4.48	8.24
<b>JSW Steel</b>	4.42	5.41	7.56	4.34	6.30
<b>SAIL</b>	-0.03	0.00	0.02	0.02	0.03

Source: Own processing



Figure 16: Return on Assets (%) (TATA Steel, JSW Steel and SAIL FY 2017 to 2021)



Source: Own processing

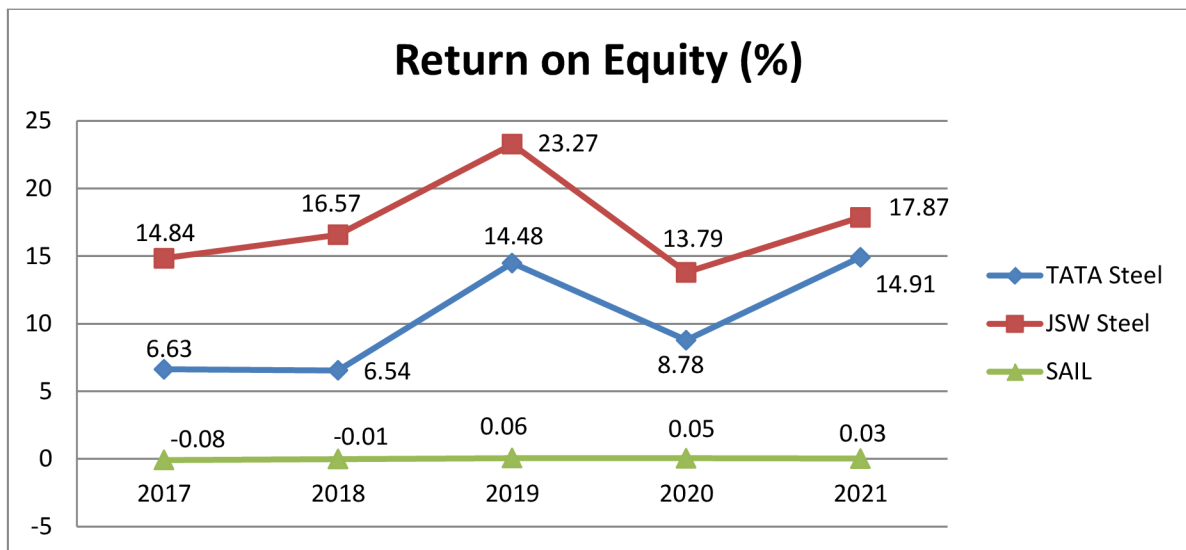
ROA shows how the company manages assets to gain more net income. Any positive percentage and ideally 5% is considered good for the company. Hence, from the table and figure we can interpret TATA Steel and JSW Steel are managing their assets well and gaining more net income. SAIL has been investing and expanding with property, plant and equipment but it is consistently very low and is a concern for the company.

**Table 37: Return on Equity (%) of TATA Steel, JSW Steel and SAIL**

Particulars	2017	2018	2019	2020	2021
<b>TATA Steel</b>	6.63	6.54	14.48	8.78	14.91
<b>JSW Steel</b>	14.84	16.57	23.27	13.79	17.87
<b>SAIL</b>	-0.08	-0.01	0.06	0.05	0.09

Source: Own processing

Figure 17: Return on Equity (%) (TATA Steel, JSW Steel and SAIL FY 2017 to 2021)



Source: Own processing

JSW Steel has been doing extremely well in ROE in comparison to TATA Steel and SAIL. JSW Steel and TATA Steel is very efficient in generating income for their shareholders and SAIL has the lowest ROE which means that SAIL is less efficient in generating profit.

#### 5.4 The most significant factors influencing profit for the industry

The factors influencing profit for the Iron and Steel industry are internal and external. Some of the internal factors are the capital investment requirement for an iron and steel industry is huge; hence many companies are not financially strong to invest largely into this industry.

And the industry requires high degree of technological advancement and efficiency and they operate in a very competitive environment in matters related to oil and coal crisis for example Vishakhapatnam steel plant imports coal from Australia, high raw material cost and energy cost, price volatility are some factors reducing the revenue and profit of the iron and steel plants.

