# A STUDY ON FUNDAMENTAL ANALYSIS OF FIVE COMPANIES IN STEEL INDUSTRY

PROJECT REPORT

*Submitted to Mahatma Gandhi University in partial fulfilment*

*Of the requirements for the award of the Degree of*

*MASTER OF BUSINESS ADMINISTRATION*

SUBMITTED BY

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**REG NO – 190031000658**

UNDER THE GUIDANCE OF

**MR JIBUMON K G**

FACULTY GUIDE



**Accredited by NAAC with 'A' Grade**
**DEPARTMENT OF MANAGEMENT STUDIES**
**MAR ATHANASIOS COLLEGE FOR ADVANCED STUDIES TIRUVALLA**

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# CERTIFICATE

*This is to certify that the project report entitled "**A FUNDAMENTAL ANALYSIS OF FIVE COMPANIES IN STEEL INDUSTRY** "is a bonafide report of the project work undertaken by **JOHNS PULIMOOTTIL THOMAS.,** fourth semester MBA student of our college during a period of 8 weeks commencing from 1st April to 30th May,2021.*

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# DECLARATION

    I hereby declare that this project report entitled **"A STUDY ON FUNDAMENTAL ANALYSIS OF FIVE STEEL INDUSTRY COMPANIES"** is a *bonafide* report of the study undertaken by me, under the guidance of **MR JIBUMON K G** Department of Management Studies, MACFAST, Tiruvalla.

    I also declare that this project report has not been submitted to any other University or Institute for the award of any degree or diploma.

Place: Tiruvalla

Date : 30th May 2021

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# <u>ABBREVATIONS</u>

**BVPS:** BOOK VALUE OF EQUITY PER SHARE

**CAGR:** COMPOUND ANNUAL GROWTH RATIO

**DPOR**: DIVIDEND PAYOUT RATIO

**DPS:** DIVIDEND PER SHARE

**EPS**: EARNINGS PER SHARE

**ISA**: INDIAN STEEL ASSOCIATION

**ISP**: INTERNET SERVICE PROVIDER

**PEG**: PROJECTED EARNINGS GROWTH

**ROE:** RETURN ON EQUITY

**WSD:** WORLD STEEL DYNAMICS

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# CHAPTER 1
# INTRODUCTION

## 1.1 BACKGROUND OF THE STUDY

Fundamental analysis is the cornerstone of investing. Fundamental analysis is the examination of the underlying forces that affect the wellbeing of the economy, industry groups, and companies. At the company level, fundamental analysis may involve examination of financial data, management, business concept and competition. At the industry level, there might be an examination of supply and demand forces for the products offered. For the national economy, fundamental analysis might focus on economic data to assess the present and future growth of the economy. To forecast future stock prices, fundamental analysis combines economic, industry, and company analysis to derive a stock's current fair value and forecast future value.

The Indian steel industry is very modern with state-of-the-art steel mills. Steel plays a vital role in accelerating growth and development of a nation. It is used as a basic material in the manufacture of metal products, electrical, machinery, transport equipment, textile, etc. and thus considered to be the backbone of the human civilization. It is a product of large and technologically advanced industry having strong forward and backward linkages in terms of material flow and income generation. Other words, the production and per capita consumption of steel are a major contributor in a country's gross domestic product (GDP) and an indicator of its industrial and economic strength. Iron ore, manganese ore and chrome ore are the critical raw material inputs for the steel industry. India is the eighth largest crude steel producing country in the world. It is endowed with richest iron and coal ore mines.

## 1.2 STATEMENT OF THE PROBLEM

The present state of our economy generates an imperative need for investors to protect their investment. Though it is a well-known fact that investing in securities such as shares, debentures, bonds, etc., are profitable and exciting, it is an avenue which involves a great deal of risk. Hence investing in financial securities is considered to be one of the best avenues for investing one's savings, while it is also acknowledged to be one of the most risky avenues for investment.

The Indian Capital Market is regarded as the barometer for the country's economic health and performance. Thus any development may have both positive and negative effects on the equity prices. Therefore the study on the fundamental analysis of 5 major players becomes relevant to appraise the intrinsic value of a security.

## 1.3 <u>RELEVENCE AND SCOPE OF STUDY</u>

Fundamental analysis is a method used by traders that attempts to gauge the inherent value of a security by examining relevant economic and financial data. These factors include: overall economic trends and industry conditions, company-specific factors such as earnings and sales growth, as well as financial strength**.** Steel plays an important role in contributing to the development of a country and accelerating its growth. It is also the backbone of human civilization and is used in manufacture of electrical machinery, metal products, textile and transport equipment etc. Steel is a product of a technologically multifaceted and large industry. India's crude steel production in 2018 was at 106.5 MT, up by 4.9 per cent from 101.5 MT in 2017, meaning India has replaced Japan as the world's second largest steel producing country. Japan produced 104.3 MT in 2018, down 0.3 percent compared to 2017.

## 1.4 <u>OBJECTIVES OF THE STUDY</u>

- To do the fundamental analysis of selected companies in steel sector.

- To find the intrinsic value of selected companies in order to take investment decision.

- To analyze the profitability and price earning capacity of the selected companies in steel sector.

- To apply regarding fundamental and performance analysis tools to steel sector.

- To analyze the effectiveness of tools for fundamental analysis.

# CHAPTER 2

# INDUSTRY PROFILE

## 2.1 <u>BUSINESS PROCESS OF THE INDUSTRY</u>

Globally, steel can be found in a variety of products and structures – from personal vehicles to the Burj Khalifa: the world's largest skyscraper. But what is steel, and why is it so important? Steel is an alloy, meaning that it is made by combining iron with another element, usually (but not always) carbon. This alloy can be up to 1,000 times stronger than iron, making steel an extremely useful and sturdy building material.

Currently Indian Steel Industry has a steel capacity of 122 million tons (2015-16) and the world is producing 1630 million tons of steel. India has an aspiration to take this capacity to 300 million tons by 2030. Today steel industry contributes approximately 2% to our country's GDP and employs 5 lakh people directly and about 20 lakh people indirectly. India has quickly touched the number three spot in terms of steel production, overthrowing many industrialized developed nations such as the US, Russia and South Korea.



WORLD CRUDE STEEL PRODUCTION 1950 TO 2017 (MILLION TONNES)

| 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2005 | 2010 | 2017 |
|------|------|------|------|------|------|------|------|------|
| 189 | 347 | 595 | 717 | 770 | 850 | 1 148 | 1 433 | 1 689 |
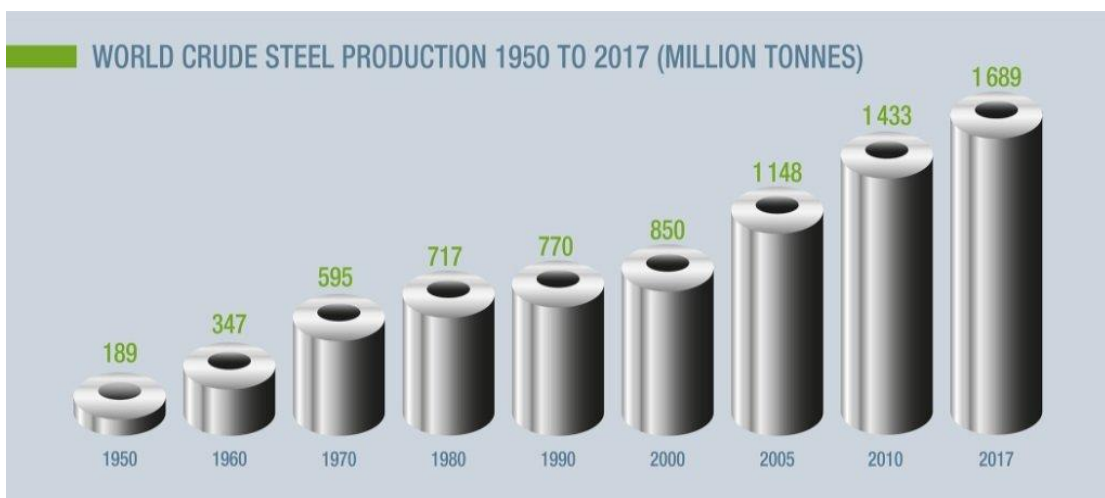
Fig: 2.1 World Crude steel productions 1950-2017   (source – Businessinsider.com)

Steel finds applications in various sectors from infrastructure, automotive, electrical appliances to mechanical equipment. The image below shows sectoral steel consumption across the globe. Generally, the same pattern is seen in various countries around steel consumption and when we read India's per capita steel consumption as 63k kg's, we can imagine very little infrastructure spending (roads, bridges, highways etc.) happening in our country of 1.25 billion inhabitants.

**Steelmaking Process & Key Components in Steel Industry**
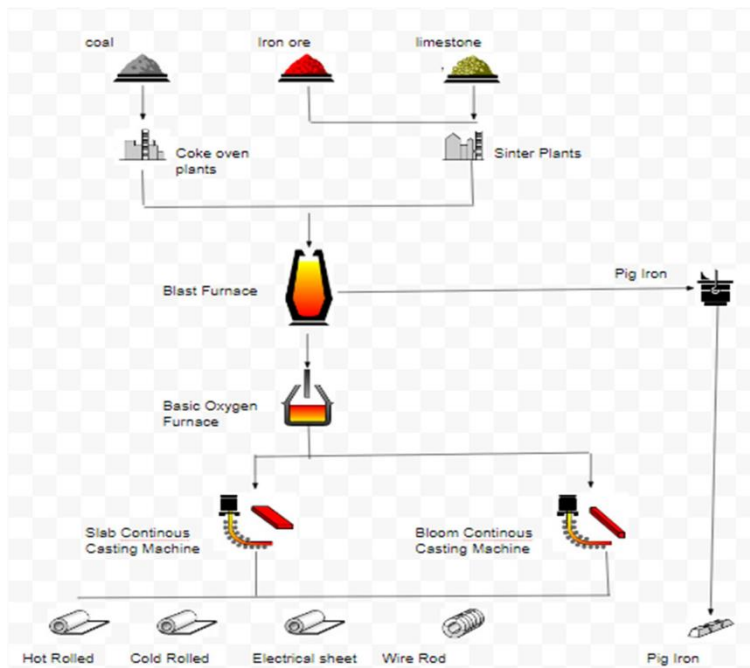


FIG 2.2 the following Flowchart shows steps of steel making pictorially in a steel plant.

There are essentially 3 steps to steelmaking-

1. Iron making Process

2. Steelmaking Process

3. Continuous Casting Process

**Iron making process in steel industry**

This is the first step in the making of steel, iron ore is extracted from the earth and melted to turn into melted iron.