External factors- National Steel Policy which focuses on achieving global competitiveness in terms of global benchmark of efficiency and productivity and policies proposed in building natural gas based steel plants and electric furnaces to bring the usage of coking coal.

The per capita labour productivity in India is very low in India than other countries like Japan and South Korea. The potential utilization of the iron and steel plants are low because of labour strikes, inefficient administration etc.

There are heavy demands and is increasing day by day and large quantities are being used within the country and exported to meet these demands and India exported

10.78 million tonnes of iron and steel to other countries in 2020-21.

Some of the huge expenses which Iron and steel companies incurs is from the Consumption of stores and spares, freight and handling charges, purchase of power and repairs to machineries and technological and machinery advancements, efficient management and high labour productivity can boost the profit.

## 5.5 The potential financial problems

Some of the problems which can and may affect the company's financial performance are as follows:

- i. **Operational risk:** The steel industry is very capital-intensive, technology and equipment intensive too, any ineffective deliverance of the equipment reliability or malfunctioning of equipment will lead to obstruction of the whole operational processes.
- ii. **Macroeconomics and market risk:** Steel industry is affected by the macroeconomics conditions and also prolonged weak growth of Indian economy and the Covid-19 restrictions and lockdowns affected the demand and supply and thereby adversely affecting the business, operations and financial conditions.
- iii. **Financial risk:** Each of the companies have large debt portfolio from long-term and short-term borrowings, volatility of the financial or share market, bank's interest rates, exchange rate losses from import and exports impacts the profitability.
- iv. **Information security risk:** Due to high reliability on information technology, business can be harmed by the system failure, data breaches, and cyber-attacks and also non-compliance of IT legislations and regulations will lead to obstruction and penalties.
- v. **Regulatory risk:** There are risks related to national laws and regulations: trade measures, taxation, mining, environmental and climate change and always introduction of new laws make it more complex.
- vi. **Commodity and Supply chain risk:** The volatility in the material prices can easily impact the profitability and the supply chains and material prices get impacted by the government's policies, geopolitical landscape and tensions, demand and supply imbalances which results in monopoly of the suppliers.
- vii. **Safety risk:** Implementation of the health and safety laws during Covid-19 and disease contagion possesses risk to business operation and reputation. Accidents within the steel plant will disrupt the production and operations.

## 6. Conclusion

The aim of the thesis was to access, evaluate and compare the financial position and performance of Iron and Steel companies by analyzing the company's financial statements with a target on the representation and changes of the reported assets, liabilities, revenues and expenses for the period of four years and to identify the most significant factors affecting profit and potential financial problems.

The financial position is accessed by the company's balance sheet and the financial performance by analyzing company's income statement. The balance sheet represents a company's assets, liabilities and equity and income statement represents revenue, expenses, profit or loss incurred by a company at a given period.

In this thesis, we analyzed the biggest Iron and Steel producing companies – TATA Steel, JSW Steel and Steel Authority of India (SAIL) for the accounting from 2017 to 2021. The practical part, comparative analysis and conclusion of the thesis were done by the analyzing all the three company's published annual reports.

The analysis of financial position i.e., balance sheet of all the companies indicates that the most significant contributing and changing assets and liabilities, among Non-current assets is Property, plant and equipment and among current assets is Inventory. Whereas, in Equity and liabilities the most significant are the other equity, among non-current liabilities is long-term borrowings and current liabilities are short-term borrowings, trade payables.

In the analysis of financial performance i.e., Income statement of all companies indicates the revenue and expenses. The most significant are the Revenue, cost of materials consumed, finance cost and other expenses which included spares of stores and freight and carriage, though other expenses had been gradually declining. And, hence we found that the profit of companies is impacted by the enhancing revenue, declining expenses and reviving strategies of company's spending.

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## 8. Appendix

### Appendix 1 – Major Iron and Steel Producers in the World

Total Iron and Steel produced in the world was 1,878 million tonnes and the country's rank are in the table below

RANK	COUNTRY NAME	MILLION TONNES	SHARE OF GLOBAL PRODUCTION (%)
1	CHINA	1064.8	56.70
2	INDIA	100.3	5.34
3	JAPAN	83.2	4.43
4	USA	72.7	3.87
5	RUSSIA	71.6	3.81
6	SOUTH KOREA	67.1	3.57
7	TURKEY	35.8	1.91
8	GERMANY	35.7	1.90
9	BRAZIL	31.0	1.65
10	IRAN	29.0	1.54
11	TAIWAN	21.0	1.12
12	UKRAINE	20.6	1.10
13	ITALY	20.4	1.09
14	VIETNAM	19.5	1.04
15	MEXICO	16.8	0.89
16	FRANCE	11.6	0.62
17	SPAIN	11.0	0.59
18	CANADA	11.0	0.59
19	INDONESIA	9.3	0.50

Source: <https://www.worldsteel.org/media-centre/press-releases/2021/world-steel-in-figures-2021.html>

As per the above table, China is the leading and largest producer of Iron and Steel in the world with 56.70% of the total produced in the world which is way higher than any other country followed by India, Japan, USA, Russia and South Korea.

## Appendix 2 - Top Iron and Steel producing companies

China Baowu Group, headquartered in China is the largest producer of steel and followed by ArcelorMittal, headquartered in Luxembourg City. TATA Steel ranks 12th among the top steel producing companies whereas SAIL and JSW Steel ranks 24th and 25th respectively.

### Top steel-producing companies 2020

million tonnes, crude steel production

Rank	Company	Tonnage	Rank	Company	Tonnage
1	China Baowu Group <sup>(1)</sup>	115.29	26	Rizhao Steel	14.40
2	ArcelorMittal <sup>(2)</sup>	78.46	27	Sinogiant Group	14.18
3	HBIS Group <sup>(3)</sup>	43.76	28	China Steel Corporation	14.11
4	Shagang Group	41.59	29	CITIC Pacific	14.09
5	Nippon Steel Corporation <sup>(4)</sup>	41.58	30	EVRAZ	13.63
6	POSCO	40.58	31	Shaaxi Steel	13.18
7	Ansteel Group	38.19	32	Gerdau	13.00
8	Jianlong Group	36.47	33	Zenith Steel	12.76
9	Shougang Group	34.00	34	Techint Group	12.55
10	Shandong Steel Group	31.11	35	Shenglong Metallurgical	12.06
11	DeLong Steel Group	28.26	36	Nanjing Steel	11.58
12	Tata Steel Group	28.07	37	MMK	11.57
13	Valin Group	26.78	38	U. S. Steel Corporation	11.55
14	JFE Steel	24.36	39	Sanming Steel	11.37
15	Nucor Corporation	22.69	40	Severstal	11.31
16	Hyundai Steel	19.81	41	Anyang Steel	11.20
17	Fangda Steel	19.60	42	Donghai Special Steel	10.88
18	IMIDRO <sup>(5)</sup>	18.90	43	Tsingshan Holding	10.80
19	Benxi Steel	17.36	44	thyssenkrupp	10.73
20	Luzhou Steel	16.91	45	Metinvest Holding	10.16
21	Jingye Steel	16.30	46	Xinyu Steel	9.89
22	NLMK	15.75	47	Jiuquan Steel	8.75
23	Baotou Steel	15.61	48	Erdemir Group	8.53
24	SAIL	14.97	49	Steel Dynamics, Inc.	8.40
25	JSW Steel	14.86	50	Jinxi Steel	8.01

Source: <https://www.worldsteel.org/media-centre/press-releases/2021/world-steel-in-figures-2021.html>

## Appendix 3 – Standalone Statement of BALANCE SHEET of TATA Steel 31<sup>st</sup> March 2020 and 31<sup>st</sup> March 2021