The process begins with sintering operation where iron ore particles are heated till they become aggregates and this is done for proper heat transfusion to occur in the blast furnace following this step.

### Blast Furnace Operation

Sintered iron ore and coke are layered inside a 100 m long furnace, then hot air at 1200 degree Celsius is blown into the blast furnace from the bottom causing the coal to burn and this heat, in turn, burns the iron ore to create molten iron at a temperature of 1500 degree Celsius. This is also called hot metal (pig iron) in the industry.

### Steel Making Process

Today, two distinct processes make up bulk of worldwide steel production: Basic Oxygen Furnace process and the Electric Arc Furnace process (EAF).

### Basic Oxygen Furnace (BOF)

In basic oxygen furnace, iron is combined with varying amounts of steel scrap (less than 30%), after that very pure oxygen is blown into the vessel causing a rise in temperature to 1700 degree Celsius. The scrap melts, impurities are oxidized and carbon content is reduced by 90%, resulting in liquid steel.

### Electric Arc Furnaces (EAF)

Electric Arc Furnace or mini-mill, does not involve iron making. It reuses existing steel (scrap), avoiding the need for raw material and their processing. The furnace is charged with steel scrap, it can also include some Direct Reduced Iron (DRI) and pig iron for chemical balance. The electric arc operates with an electric charge between two electrodes providing heat for the process.

This furnace does not require coke as raw material but depends heavily on the electricity generated by coal-fired power plant elsewhere in the grid.

How do the Two Processes Stack UP?

Although the BOF and EAF processes both produce steel as the end product, the varying means to this end between the two processes give each certain economic advantages and disadvantages. The main area of discussion centers on the supply side and the raw materials going into steelmaking. For BOF firms, producing steel requires sourcing a variety of raw materials, namely iron, coal, and limestone. Due to the necessity of securing these raw materials, large-scale steel firms like to vertically integrate its production process backward into coal and iron ore mining.

On the other side, EAF steelmakers have a much simpler input process: EAF furnaces only require scrap steel as the major input. As long as scrap steel remains plentiful in the market, these firms have easy and cheap access to the required raw material.

For a BOF firm, the average cost per ton of capacity is $1,100, while the cost for an EAF mini mill per ton of capacity is only $300. The barrier for entry is thus lower for EAF firms, which can in part explain the rise of such "minimills" in India over the last decade with over 300 small players across the length and breadth of the country.

Another reason of the adoption of BOF process over EAF is the quality of steel produced from it. Generally speaking, steel produced from BOF process is regarded having higher strength and durability than steel produced from EAF process giving it the pricing advantage. Molten steel is now poured into molds and cooled into solid steel reaping semi-finished material ready to be made into finished steel product. These semi-finished materials are categorized into slabs, blooms, and billets.

**Slabs** –

Slabs are wide and flat and are mainly used to produce hot and cold rolled coils, heavy slabs, and profiles.

**Bloom** –

Bloom is rectangular bars used to make products such as springs, forged parts, heavy structural shapes and seamless tubes.

**Billets** –

Billets are bars from a square section of long steel that serve as input for the production of wire rods and rebars.

**Continuous Casting Process**

The final stage of producing steel is the Continuous Casting Process where steel is forged into various steel products.

Hot Rolled Product– When a slab is heated above 1100 degree Celsius and passed between rollers, it turns into a thin and long sheet (hot rolled). This hot rolled product is widely used as a construction material and pipes in various industries.

Cold Rolled Products – Cold rolled products are made by making hot rolled products thinner at room temperature which is then used in making appliances, barrels and auto frames.

Coated Steel – Coated steel is made by coating cold rolled product with Zinc and it is used in high-end appliances, office equipment, and automobile exteriors.

Electrical Steel Plates- Electrical steel plates are made by adding silicon in molten steel and find applications in transformers and motors.

Wire Rods– When a billet is above 1000 degree Celsius and passed through a hole, it turns into a wire rod which is used as automobile tire cord, wire for bridges etc.

**Stainless Steel**– Stainless Steel plants in steel industry are equipped with the additional production facility. Nickel and chrome are added to steel to produce Stainless Steel product which are used in kitchen appliances, medical equipment, exterior walls and roofs of the building.

## 2.2 <u>MARKET DEMAND AND SUPPLY- CONTRIBUTION TO GDP- REVENUE GENERATION.</u>

As the world's 3rd largest producer of steel, India has humongous scope for developing its mining reserves for iron ore. Indian Steel sector's contribution to the overall Gross Domestic Product (GDP) of the country is above 2% during 2018. The total exposure of steel industry is about Rs. 3.13 lakh crore rupees. Crude steel production was recorded to be 75.498MT during April-December 2017 that grew by 4.6% Y-O-Y. India's finished steel exports rose102.1 percent to 8.24 MT, while imports fell by 36.6 percent to 7.42 MT in 2016-17. Finished steel exports rose 52.9 percent in April-December 2017 to 7.606 MT, while imports increased 10.9 percent to 6.096 MT during the same period. Total consumption of finished steel grew by 5.2 percent year-on-year at 64.867 MT during April-December 2017. According to the data released by Department of Industrial Policy and Promotion (DIPP), the Indian metallurgical industries attracted Foreign Direct Investments (FDI) to the tune of US$ 10.419 billion in the period April 2000–September 2017. A large number of

these industries are directly and indirectly related to steel.

In the wake of the recent Budget for 2018, the Government of India has focused on infrastructure and restarting road projects to aid the boost in the demand for steel domestically. The Union Cabinet had approved the National Steel Policy (NSP) in 2017, as it seeks to create a globally competitive steel industry in India. The policy targets achieving 160 kgs per capita steel consumption along with 300 million tons (MT) steel-making capacity by 2030. Our Government is also working on initiatives like Metal Scrap Trade Corporation (MSTC) Limited the Ministry of Steel have jointly launched an e-platform called 'MSTC Metal Mandi' under the 'Digital India' initiative that will be able to facilitate the sale of finished and semi-finished steel products. The Ministry of Steel is facilitating setting up of an industry driven Steel Research and Technology Mission of India (SRTMI) in association with the public and private sector steel companies to spearhead research and development activities in the iron and steel industry at an initial corpus of Rs 200 crore (US$ 30 million).

With the Steel Industry of India accounting to up to 2% of the GDP, the importance of steel in our economy is irreplaceable. It employs millions of people throughout the country, both directly and indirectly. The potential of this industry is considered by the market experts to be boosted in the upcoming years, as the demand for steel keeps rising. Due to a wide array of features that find their application in so many sectors, steel will continue to be one of the most widely used material for years to follow. With our Government promoting domestic steel usage, the future of the steel industry of India seems bright.

## 2.3 LEVEL AND TYPE OF COMPETITION- FIRMS OPERATING IN THE INDUSTRY

The performance of Indian iron and steel industry in the pre and post-liberalization periods in terms of primary indicators such as production, consumption and foreign trade. It also studies growth in capacity utilization, prices and employment. It is deduced that the industry has grown manifold in all the aspects, especially after the liberalization of the economy except employment, which shows a substantial fall during post-liberalization when competition among the Indian manufacturing firms has increased. Therefore, that leads us to investigate the competitiveness of the sample firms in the industry through composite competitiveness

On the basis of overall competitiveness, as well as financial and non-financial aspects of competitiveness, the industry is mostly dominated by Tata Steel Ltd., even though SAIL has a greater market share and proves to be superior with respect to non-financial indicators. JSW Steel Ltd. stands tall on the index for 'major producers', whereas Bhushan Power & Steel Ltd. leads the 'other secondary producers' index of competitiveness. As part of the study the details of the selected companies are given below.

### Companies in steel industry for Study

1. **Tata Steel**

   Established in 1907, Tata Steel is among the top ten global steel companies with an annual crude steel capacity of over 28 million tons per annum (mtpa). It is now one of the world's most geographically' diversified steel producers, with operations in 26 countries and a commercial presence in over 50 countries.

   Tata steel limited (formerly Tata Iron and Steel Company Limited (TISCO)) is an Indian multinational steel-making company headquartered in Mumbai, Maharashtra, India, and a subsidiary of the Tata Group. It is one of the top steel producing companies globally with annual crude steel deliveries of 27.5 million tonnes (in FY17), and the second largest steel company in India (measured by domestic production) with an annual capacity of 13 million tones after SAIL.

2. **JSW STEEL**

   JSW Steel Ltd. is an Indian multinational steel making company based in Mumbai, Maharashtra. It is a subsidiary of JSW Group. It is one of the fastest growing companies in India with a global footprint in over 140 countries. After the merger of ISPAT steel, JSW Steel has become India's second largest private sector steel company. The current installed capacity of the company stands at 18 MTPA. A $13 billion conglomerate, with presence across India, USA, South America & Africa, and the JSW Group is a part of the O.P. Jindal Group with strong footprints across core economic sectors, namely, Steel, Energy, Infrastructure, Cement, Ventures and Sports. JSW's history can be traced back to 1982, when the Jindal Group acquired Piramal Steel Limited, which operated a mini steel mill at Tarapur in Maharashtra and renamed it as Jindal Iron and Steel Company (JISCO)

### 3. VISA STEEL

**VISA Steel Limited** is a mineral and metals company situated in the Kalinganagar industrial complex of Jajpur Odisha, India with a 1.5 million ton integrated special and stainless steel manufacturing plant. VISA Steel has its registered office in Bhubaneswar; corporate office in Kolkata and Branch offices across India. A listed company, VISA Steel's shares are traded on the BSE and NSE.

The company is setting up an integrated 1 million TPA Special and Stainless Steel Plant at Kalinganagar Industrial Complex, Odisha. The first phase of 0.5 million TPA Special Steel Long Product Plant with 75 MW captive power plant is fully operational. The facilities include a 0.4 million TPA Coke Oven Plant, 0.225 million TPA Pig Iron Plant, 0.3 million TPA Sponge Iron Plant, 0.05 million TPA Ferro Chrome Plant, 75 MW captive power plant, 0.5 million TPA Steel Melt Shop (with EAF, LRF and VD) and 0.5 million TPA Rolling Mill (Bar & Wire Rod Mill). Capacity of this plant is planned to be doubled to 1 million TPA.

The company plans to integrate backwards to the mining of iron ore, chrome ore and coal. Captive iron ore mining leases in Odisha are under the process of allotment by the Government. A chrome ore deposit in Odisha is being developed through Ghotaringa Minerals Limited, a subsidiary of the company.

VISA Steel also plans to set up a fully integrated 2.5 million TPA Steel Plant with 500 MW captive power plant at Raigarh in Chhattisgarh.

### 4. JINDAL STEEL

**Jindal Steel and Power Limited** (**JSPL**) is an Indian steel and energy company based in New Delhi, India. With turnover of approx. ₹40000 crore (US$5.5 billion), JSPL is a part of about ₹130000 crore (US$18 billion) diversified Jindal Group conglomerate. JSPL is a leading player in steel, power, mining, oil and gas and infrastructure in India. The company produces steel and power through backward integration from its own captive coal and iron-ore mines.

In terms of tonnage, it is the third largest steel producer in India. The company manufactures and sells sponge iron, mild steel slabs, ferro chrome, iron ore, mild steel, structural, hot rolled plates and coils and coal-based sponge iron plant.

## 5. SAIL ( STEEL AUTHORITY OF INDIA LTD)

**Steel Authority of India Limited** (**SAIL**) is an Indian government owned steel manufacturing enterprise based in New Delhi, India. It is under the ownership of Ministry of Steel , Government of India with an annual turnover of INR 66,267 Crore (US$9.32 billion) for fiscal year 2018–19. Incorporated on 24 January 1973, SAIL has 65,807 employees (as of 01-Mar-2021). With an annual production of 16.30 million metric tons, SAIL is the 20th largest steel producer in the world and the largest in India. The Hot Metal production capacity of the company will further increase and is expected to reach a level of 50 million tons per annum by 2025. Smt Soma Mondal is the current Chairman of SAIL. SAIL operates and owns five integrated steel plants at Bhilai, Rourkela, Durgapur, Bokaro and Burnpur (Asansol) and three special steel plants at Salem, Durgapur and Bhadravathi. It also owns a Ferro Alloy plant at Chandrapur. As a part of its global ambition, the company is undergoing a massive expansion and modernization programme involving upgrading and building new facilities with emphasis on state of the art green technology. According to a recent survey, SAIL is one of India's fastest growing Public Sector Units. Besides, it has R&D centre for Iron & Steel (RDCIS), centre for Engineering in Ranchi, Jharkhand.

## 2.4 <u>PRICING STRATEGIES IN STEEL INDUSTRY</u>

Steel prices continue to strengthen however the pace of the increases has started to decelerate. Steel prices are extreme and should decline from late second quarter through the end of 2021. Locking now will mean over-paying over the second half of the year. Either buy on spot or be sure your contract has an escalator clause because in coming months it would act as a de-escalator. Supply chain disruptions have delayed expected declines but fundamentals of supply and demand still point toward a turning point in coming months.

In steel industries there are various factors that affect the pricing of the products. Some of the major factors are as follows:

1. Cost of production

2. Demand in the market

3. Government regulations

4. Competitions

Steel is well known for keeping its production cost very low. This gives Steel a competitive advantage over others. There are various reasons as to why the company's production is so low compared to other competitors. Few of them are:

• Steel acquires its raw materials and other products required both from the domestic market as well as globally. The mines in Bokaro have reserves of around 196 million tones. It also owns iron ores and chromites mines in other parts of the country.

• Steel has used technologies which help them keep the production cost low thus helping it maintain the good quality as well as keep the price low.

The demand for steel has also increased in recent years. Also one more advantage of Steel is that their iron ore reserves are much more than their current needs thus giving them an advantage. Steel has adapted Market Penetration as their pricing strategy. They assume that the demand of the product is highly elastic. So, capability of Steel to maintain low price helps them maintain a huge customer base.
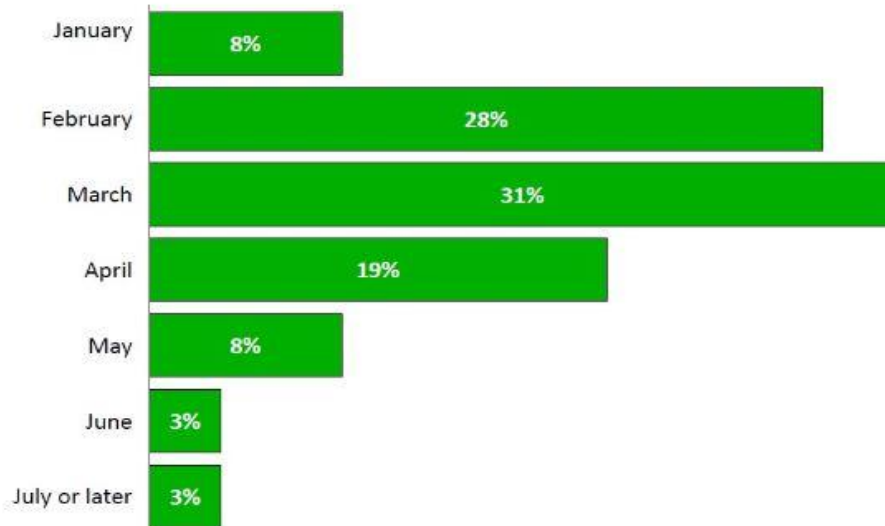
FIG 2.3

## 2.5 PROSPECTUS AND CHALLENGES OF THE INDUSTRY

### Prospects of Steel Industry

Global steel production grew enormously in the 20th century from a mere 28 million tons at the beginning of the century to 781 million tons at the end. Per-capita steel consumption in the US peaked in 1977, then fell by half before staging a modest recovery to levels well below the peak.World steel production in the 20th century Bethlehem Steel in Bethlehem, Pennsylvania (Closed in 2003) was one of the world's largest manufacturers of steel. Production of crude steel has risen at an astounding rate, reaching 1,691 m tones by 2017. During the 20th century, the consumption of steel increased at an average annual rate of 3.3%. In 1900, the United States was producing 37% of the world's steel, but with post war industrial development in Asia and centralized investment by China.

The National Steel Policy, 2017, has envisaged 300 million tones of production capacity by 2030-

31. The per capita consumption of steel has increased from 57.6 kg to 74.1 kg during the last five years. As per Indian Steel Association (ISA), steel demand to grow by over 7.2 percent in both 2019-20 and 2020-21.

After almost a decade of limping growth, the significant recovery of the global economy as well as that of the Global Steel Industry in 2017 also points to a favorable outlook for the Indian steel industry. While global production of crude steel at 1,691 million tons (MT) noted a growth of 5.3 per cent in 2017 over the previous year, the estimated steel consumption rose to 1,622 MT. The latest Internal Monetary Fund projection has estimated the global economy is slated to grow at 3.9 per cent in 2018, and India's GDP is to move up by 7.4 per cent in 2018 as compared to 6.7 per cent in the previous year. The continued growth in GDP in India, in fact, indicates that major steel consuming segments such as construction, real estate/housing, capital goods/machinery, consumer goods, automobiles and energy sector shall benefit. The housing and construction sector, where major chunk of steel is consumed, shall get a boost with increase in per capita incomes and social sector schemes like Pradhan Mantri Awas Yojna-Housing for All, Sardar Patel Urban Housing Mission, 100 Smart Cities Mission (by 2022), Pradhan Mantri Gram Sadak Yojna, Urban Infrastructure Development Scheme for Small & Medium Towns (UIDSSMT), National Heritage City Development and Augmentation Yojana (NHRIDAY), Bharatmala project, 24x7 Power for All initiative (by 2019), Development of Industrial Corridors & National Investment & Manufacturing Zones, 75,000 MW Clean-Energy initiative (by 2022) and many others. In a nutshell, with the increasing thrust on the "Make-in-India" vision by the Indian Government under the leadership of Prime Minister Narendra Modi, the Indian steel industry itself will grow and will be in a position to supply the required quantities and grades of steel much needed by the end-users. This also given the fact that the per capita finished steel consumption remains at a dismal 60 kgs, in contrast with the world average of around 220 kgs. The recently formed Global Forum on Excess Steel Capacity has acknowledged India's capacity expansion of steel as a function of growing consumption in the domestic market.

- The Indian steel industry is expected to register exponential growth in the future, riding on increasing urbanization, and projected growth of infrastructure, automobile and real estate sectors.
- India's outlook has improved following the election of the new government which is promising pro-business reforms. The government of India has set a target to triple Indian steel production to 300 million tons by 2025.

- Key foreign players in the industry are investing in India which gives an optimistic feel for the industry.

## **Challenges/Concerns:**

**Finance**: a large share of the challenges that the steel industry has faced since 2014 can be traced to the extremely high finance costs or cost of borrowed capital. Although India's Reserve Bank has lowered the policy repo rate five times and by 135 basis points in 2019 alone, the cost of capital in India still remains significantly high and Indian steel makers continue to face a relative disadvantage vis-à-vis their competitors from the developed world. If the Indian steel industry is to fulfill the vision outlined in the National Steel Policy, 2017, financing capacity addition of 100–150 million tones will be the biggest challenge. The policy document acknowledges that additional investment of INR 10 lakh crore will be required and financing it is the primary challenge.

**Logistics**: For most Indian steel makers, managing logistics requirements is arduous, challenging and costly. The primary raw material for steel making is iron ore, besides coal or coking coal. Both are bulk minerals, and steel is also a bulk commodity. So, whether it is physical transportation of raw materials for steelmaking to the steel mills or physical transportation of finished steel to demand centres, transportation of bulk materials is always arduous. The railways face huge infrastructure constraints, which makes managing logistics challenging for Indian steel makers. Moreover, for a long time now, the overwhelming dependence of the Indian Railways on revenue from freight traffic, especially from bulk commodities, is well documented. In other words, the freight cost of moving materials through the railways, both raw materials and finished steel, is artificially much higher as passenger traffic is subsidized from freight earnings by the Indian Railways. In conclusion, infrastructure bottlenecks, especially in railway connectivity, are another external challenge that can outweigh future growth considerations. Unless there is a significant effort by the Indian Railways to rationalize costs as well as to improve railway connectivity, capacity additions will remain limited.

**Tax, duties and cess:** While the government has recently lowered corporate tax rates to 25%, there are certain noncredit able taxes, duties and cesses, specifically paid by the steel sector, which reduce the competitiveness of Indian steel products in the global market. Delays in the government allocating sufficient iron ore blocks, regulatory approvals and challenges in land acquisition have slowed many steel projects. Some of these hopefully get addressed in the current quarter. Shift towards relatively lower steel demand growth in most of the heavy-weight economies including China. Structural shifts in the Chinese market arising from over capacity coupled with weakening prices are threatening the Indian players.

## 2.6 <u>KEY DRIVERS OF INDUSTRY</u>

. The Indian steel industry has registered an average growth rate of more than 10% CAGR in output in the last five years. During the same period, steel consumption has also moved in perfect lockstep and has maintained a growth rate of 10%. In this article, let us have a look at the key growth drivers of the domestic steel industry and the rate at which the sector is expected to grow over the long-term. According to World Steel Dynamics, (WSD) the Indian steel industry has entered into massive growth in steel demand as well as steel making capacities. The key growth drivers for the steel industry and the brief description of each driver are laid out below.