### BALANCE SHEET

as at March 31, 2021

				(₹ crore)	
				As at	As at
				March 31, 2021	March 31, 2020
	Note	Page			
<b>Assets</b>					
<b>I Non-current assets</b>					
(a) Property, plant and equipment	3	268		64,032.32	66,392.35
(b) Capital work-in-progress				10,057.18	8,070.41
(c) Right-of-use assets	4	271		3,905.97	4,113.31
(d) Intangible assets	5	273		839.33	777.72
(e) Intangible assets under development				408.79	176.64
(f) Investments in subsidiaries, associates and joint ventures	6	274		28,444.61	26,578.41
(g) Financial assets					
(i) Investments	7	279		22,621.66	20,282.50
(ii) Loans	8	283		7,509.33	199.26
(iii) Derivative assets				42.52	162.46
(iv) Other financial assets	9	285		91.66	60.42
(h) Non-current tax assets (net)				1,645.10	1,557.82
(i) Other assets	11	288		1,681.22	2,062.07
<b>Total non-current assets</b>				<b>1,41,279.69</b>	<b>1,30,383.37</b>
<b>II Current assets</b>					
(a) Inventories	12	289		8,603.79	10,716.66
(b) Financial assets					
(i) Investments	7	279		6,404.46	3,235.16
(ii) Trade receivables	13	289		3,863.31	1,016.73
(iii) Cash and cash equivalents	14	291		1,501.71	993.64
(iv) Other balances with banks	15	291		170.00	233.23
(v) Loans	8	283		1,555.95	1,607.32
(vi) Derivative assets				66.93	209.96
(vii) Other financial assets	9	285		351.54	230.41
(c) Other assets	11	288		854.99	1,715.92
<b>Total current assets</b>				<b>23,372.68</b>	<b>19,959.03</b>
<b>III Assets held for sale</b>					
				<b>383.62</b>	<b>50.16</b>
<b>Total assets</b>				<b>1,65,035.99</b>	<b>1,50,392.56</b>
<b>Equity and liabilities</b>					
<b>IV Equity</b>					
(a) Equity share capital	16	292		1,198.78	1,146.13
(b) Hybrid perpetual securities	17	295		775.00	2,275.00
(c) Other equity	18	295		89,293.33	73,416.99
<b>Total equity</b>				<b>91,267.11</b>	<b>76,838.12</b>
<b>V Non-current liabilities</b>					
(a) Financial liabilities					
(i) Borrowings	19	299		27,313.80	31,381.96
(ii) Derivative liabilities				71.20	122.55
(iii) Other financial liabilities	20	302		413.66	293.59
(b) Provisions	21	302		2,543.94	2,113.56
(c) Retirement benefit obligations	22	303		2,087.86	2,224.44
(d) Deferred tax liabilities (net)	10	286		6,111.70	5,862.28
(e) Other liabilities	24	304		5,913.40	684.76
<b>Total non-current liabilities</b>				<b>44,455.56</b>	<b>42,683.14</b>
<b>VI Current liabilities</b>					
(a) Financial liabilities					
(i) Borrowings	19	299		-	7,857.27
(ii) Trade payables	25	304			
(a) Total outstanding dues of micro and small enterprises				160.66	118.62
(b) Total outstanding dues of creditors other than micro and small enterprises				10,477.93	10,482.34
(iii) Derivative liabilities				69.39	81.69
(iv) Other financial liabilities	20	302		5,274.11	5,401.55
(b) Provisions	21	302		1,074.43	663.86
(c) Retirement benefit obligations	22	303		116.10	106.61
(d) Deferred income	23	304		34.44	6.15
(e) Current tax liabilities (net)				4,093.26	277.26
(f) Other liabilities	24	304		8,013.00	5,875.95
<b>Total current liabilities</b>				<b>29,313.32</b>	<b>30,871.30</b>
<b>Total equity and liabilities</b>				<b>1,65,035.99</b>	<b>1,50,392.56</b>



## Appendix 4 – Standalone Statement of INCOME STATEMENT of TATA Steel 31<sup>st</sup> March 2020 and 31<sup>st</sup> March 2021

### STATEMENT OF PROFIT AND LOSS

for the year ended March 31, 2021

(₹ crore)

	Note	Page	Year ended March 31, 2021	Year ended March 31, 2020
<b>I</b> Revenue from operations	26	305	64,869.00	60,435.97
<b>II</b> Other income	27	306	637.89	404.12
<b>III Total income</b>			<b>65,506.89</b>	<b>60,840.09</b>
<b>IV Expenses:</b>				
(a) Cost of materials consumed			13,868.60	17,407.03
(b) Purchases of stock-in-trade			1,146.05	1,563.10
(c) Changes in inventories of finished and semi-finished goods, stock-in-trade and work-in-progress	28	307	1,464.12	(564.40)
(d) Employee benefits expense	29	307	5,198.82	5,036.62
(e) Finance costs	30	308	3,393.84	3,031.01
(f) Depreciation and amortisation expense	31	308	3,987.32	3,920.12
(g) Other expenses	32	308	22,747.30	23,803.18
			<b>51,806.05</b>	<b>54,196.66</b>
Less: Expenditure (other than interest) transferred to capital and other accounts			1,321.24	1,671.13
<b>Total expenses</b>			<b>50,484.81</b>	<b>52,525.53</b>
<b>V Profit before exceptional items and tax (III-IV)</b>			<b>15,022.08</b>	<b>8,314.56</b>
<b>VI Exceptional items:</b>	33	310		
(a) Profit/(loss) on sale of non-current investments			1,084.85	-
(b) Provision for impairment of investments/doubtful advances			149.74	(1,149.80)
(c) Provision for demands and claims			-	(196.41)
(d) Employee separation compensation			(443.55)	(107.37)
(e) Gain/(loss) on non-current investments classified as fair value through profit and loss (net)			1,982.01	(250.00)
<b>Total exceptional items</b>			<b>2,773.05</b>	<b>(1,703.58)</b>
<b>VII Profit before tax (V+VI)</b>			<b>17,795.13</b>	<b>6,610.98</b>
<b>VIII Tax expense:</b>				
(a) Current tax			3,949.05	1,787.95
(b) Deferred tax			239.46	(1,920.77)
<b>Total tax expense</b>			<b>4,188.51</b>	<b>(132.82)</b>
<b>IX Profit for the year (VII-VIII)</b>			<b>13,606.62</b>	<b>6,743.80</b>
<b>X Other comprehensive income/(loss)</b>				
<b>A (i) Items that will not be reclassified subsequently to profit and loss</b>				
(a) Remeasurement gain/(loss) on post-employment defined benefit plans			81.97	(461.27)
(b) Fair value changes of investments in equity shares			333.55	(244.30)
<b>(ii) Income tax on items that will not be reclassified subsequently to profit and loss</b>			<b>(27.40)</b>	<b>116.65</b>
<b>B (i) Items that will be reclassified subsequently to profit and loss</b>				
(a) Fair value changes of cash flow hedges			27.56	(79.76)
<b>(ii) Income tax on items that will be reclassified subsequently to profit and loss</b>			<b>(6.94)</b>	<b>19.81</b>
<b>Total other comprehensive income/(loss) for the year</b>			<b>408.74</b>	<b>(648.87)</b>
<b>XI Total comprehensive income/(loss) for the year (IX+X)</b>			<b>14,015.36</b>	<b>6,094.93</b>
<b>XII Earnings per share</b>	34	310		

Appendix 5 – Standalone Statement of BALANCE SHEET of JSW Steel 31<sup>st</sup> March 2020 and 31<sup>st</sup> March 2021