**Construction:** The construction industry has been witnessing a growth rate of 12%-14% in recent times. Steel construction is now identified with speed and since India is in need of speedy project implementation, steel is the best alternative for fast track construction. With economy surging ahead and expected increase in income levels of population, it is believed that demand for steel from this sector will continue to grow at current rates if not improve

**Automobile:** The domestic automobile industry has also grown at more than double-digit rates in the past five years. The Indian automobile sector is the second fastest growing market after China and has emerged as a prime demand driver for alloy steel. Automobile sector which is experiencing growth and competition is likely to be one of the major drivers for steel

consumption in the coming years and most likely, its contribution in the overall demand pie is likely to improve from the current levels.

**Auto components Industry:** During the last five years, auto components market has grown at 19% CAGR, led by both robust domestic demand as well as exports. India is fast emerging as hub for auto components. International companies such as General Motors, Ford, Daimler Chrysler, Toyota and Volkswagen are outsourcing auto parts from India as it has cost advantage with regard to forgings and castings. Also, the growing domestic automobile industry, which relies on steel industry for its parts manufacturing, will enhance the demand for steel in India.

**Infrastructure:** Infrastructure comprises of roads, railways, airports and power. The 11th Five-year plan has lined up huge investments in all the above related sectors of infrastructure. The sector wise anticipated investment are $200bn in power, $80bn in railways, $48bn in roads, $13bn in ports and $9bn in airports. Because of surge in the above activities, the demand for long products of steel will be increasing in years ahead.

**Consumer Durables:** The Consumer durables sector has also been witnessing robust growth. It has grown at an average of 10% per annum and is expected to grow at double-digit rates for coming years. The share of white goods and utensils is predominant in India. The domestic appliances market which includes spin driers of washing machine, almirahs, thermo ware, water filters, dishwashers, microwave ovens, catering equipments, cutlery, furniture etc. have opened new opportunities for steel consumption, thus ensuring a steadily growing trend.

**Oil & Gas Industry:** oil and gas sector is the major consumer of steel tubes and pipes. The pipe consumption in oil & gas sector is expected to grow at a rate of 25% CAGR as this sector is set to witness massive capital investment. Apart from laying cross-country pipelines, exploration and production activities are also experiencing strong growth in both international as well as domestic markets.

Thus, in view of the robust growth expected in all the above mentioned sectors, there is no reason to believe that demand will slowdown in the coming future. In fact, if one were to go by government projections, then the demand is likely to increase at a CAGR of 11% until2020. What gives us further conviction is the low per capita consumption of steel in India, which at 40 kgs currently is way below the world average of 150 kgs. Thus, the next few years are likely to be very good for the Indian steel manufacturers as far as demand is concerned.

# CHAPTER 3

## **REVIEW OF LTERATURE**

## 3.1 <u>BRIEF THEORTICAL CONSTRUCT RELATED TO THE PROBLEM</u>

**FUNDAMENTAL ANALYSIS:** THEORIES

Fundamental analysis is a method of finding out the future price of a stock which an investor wishes to buy. It relates to the examination of the intrinsic worth of a company to find out whether the current market price is fair or not, whether it is overpriced or under-priced. It believes that analyzing the economy, strategy, management, product, financial status and other related information will help to choose shares that will outperform the market and provide consistent gains to the investor. It is the examination of the underlying forces that affect the interest of the economy, industrial sectors and companies. It tries to forecast the future movement of the capital market using signals from the Economy, Industry and Company. It requires an examination of the market from a broader perspective.

The presumption behind fundamental analysis is that a thriving economy fosters industrial growth which leads to development of companies. Estimate of real worth of a stock is made by considering the earning potential of the company which depends on investment environment and factors relating to specific competitiveness, quality of management, operational efficiency, profitability, and capital structure and dividend policy. Many people use fundamental analysis to select a company to invest in, and technical analysis to help make their buy and sell decisions. It also involves a detailed examination of the company's competitors, the industry or sector. Fundamental analysis involves examining the financial and other qualitative and qualitative factor related to a security in order to determine its intrinsic value. It attempts to study everything that can affect the security value including macroeconomic factors (like overall economy and industry conditions) and individually the specific factors (like financial conditions and management of the companies).

Many analyst and investors focus on the single number net income or net income to evaluate performance. When the investors attempt to forecast the market value of firm they frequently relay on earnings many institutional investors analyst and regulators believe earning are not as relevant as they once were due to nonrecurring events disparities in measuring the risk and

Management's ability to disguise fundamental earnings problems other measures beyond net income can assist in predicting future firm's earnings.

**Two Approaches of Fundamental Analysis**

While carrying the fundamental analysis the investors can use either of the following approaches:-

**i) Fundamental analysis**: - which postulates that stock markets may misprice an asset in the short run but not in the long-run, where the "correct "price will be attained. Therefore, there is long- equilibrium to which every stock price will tend. Profits can be made by trading the mispriced asset and then waiting for the market to recognize its "mistake" and re-price it.

**ii) Technical analysis**: - which considers that all information is already reflected in the stock price. In this situation, the investor believes that (i) "the trend is his friend" and that (ii) sentiment Changes predict trend changes. More specifically, investors' emotional responses to price Movements lead to recognizable price chart patterns. The price predictions based on the Technical analysis is just extrapolations from historical price patterns.

The fundamental analysis is carried out with the aim of predicting company's future performance.

It is based on the belief that the market price of an asset tends to move towards its "real value" or its "intrinsic value". Thus, if the intrinsic value of an asset is higher than its market value, there may be a situation where it is time to buy. Otherwise, investor's should sell. In the next section, the theoretical framework of the fundamental analysis is reviewed. The paper ends with a section where the main conclusions are drawn. According to fundamental analysts, earning of the company and prospective dividend stream of shareholders depend on following factors:

- Economic and industrial environment.

- Relative importance of company within its industry

- Company's financial strength and performance.

### OBJECTIVES OF FUNDAMENTAL ANALYSIS

a) To predict the direction of national economy because economic activity affects the corporate profit, investor attitudes and expectation and ultimately security prices.

b) To estimate the stock price changes by studying the forces operating in the overall economy, as well as influences peculiar to industries and companies.

c) To select the right time and right securities for the investment.

**How does fundamental analysis works?**

Fundamental analysis carried out with the aim of predicting the future performance of a company. It's based on the theory that the market price of a security tends to move towards its 'real value' or 'intrinsic value' Thus, the intrinsic value of a security being higher than the security's market value represents a time to buy. If the value of the security is lower than its market price, investors should sell it.

**Fundamental Analysis Tools**

These are the most popular tools of fundamental analysis.

- ➢ Earnings per Share –EPS

- ➢ Price to Earnings Ratio –P/E

- ➢ Projected Earnings Growth –PEG

- ➢ Price to Sales- P/S

- ➢ Price to Book –P/B

- ➢ Dividend Pay-out Ratio

- ➢ Return on Equity

- ➢ Ratio analysis

## Ratio Analysis:25

A tool used by individuals to conduct a quantitative analysis of information in a company's financial statements. Ratios are calculated from current year numbers and are then compared to previous years, other companies, the industry, or even the economy to judge the performance of the company. Ratio analysis predominately used by proponents of fundamental analyst. There are many ratios that can be calculated from the financial statements pertaining to a company's performance, activity, financing and liquidity. Some common ratios include the price-earnings ratio, debt equity ratio, earnings per share, asset turnover and working capital.

### Current Ratio

Current ratio is defined as the relationship between current assets and current liabilities. This ratio is also known as Working Capital Ratio.

**Current Ratio =      Current Assets/Current Liabilities**

### Quick Ratio

Quick ratio is defined as the relationship between liquid and quick assets and current or liquid liabilities. This ratio is also known as Liquid ratio.

**Quick Ratio =      Liquid Assets/Current Liabilities**

### Inventory Turnover Ratio

Inventory Turnover ratio indicates the number of times the stock has been turned over during the period and evaluates the efficiency with which a firm is able to manage its inventory.

**Inventory Turnover Ratio= Cost of goods sold/Average Inventory Cost**

**Book Value per Share**

Book value of equity per share (BVPS) is the equity available to common shareholders divided by the number of outstanding shares. It is equal to a firm's total assets minus its total liabilities, which is the net asset value or book value of the company as a whole.

$$\text{BVPS} = \frac{\text{Total equity} - \text{Preferred equity}}{\text{Total shares outstanding}}$$

**Debt Equity Ratio**

Debt Equity ratio is calculated to measure the relationship between the external equities or outsiders fund and the internal equities or the Shareholders fund. The ratio is also known as External- Internal Equity ratio.

$$\text{Debt Equity Ratio} = \text{Outsiders Fund} / \text{Shareholders Fund}$$

**Return on Asset**

Return on assets, which, offering a different take on management's effectiveness reveals how much profit a company earns for every dollar of its assets. Assets include things like cash in the bank accounts receivable property, equipment, inventory and furniture.

$$\text{ROA} = \text{Annual Net Income} / \text{Total Assets}$$

**Return on Equity:**

Of all the fundamental ratios that investors look at, one of the most important is return on equity. It's a basic test of how effectively a company's management investors' money.

$$\text{ROE} = \text{Average Net Income} / \text{Average Shareholders' Equity}$$

**Earnings per Share:**

The portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serve as an indicator of a company's profitability.

$$\text{EPS} = \frac{\text{Net Income-Dividends on Preferred Stock}}{\text{Average Outstanding shares}}$$

**Dividend per Share**:

The sum of declared dividends for every ordinary share issued. Dividend per share (DPS) is the total dividends paid out over an entire year (including interim dividends but not including special dividends) divided by the number of outstanding ordinary shares issued.

$$\text{DPS} = \text{D-S} \div S$$

DPS

D -Sum of dividends over a period (usually 1 year)

SD -Special, one time dividends

S-Share outstanding for the period

**Pay-Out Ratio:**

The amount of earnings paid out in dividends to shareholders. Investors can use the pay-out ratio to determine what companies are doing with their earnings:

**Pay Out Ratio = Dividends per Share/Earnings per Share Price-Earnings Ratio (P/E Ratio):**

The price-earnings ratio is the ratio for valuing a company that measures its current share price relative to its per-share earnings. The price-earnings ratio is also sometimes known as the price multiple or the earnings multiple. The P/E ratio can be calculated as:

$$\text{(P/E Ratio)} = \frac{\text{Market Value per Share}}{\text{Earnings per Share}}$$

**Net Profit Margin:**

Net profit margin is the ratio of net profits to revenues for a company or business segment. Typically expressed as a percentage, net profit margins show how much of each dollar collected by a company as revenue translates into profit.

$$\text{Net Profit} = \text{Net profit/Revenue}$$

## Intrinsic Value Analysis

Fundamental analysis is based on the premises that each share has an intrinsic worth or value. The investment decision of the fundamental analyst to buy or sell a share is based on a comparison between the intrinsic value of a share and its current market price. If the market price of a share is currently lower than the intrinsic value, such a share can be bought because it is perceived to be undervalued. A share whose market price is higher than the intrinsic value is said to be overvalued and hence it can be sold. The market price of a share and its intrinsic value are thus two basic inputs necessary for the investment decision. Market price of a share is available from the quotations of stock exchange. The intrinsic value is estimated through the process of stock or share valuation.

a) **Dividend pay-out ratio:-**

   The dividend pay-out ratio is the ratio of the total amount of dividends paid out to shareholders relative to the net income of the company. It is the percentage of earnings paid to shareholders in dividends.