## Standalone Balance Sheet

As at 31 March 2021

	Notes	As at 31 March 2021	As at 31 March 2020
₹ in crores			
<b>I ASSETS</b>			
<b>Non-current assets</b>			
(a) Property, plant and equipment	4	46,167	46,117
(b) Capital work-in-progress	5	28,914	23,910
(c) Right-of-use assets	6	4,161	4,102
(d) Intangible assets	7	1,614	323
(e) Intangible assets under development	7	128	331
(f) Investments in subsidiaries, associates and joint ventures	8	6,676	4,757
(g) Financial assets			
(i) Investments	9	5,782	1,242
(ii) Loans	10	5,382	8,705
(iii) Derivative assets	17	110	-
(iv) Other financial assets	11	1,971	562
(h) Current tax assets (net)		230	340
(j) Other non-current assets	12	2,384	2,378
<b>Total non-current assets</b>		<b>103,529</b>	<b>92,667</b>
<b>Current assets</b>			
(a) Inventories	13	10,692	9,623
(b) Financial assets			
(i) Trade receivables	14	3,333	3,166
(ii) Cash and cash equivalents	15	11,121	3,438
(iii) Bank balances other than (ii) above	16	625	7,963
(iv) Loans	10	733	321
(v) Derivative assets	17	86	275
(vi) Other financial assets	11	1,348	2,784
(c) Other current assets	12	1,765	1,785
<b>Total current assets</b>		<b>29,703</b>	<b>29,375</b>
<b>Total assets</b>		<b>133,232</b>	<b>122,042</b>
<b>II EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
(a) Equity share capital	18	302	301
(b) Other equity	19	46,675	38,061
<b>Total equity</b>		<b>46,977</b>	<b>38,362</b>
<b>Non-current liabilities</b>			
(a) Financial liabilities			
(i) Borrowings	20	39,551	39,247
(ii) Lease liabilities	6	2,413	2,716
(iii) Derivative liabilities	27	57	130
(iv) Other financial liabilities	21	1,173	1,308
(b) Provisions	22	753	322
(c) Deferred tax liabilities (net)	23	3,085	1,315
(d) Other non-current liabilities	24	2,173	3,048
<b>Total non-current liabilities</b>		<b>49,215</b>	<b>48,086</b>
<b>Current liabilities</b>			
(a) Financial liabilities			
(i) Borrowings	25	1,285	6,913
(ii) Trade payables	26		
(a) Total outstanding, dues of micro and small enterprises		205	56
(b) Total outstanding, dues of creditors other than micro and small enterprises		11,945	13,298
(iii) Derivative liabilities	27	96	189
(iv) Lease liabilities	6	925	773
(v) Other financial liabilities	28	18,550	11,980
(b) Provisions	22	243	64
(c) Other current liabilities	29	3,254	2,302
(d) Current tax liabilities (net)		537	119
<b>Total current liabilities</b>		<b>37,040</b>	<b>36,594</b>
<b>Total liabilities</b>		<b>86,255</b>	<b>83,680</b>
<b>Total equity and liabilities</b>		<b>133,232</b>	<b>122,042</b>

See accompanying notes to the Standalone Financial Statements

Appendix 6 – Standalone Statement of INCOME STATEMENT of JSW Steel 31<sup>st</sup> March 2020 and 31<sup>st</sup> March 2021

## Standalone Statement of Profit and Loss

For the year ended 31 March 2021

		₹ in crores	
		For the year ended	
	Notes	31 March 2021	31 March 2020
<b>I</b>	<b>Revenue from operations</b>	70,727	63,546
	Fees for assignment of procurement contract	-	250
	Government grant income - VAT/GST incentive relating to earlier years	-	466
	<b>Total revenue from operations</b>	<b>70,727</b>	<b>64,262</b>
<b>II</b>	<b>Other Income</b>	669	628
<b>III</b>	<b>Total Income (I + II)</b>	<b>71,396</b>	<b>64,890</b>
<b>IV</b>	<b>Expenses:</b>		
	Cost of materials consumed	29,743	33,073
	Purchases of stock-in-trade	199	420
	Changes in inventories of finished goods, work-in-progress and stock-in-trade	(872)	(27)
	Mining premium and royalties	6,972	651
	Employee benefits expense	1,601	1,496
	Finance costs	3,665	4,022
	Depreciation and amortisation expense	3,791	3,522
	Other expenses	14,925	16,132
	<b>Total expenses</b>	<b>59,814</b>	<b>59,289</b>
<b>V</b>	<b>Profit before exceptional items and tax (III-IV)</b>	<b>12,582</b>	<b>5,601</b>
<b>VI</b>	<b>Exceptional items</b>	386	1,309
<b>VII</b>	<b>Profit before tax (V-VI)</b>	<b>12,196</b>	<b>4,292</b>
<b>VIII</b>	<b>Tax expense/(credit):</b>		
	Current tax	2,162	799
	Deferred tax	1,641	(1,788)
		<b>3,803</b>	<b>(989)</b>
<b>IX</b>	<b>Profit for the year (VII-VIII)</b>	<b>8,393</b>	<b>5,291</b>
<b>X</b>	<b>Other comprehensive Income</b>		
<b>A</b>	<b>i) Items that will not be reclassified to profit or loss</b>		
	(a) Re-measurements of the defined benefit plans	27	(19)
	(b) Equity instruments through other comprehensive income	385	(255)
	ii) Income tax relating to items that will not be reclassified to profit or loss	(10)	6
	<b>Total (A)</b>	<b>402</b>	<b>(268)</b>
<b>B</b>	<b>i) Items that will be reclassified to profit or loss</b>		
	(a) The effective portion of gains and loss on hedging instruments	369	(719)
	(b) Changes in Foreign Currency Monetary Item translation difference account (FCMTDA)	-	87
	ii) Income tax relating to items that will be reclassified to profit or loss	(129)	221
	<b>Total (B)</b>	<b>240</b>	<b>(411)</b>
	<b>Total Other comprehensive Income / (loss) (A+B)</b>	<b>642</b>	<b>(679)</b>
<b>XI</b>	<b>Total comprehensive income (IX + X)</b>	<b>9,035</b>	<b>4,612</b>
<b>XII</b>	<b>Earnings per equity share of ₹ 1 each</b>		
	Basic (in ₹)	34.92	22.03
	Diluted (in ₹)	34.72	21.89

See accompanying notes to the Standalone Financial Statements

As per our report of even date

INTEGRATED REPORT

MANAGEMENT DISCUSSION AND ANALYSIS

STATUTORY REPORTS

FINANCIAL

## Appendix 7 – Standalone Statement of BALANCE SHEET of SAIL 31<sup>st</sup> March 2020 and 31<sup>st</sup> March 2021

### Standalone Balance Sheet

As at 31<sup>st</sup> March, 2021

(₹ Crores)

	Note No.	As at 31 <sup>st</sup> March, 2021	As at 31 <sup>st</sup> March, 2020
<b>ASSETS</b>			
<b>Non-current assets</b>			
(a) Property, Plant and Equipment	4	64115.26	65365.62
(b) Capital work-in-progress	5	8876.48	8751.58
(c) Right of use assets	4a	2054.13	2205.08
(d) Investment Property	6	1.08	1.12
(e) Intangible assets	7	1429.78	1443.62
(f) Inventories	7a	4236.36	-
(g) Financial assets			
(i) Investments	8	1595.01	1584.98
(ii) Trade receivables	9	-	-
(iii) Loans	10	756.23	684.59
(iv) Other financial assets	11	334.21	446.36
(h) Deferred tax assets (net)	12	-	2078.99
(i) Current tax assets (net)	13	216.78	162.36
(j) Other non-current assets	14	1566.31	1481.29
		<u>85163.54</u>	<u>84179.39</u>
<b>Current Assets</b>			
(a) Inventories	15	15272.04	23747.20
(b) Financial assets			
(i) Trade receivables	16	7124.00	8812.39
(ii) Cash and cash equivalents	17 (i)	468.40	153.43
(iii) Other bank balances	17 (ii)	212.12	209.82
(iv) Loans	18	50.47	46.67
(v) Other financial assets	19	2478.11	2188.99
(c) Other current assets	20	6353.97	5729.75
		<u>31959.11</u>	<u>40891.25</u>
Assets classified as held for sale	21	17.01	27.20
<b>TOTAL ASSETS</b>		<u>117199.66</u>	<u>125097.81</u>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
(a) Equity share capital	22	4130.53	4130.53
(b) Other equity	23	36364.35	35645.65
		<u>40494.88</u>	<u>39776.18</u>
<b>Liabilities</b>			
<b>Non-current liabilities</b>			
(a) Financial liabilities			
(i) Borrowings	24	16725.96	34580.03
(ii) Trade payables	25	-	-
(a) total outstanding dues of micro enterprises and small enterprises		-	-
(b) total outstanding dues of creditors other than micro enterprises and small enterprises		-	6.08
(iii) Other financial liabilities	26	1281.07	1295.59
(b) Provisions	27	4525.89	4105.80
(c) Deferred tax liabilities (net)	12	1253.16	-
(d) Other non-current liabilities	28	439.97	397.51
		<u>27176.05</u>	<u>40368.59</u>
<b>Current liabilities</b>			
(a) Financial liabilities			
(i) Borrowings	29	15850.24	16640.78
(ii) Trade payables	30	-	-
(a) total outstanding dues of micro enterprises and small enterprises		103.57	47.99
(b) total outstanding dues of creditors other than micro enterprises and small enterprises		8910.84	6272.39
(iii) Other financial liabilities	31	14017.14	13732.40
(b) Other current liabilities	32	7555.04	5723.85
(c) Provisions	33	2039.84	2364.83
(d) Current tax liabilities (net)	34	12.06	178.50
		<u>46489.73</u>	<u>44961.84</u>
<b>TOTAL EQUITY AND LIABILITIES</b>		<u>117199.66</u>	<u>125097.81</u>
Significant Accounting Policies	3		