   **Dividend Pay-out Ratio (DPOR) =**

   $$\text{DPS/EPS}$$

b) **Average DPOR for 5 years** = $\dfrac{\text{DPOR for 5 years}}{5}$

c) **Average Retention Ratio = 1 - Average DPOR**

d) **Average Return on Equity = sum of ROE for 5 years ÷ 5**

e) **Long term growth rate in equity (g) = Average Retention Ratio - Average ROE**

**f) Normalized Average Price Earnings Ratio** = $\dfrac{\text{Sum of PE ratio for 5 year}}{5}$

**g) Growth rate(g) = Average Retention Ratio x Average RO**

**Projected EPS for current year =EPS of current year $\times$ (1+g)**

**a) Intrinsic Value = Projected EPS $\times$ Normalized average PE ratio**

## 3.2 AN OVERVIEW OF EARLIER STUDIES

Literature on mutual fund performance evaluation is enormous. A few research studies that have influenced the preparation of this paper substantially are discussed in this section.

**Sharpe, William F. (1966)** suggested a measure for the evaluation of portfolio performance. Drawing on results obtained in the field of portfolio analysis, economist Jack L. Treynor suggested a new predictor of mutual fund performance, one that differ from all those used previously by incorporating the volatility of a fund's return in a simple yet meaningful manner.

**Michael C Jensen (1967)** derived a risk-adjusted measure of portfolio performance (Jensen's alpha) that estimates how much a manager's forecasting ability contributes to fund's return.

As indicated by **Statman (2000)** ESDAR of a portfolio is the excess return of the portfolio over the return of the benchmark index, where the portfolio is leveraged to have the benchmark index's standard deviation. S.Narayana Rao, evaluated performance of Indian mutual funds in a bear market through relative performance index, risk-return analysis, Treynor's ratio, Sharpe's ratio, Sharpe's measure, Jensen's measure and Fama's measure. The study used 269 open-ended schemes (out of a total of 433 schemes) for computing relative performance index. From this 58 schemes were able to satisfy investor's by giving excess returns over expected returns based on both premium for systematic risk and total risk.

**Mishra (2002)** measured mutual fund performance using lower partial movement. Risk from the lower partial moment is measured by taking into account only those states in which return is below a pre-specified "target rate: like risk free rate." Kshama (2003) evaluated index fund implementation in India. In this paper, tracking errors obtained by some well-run index fund suggest that it is possible to attain low levels of tracking error under Indian conditions.

.**Zderiy Rello (2005)** matched a sample of socially responsible stock mutual funds to randomly selected conventional funds of similar net assets to investigate differences in characteristics of assets held. The study found that socially responsible funds do not differ significantly from conventional funds in terms of any of these attributes. Moreover, the effect of diversification on investment performance is not different between the two groups. Both groups underperformed in the Domini 400 Social index and S&P 500 during the study period. A number of recent studies have examined the issue or performance persistence in mutual funds. Grinblatt and Titman (1992) analyse performance of 279 funds over the period from 1975 to 1984 using benchmark technique and find evidence that performance difference between funds persists over time.

**Hendricks, Patel and Zeckhauser** (1993) study 165 no-load growth-oriented funds over the period 1974 to 1988 and obtain similar results over the period 1976 to 1988, Goetzman and Ibbotson (1994) find that two year performance is predictive of performance over the successive two years. Volkman and Wohar (1995) extend this analysis to examine factors that impact performance persistence. Their data consists of 322 funds over the period 1980 to 1989, and shows performance persistence is negatively related to size and negatively related to levels of management fees. Studies of performance persistence in mutual funds are not with contrary evidence.

**Carhart** (1997) shows that expenses and common factors in stock returns momentum, and whether the portfolio is value or growth oriented "almost completely" explain short term persistence in risk adjusted returns.

**Dunn and Theisen** (1983) rank the annual performance of 201 institutional portfolios for the period 1973 through 1982 without controlling for fund risk. They found no evidence that ranks of individual managers based on 5-year compound returns revealed no consistency. Bauman and Miller (1995) studied the persistence of pension investment fund performance by type of investment organization style. They employed a quartile ranking techniques because they noted that "Investors pay particular attention to consultants and financial periodicals investment performance ranking of mutual funds and pension funds.

## 3.3 <u>UNIQUENESS OF RESEARCH STUDY</u>

Review of earlier studies on Fundamental Analysis helped in the generation of idea, formulation of hypotheses and selection of various tools for analysis and to arrive at meaningful conclusions. There are many studies available on Fundamental Analysis of companies in different industries. No doubt, all these studies have stimulated and encouraged to chalk out a design for this study, which encompasses a wider field than any of the studies referred to this topic Fundamental Analysis of 5 companies is a new attempt which is not made so far in Steel Industry.

The study Fundamental analysis is nothing but examining the forces that will destroy the

-well being of the economy, industry groups, and companies. This system will be utilized will be used to assess the worth of a company's stock. It can additionally make utilized for estimating esteem of any sort of security, like securities or particular cash. This transform of key dissection includes looking at those economic, monetary Also other qualitative and additionally quantitative variables identified with An security In this way Similarly as will determine its innate worth. Key Investigation may be called quantitative Investigation Furthermore this primarily includes those company's monetary indicators (such as earnings, liabilities, revenues, expenses and assets).

# CHAPTER 4

# METHODOLOGY OF STUDY

## 4.1   RESEARCH APPROACH AND DESIGN

The success of a study depends largely on the methodology used. The appropriate methodology will improve the validity of the findings. For the purpose of getting data both primary and secondary sources are used.

## 4.2   SOURCES OF ONLINE DATA

The success of a study depends largely on the methodology used. The appropriate methodology will improve the validity of the findings. For the purpose of getting data secondary sources are used specially data available on internet and money control websites.

**SECONDARY DATA**

Secondary data are those data which are not collected for the first time. These are collected through the following sources:

➢ Documents

➢ Brochures

➢ Articles

➢ Annual Report

Websites : moneycontrol.com

## 4.3 <u>SAMPLING DESIGN</u>

For the purpose of the study the companies under the steel industry were selected. The companies selected were based on the basis of market capitalization rate.

The following companies were selected for the study:

- TATA STEEL
- JSW STEEL
- JINDAL STEEL
- SAIL
- VISA STEEL

## 4.4 <u>DATA ANALYSIS TOOL</u>

### a. FINANCIAL TOOLS

    i. EARNINGS PER SHARE(EPS)

    ii. BOOK VALUE PER SHARE

    iii. DIVIDEND PER SHARE(DPS)

    iv. QUICK RATIO

    v. CURRENT RATIO

    vi. INVENTORY TURNOVER RATIO

    vii. DEBT EQUITY RATIO

    viii. NET PROFIT MARGIN RATIO

    ix. RETURN ON ASSETS(ROA)

    x. RETURN ON EQUITY(ROE)

- **INTRINSIC VALUE**

    - DIVIDEND PAY-OUT RATIO

    - AVERAGE DIVIDEND PAYOUT RATIO

    - AVERAGE RETENTION RATIO

    - AVERAGE RETURN ON EQUITY

    - LONG TERM GROWTH RATE IN EQUITY

    - NORMALISED AVERAGE PRICE EARNING RATIO

    - PROJECTED EPS

    - INTRINSIC VALUE

    - PROJECTED DPS

## 4.5 REPORT STRUCTURE

### Chapter 1: Introduction – Statement of the Problem

Introduction chapter gives an idea about the study, the background of the study, statement of the problem, relevance & scope of the study and the objective of the study.

### Chapter 2: Industry Profile

It gives an overview of financial industry and steel industry; it deals with business process of the industry, market demand and supply, contribution to GDP, revenue generation, level and type of competition, pricing strategies in the industry, prospects and challenges of the industry and the key drivers of the industry.

### Chapter 3: Review of Literature

In this chapter all the theoretical details of fundamental analysis and the methods are discussed.

**Chapter 4: Methodology of the Study**

In this chapter it dealt with the methodology used by the researcher. The research approach and design, sources of online data, sampling design, data analysis tools, report structure, limitations of the study.

**Chapter 5: Data Analysis, Interpretation & inference**

This chapter dealt with the analysis of the data collected and also their    interpretation and inference.

**Chapter 6: Findings of the Study**

This chapter dealt with the findings of the study.

**Chapter 7: Conclusions**

This chapter dealt with the conclusions of the report.

## 4.6 <u>LIMITATIONS OF THE STUDY</u>

- As research was confined to five companies in steel sector only, the findings of the study suffers from the limitation of generalization.
- Lack of accuracy due to the use of secondary data and due to corona virus couldn't collect more data directly.
- Future changes are largely unpredictable because it is mainly based on the market situations.
- The intrinsic value of the company is determined by the profit, which the company earned over a period of time and it is directly related to both internal and external factors, which are out of one's control.

# CHAPTER 5

## DATA ANALYSIS, INTERPRETATION, INFERENCE

## A. RATIO ANALYSIS

### EARNING PER SHARE

**Table 5.1:- Earning per Share**

|  | 2016 | 2017 | 2018 | 2019 | 2020 | Average |
|---|---|---|---|---|---|---|
| **TATA STEEL** | 64.21 | 64.49 | 48.67 | 31.74 | 38.57 | 49.536 |
| **JSW STEEL** | 26.06 | 22.16 | 35.10 | 37.00 | 41.55 | 32.374 |
| **VISA STEEL** | 2.90 | 3.59 | 4.20 | 6.60 | 2.77 | 4.012 |
| **JINDAL STEEL** | 12.17 | 12.34 | 14.16 | 15.11 | 19.86 | 12.728 |
| **SAIL** | 1.56 | 9.38 | 15.06 | 5.72 | 11.01 | 8.554 |
| **Average** |  |  |  |  |  | 21.44 |

**Figure 5.1:- Earning per Share**
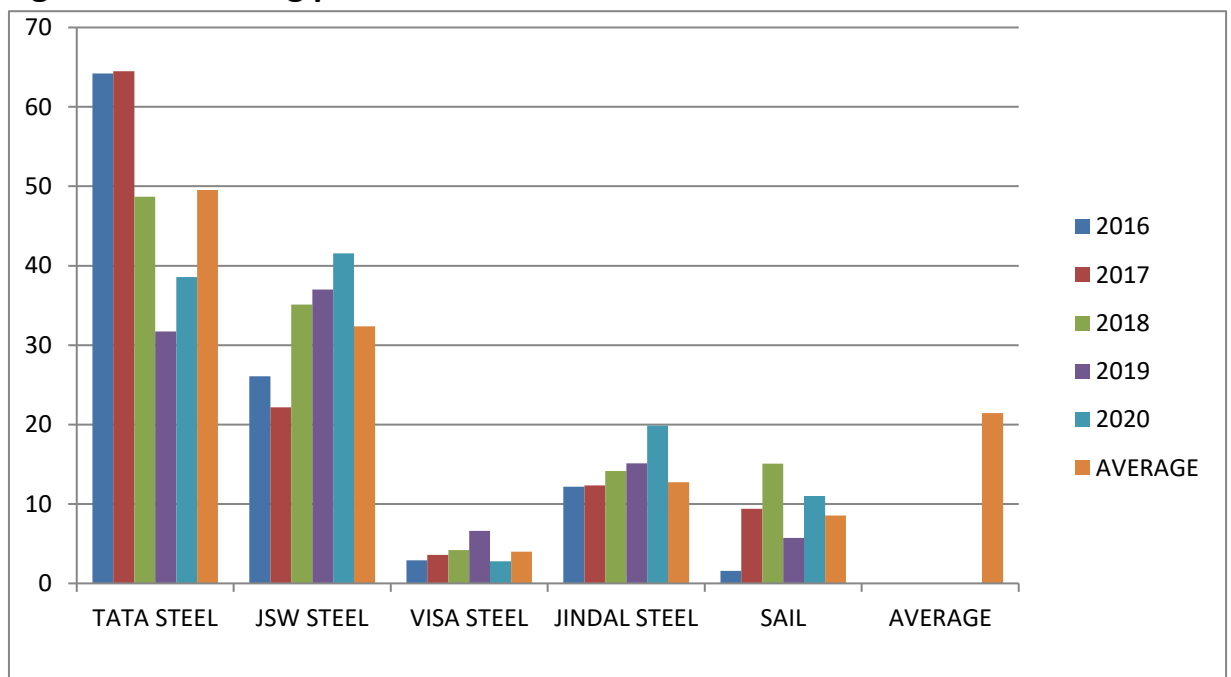
### INTERPRETATION

From the above table and chart it is understood that the average EPS is Rs. 21.44. Tata steel (49.536) is having high earning per share. Tata steel (49.536) and JSW steel (17.053) showed above average EPS among the selected steel companies.

## BOOK VALUE PER SHARE

### Table 5.2:- Book Value per Share

|  | 2016 | 2017 | 2018 | 2019 | 2020 | Average |
|---|---|---|---|---|---|---|
| TATA STEEL | 629.48 | 686.26 | 725.51 | 511.21 | 725.51 | 655.594 |
| JSW STEEL | 170.20 | 185.75 | 205.46 | 242.74 | 264.76 | 213.78 |
| VISA STEEL | 31.06 | 33.14 | 35.83 | 42.43 | 43.15 | 37.12 |
| JINDAL STEEL | 176.56 | 185.03 | 157.76 | 174.77 | 192.49 | 177.32 |
| SAIL | 116.15 | 85.57 | 99.71 | 105.13 | 114.42 | 104.2 |
| Average |  |  |  |  |  | 237.603 |



**FIG 5.2**

### INTERPRETATION

From the above table and chart it is understood that the average Book Value per share is Rs. 237.603.Tata steel is having high Book Value per share. Tata steel (655.594) showed above average Book Value per share among the selected steel companies.

## DIVIDEND PER SHARE

## Table 5.3:- Dividend per Share

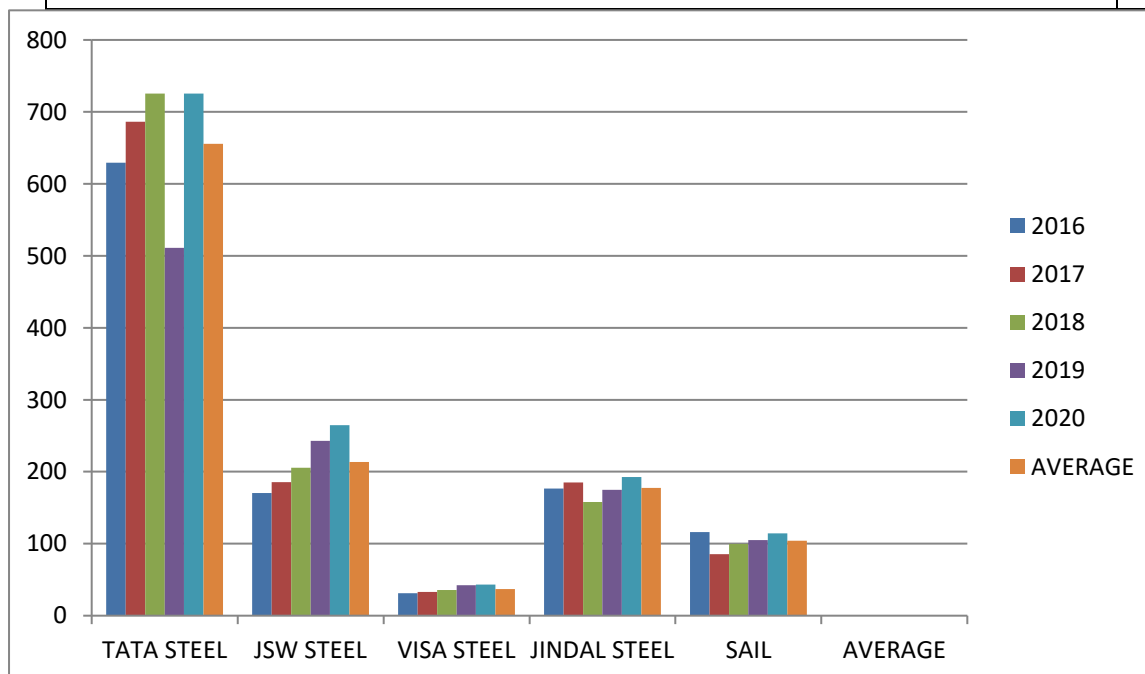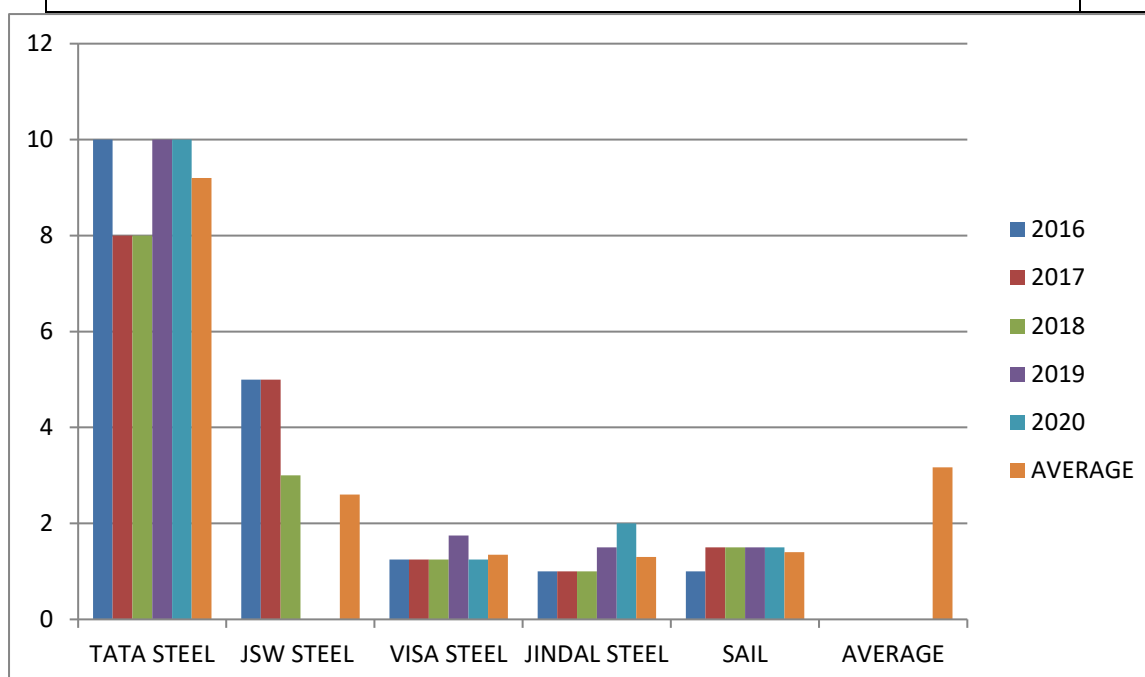| | 2016 | 2017 | 2018 | 2019 | 2020 | Average |
|---|---|---|---|---|---|---|
| **Tata Steel** | 10.00 | 8.00 | 8.00 | 10.00 | 10.00 | 9.2 |
| **JSW STEEL** | 5.00 | 5.00 | 3.00 | 0.00 | 0.00 | 2.6 |
| **VISA STEEL** | 1.25 | 1.25 | 1.25 | 1.75 | 1.25 | 1.35 |
| **JINDAL STEEL** | 1.00 | 1.00 | 1.00 | 1.50 | 2 | 1.3 |
| **SAIL** | 1.00 | 1.50 | 1.50 | 1.50 | 1.50 | 1.4 |
| **Average** | | | | | | 3.17 |



**Figure 5.3:- Dividend per Share**

### INTERPRETATION

From the above table and chart it is understood that the average DPS is Rs. 3.17.Tata steel is having high earning per share. Tata steel (9.2) showed above average DPS among the selected steel companies.