The accompanying notes are an integral part of these standalone financial statements.

## Appendix 8 – Standalone Statement of INCOME STATEMENT of SAIL 31<sup>st</sup> March 2020 and 31<sup>st</sup> March 2021



ANNUAL REPORT-2020-21

### Standalone Statement of Profit and Loss

For the year ended 31<sup>st</sup> March, 2021

(₹ crore)

	Note No.	Year ended 31 <sup>st</sup> March, 2021	Year ended 31 <sup>st</sup> March, 2020
<b>Income</b>			
Revenue from operations	35	69110.02	61660.55
Other income	36	1011.69	985.22
<b>Total Income</b>		<b>70121.71</b>	<b>62645.77</b>
<b>Expenses</b>			
Cost of materials consumed	37	23136.17	29212.87
Changes in inventories of finished goods, work in progress and by-products	38	4268.58	(5555.82)
Employee benefits expense	39	10445.94	8781.32
Finance costs	40	2817.14	3486.76
Depreciation and amortisation expense		4102.00	3755.05
Other expenses	41	18531.28	19023.17
<b>Total expenses</b>		<b>63301.11</b>	<b>58703.35</b>
<b>Profit before Exceptional items and tax</b>		<b>6820.60</b>	<b>3942.42</b>
Less: Exceptional items	41a	(58.43)	771.76
<b>Profit before tax</b>		<b>6879.03</b>	<b>3170.66</b>
<b>Tax expense</b>			
Current tax		12.05	224.14
Deferred tax		3016.96	924.98
<b>Total tax expense</b>		<b>3029.01</b>	<b>1149.12</b>
<b>Profit for the year</b>		<b>3850.02</b>	<b>2021.54</b>
<b>Other Comprehensive Income</b>			
(i) Items that will not be reclassified to profit or loss			
Remeasurement of defined benefit plans		357.49	(194.21)
Gain and losses from investments in equity instruments designated at fair value through OCI		16.67	16.60
(ii) Income tax relating to items that will not be reclassified to profit or loss		(93.63)	61.90
<b>Other Comprehensive Income/(Loss) for the year</b>		<b>280.53</b>	<b>(115.71)</b>
<b>Total Comprehensive Income for the year</b>		<b>4130.55</b>	<b>1905.83</b>
<b>Earnings per equity share</b>			
Number of equity shares (face value ₹10/- each)		4130525289	4130525289
Basic and diluted earnings per share (₹)	41b	9.32	4.89

Significant Accounting Policies

3

The accompanying notes are an integral part of these standalone financial statements.

Sd/-  
M.A. Balakrishnan  
Company Secretary

For and on behalf of the Board of Directors  
Sd/-  
Amit Sen  
Director Finance  
DIN: 08602987

Sd/-  
Soma Mondal  
Chairman  
DIN: 06845389

In terms of our report of audit date