## CURRENT RATIO

**Table 5.4:- Current Ratio**

|  | 2016 | 2017 | 2018 | 2019 | 2020 | Average |
|---|---|---|---|---|---|---|
| **TATA STEEL** | 0.61 | 0.71 | 0.68 | 0.87 | 1.35 | 0.84 |
| **JSW STEEL** | 2.72 | 2.02 | 2.00 | 2.12 | 1.76 | 2.12 |
| **VISA STEEL** | 0.93 | 0.88 | 0.98 | 1.19 | 1.05 | 1.01 |
| **JINDAL STEEL** | 1.28 | 1.29 | 1.32 | 1.30 | 1.33 | 1.3 |
| **SAIL** | 2.01 | 1.37 | 1.69 | 1.51 | 1.18 | 1.55 |
| **Average** |  |  |  |  |  | 1.36 |
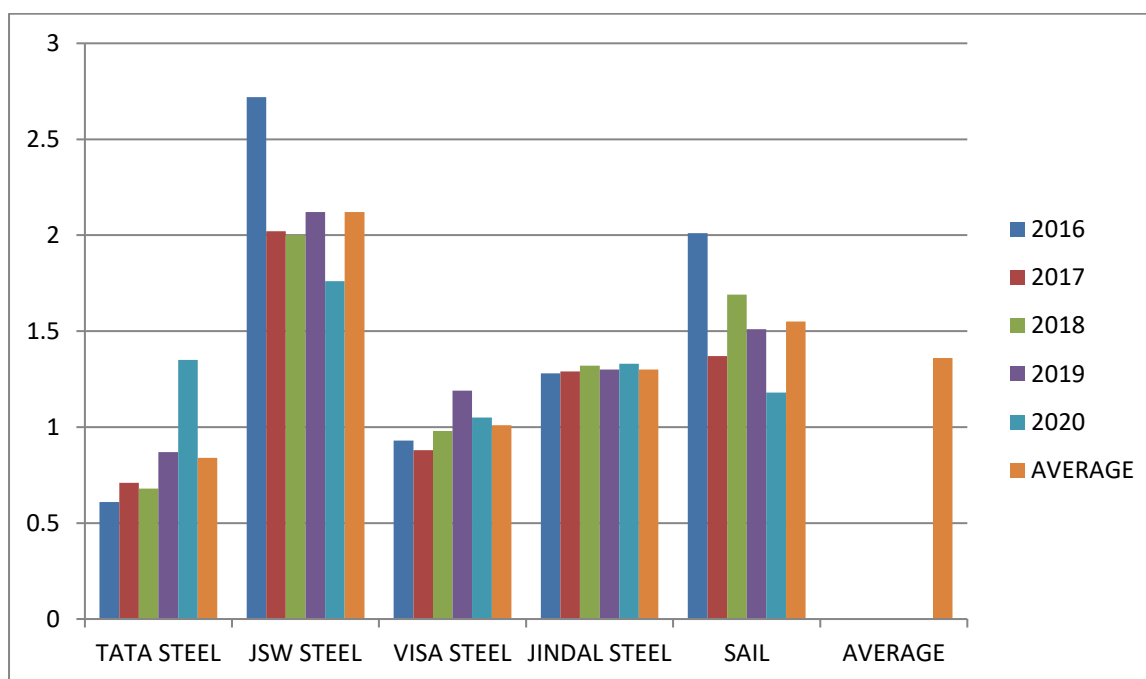


**FIG 5.4**

## INTERPRETATION

From the above table and chart it is understood that the average Current ratio is Rs 1.36. JSW steel is having high Current ratio. JSW steel and SAIL showed above average Current Ratio among the selected Steel companies.

## QUICK RATIO

### Table 5.5:- Quick Ratio

|  | 2016 | 2017 | 2018 | 2019 | 2020 | Average |
|---|---|---|---|---|---|---|
| **TATA STEEL** | 0.29 | 0.23 | 0.35 | 0.43 | 0.92 | 0.44 |
| **JSW STEEL** | 2.10 | 1.33 | 1.51 | 1.56 | 1.26 | 1.55 |
| **VISA STEEL** | 0.56 | 0.57 | 0.66 | 0.79 | 0.63 | 0.64 |
| **JINDAL STEEL** | 0.75 | 0.82 | 0.78 | 0.73 | 0.70 | 0.76 |
| **SAIL** | 1.79 | 1.16 | 1.40 | 1.32 | 0.72 | 1.28 |
| **Average** |  |  |  |  |  | 0.93 |
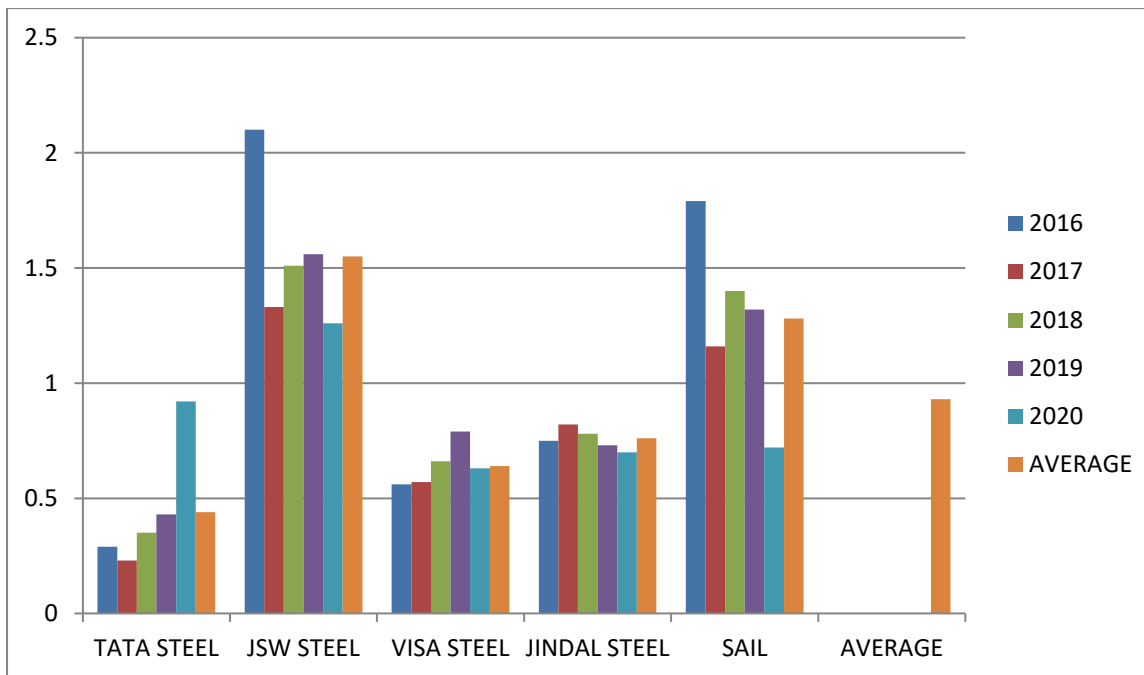


**FIG 5.5**

### INTERPRETATION

From the above table and chart it is understood that the average Quick ratio is Rs.0.93. JSW steel is had made high quick ratio. JSW and SAIL showed above average quick ratio among the selected Steel companies.

## INVENTORY TURNOVER RATIO Table

## 5.6:- Inventory Turnover Ratio

| | 2016 | 2017 | 2018 | 2019 | 2020 | Average |
|---|---|---|---|---|---|---|
| **TATA STEEL** | 6.94 | 5.20 | 5.39 | 4.69 | 5.41 | 5.53 |
| **JSW STEEL** | 6.79 | 4.58 | 4.93 | 4.61 | 4.06 | 4.99 |
| **VISA STEEL** | 7.59 | 11.54 | 11.98 | 10.48 | 7.94 | 9.91 |
| **JINDAL STEEL** | 7.00 | 7.33 | 6.31 | 5.93 | 5.95 | 6.5 |
| **SAIL** | 8.71 | 10.03 | 10.91 | 9.74 | 3.76 | 8.63 |
| **Average** | | | | | | 7.11 |
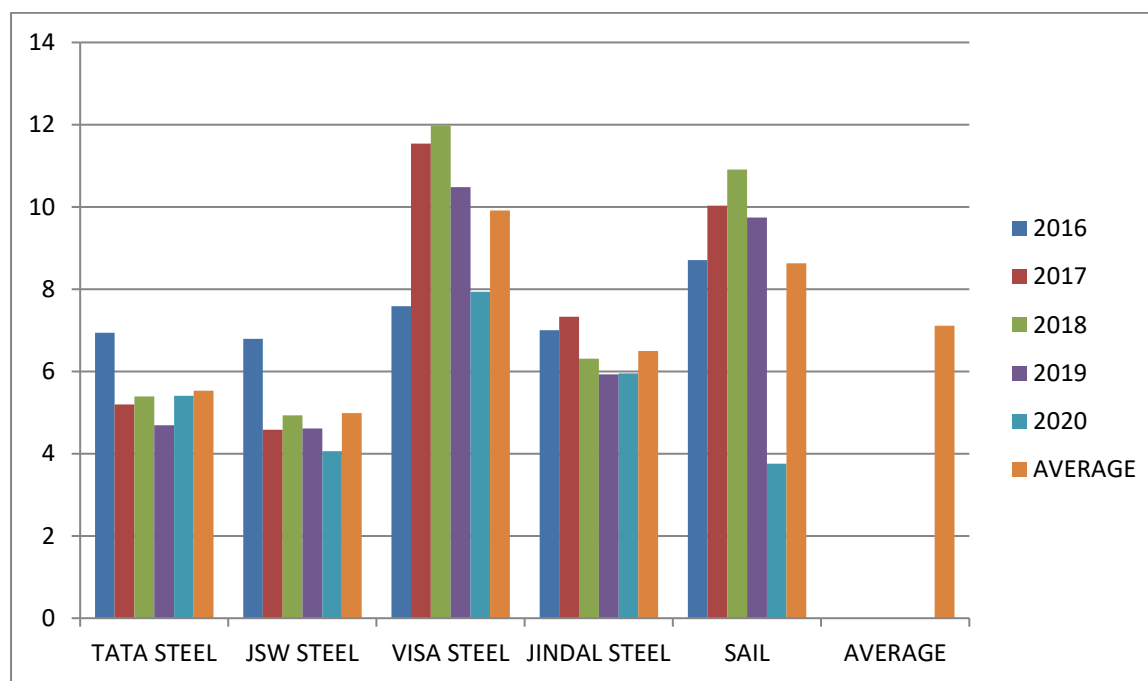


**FIG 5.6**

## INTERPRETATION

From the above table and chart it is understood that the average Inventory turnover ratio is Rs 7.11. VISA steel is having high inventory turnover ratio. VISA steel and SAIL showed above average inventory turnover ratio among the selected Steel companies.

## RETURN ON ASSET RATIO

## Table 5.7:- Return on Asset Ratio

|  | **2016** | **2017** | **2018** | **2019** | **2020** | **Average** |
|---|---|---|---|---|---|---|
| **TATA STEEL** | 5.77 | 5.56 | 3.97 | 3.09 | 3.33 | 4.34 |
| **JSW STEEL** | 11.07 | 8.19 | 10.37 | 9.55 | 8.94 | 9.62 |
| **VISA STEEL** | 4.01 | 5.31 | 6.74 | 8.91 | 3.17 | 5.63 |
| **JINDAL STEEL** | 2.57 | 2.60 | 3.19 | 3.29 | 3.78 | 3.09 |
| **SAIL** | 0.56 | 3.69 | 6.88 | 2.39 | 3.68 | 3.44 |
| **Average** |  |  |  |  |  | 5.22 |



## FIG 5.7

## INTERPRETATION

From the above table and chart it is understood that the average Return on asset ratio is Rs

5.22. JSW steel is having high return on asset ratio JSW steel and VISA steel showed above

average return on asset ratio among the selected steel companies.

## RETURN ON EQUITY RATIO

### Table 5.8:- Return on Equity Ratio

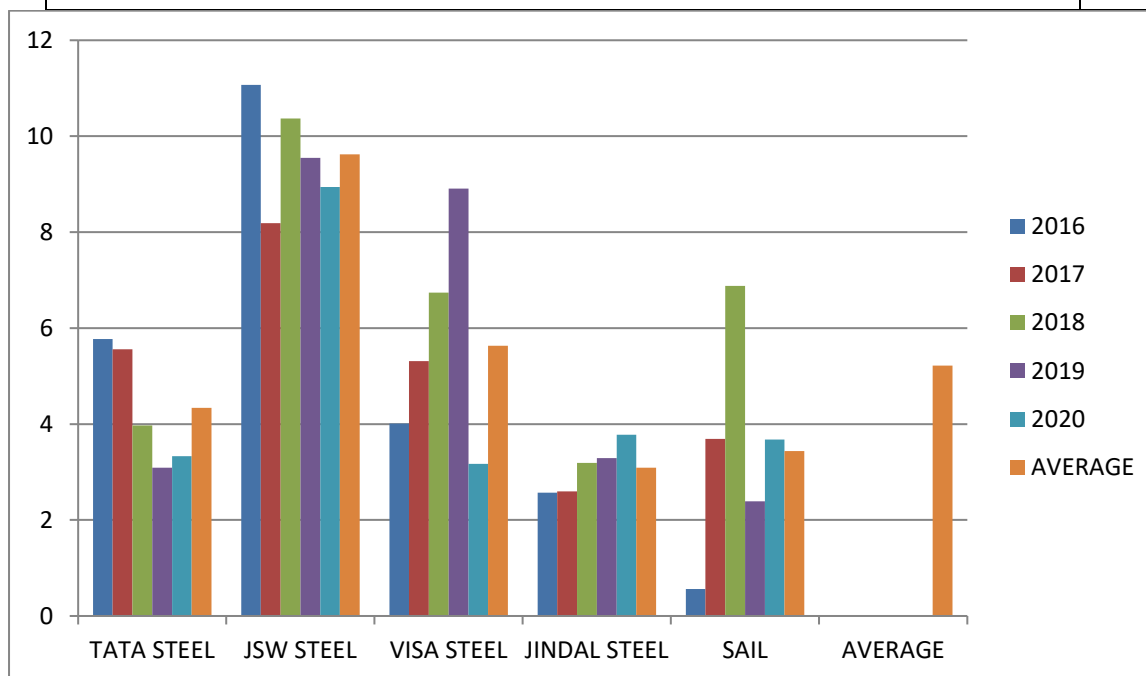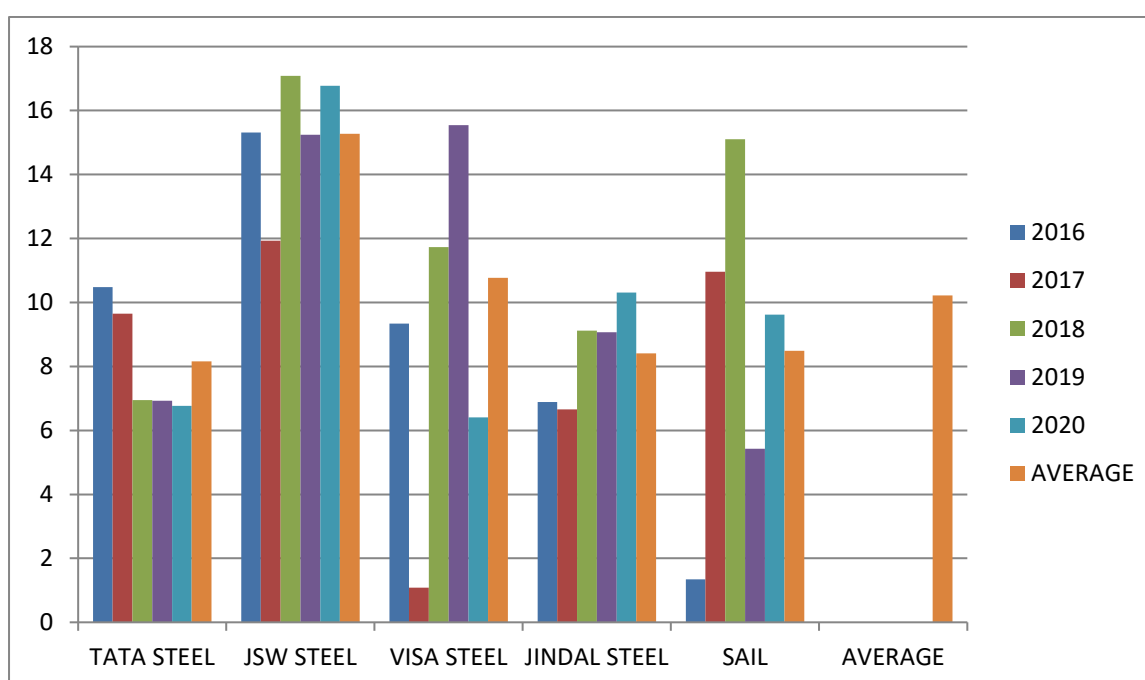|  | 2016 | 2017 | 2018 | 2019 | 2020 | Average |
|---|---|---|---|---|---|---|
| **TATA STEEL** | 10.48 | 9.65 | 6.95 | 6.93 | 6.77 | 8.16 |
| **JSW STEEL** | 15.31 | 11.93 | 17.08 | 15.24 | 16.77 | 15.27 |
| **VISA STEEL** | 9.34 | 10.82 | 11.73 | 15.54 | 6.41 | 10.77 |
| **JINDAL STEEL** | 6.89 | 6.66 | 9.12 | 9.07 | 10.31 | 8.41 |
| **SAIL** | 1.34 | 10.96 | 15.10 | 5.43 | 9.62 | 8.49 |
| **Average** | | | | | | 10.22 |



**FIG 5.8**

**INTERPRETATION**

From the above table and chart it is understood that the average Return on equity ratio is Rs

10.22. JSW steel is having high return on equity ratio. Techno craft (15.27) and VISA steel    showed above average return on equity ratio among the selected steel companies.

## DEBT EQUITY RATIO Table

## 5.9:- Debt Equity Ratio

|  | 2016 | 2017 | 2018 | 2019 | 2020 | Average |
|---|---|---|---|---|---|---|
| **TATA STEEL** | 0.39 | 0.36 | 0.41 | 0.56 | 0.41 | 0.43 |
| **JSW STEEL** | 0.20 | 0.27 | 0.47 | 0.42 | 0.61 | 0.39 |
| **VISA STEEL** | 0.36 | 0.18 | 0.20 | 0.17 | 0.12 | 0.21 |
| **JINDAL STEEL** | 1.23 | 1.08 | 1.22 | 1.08 | 1.02 | 1.13 |
| **SAIL** | 0.63 | 0.79 | 0.47 | 0.59 | 0.41 | 0.58 |
| **Average** |  |  |  |  |  | 0.55 |
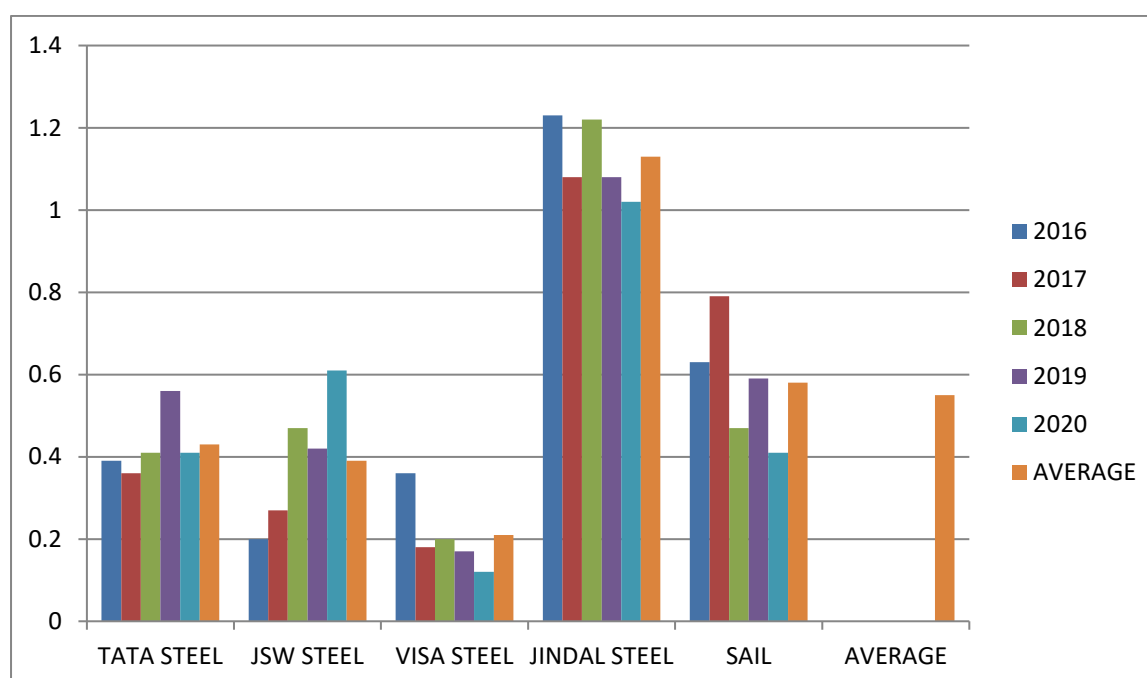


**FIG 5.9**

**INTERPRETATION**

From the above table and chart it is understood that the average Debt equity ratio is Rs 0.55. JINDAL steel is having high Debt equity ratio. JINDAL steel and SAIL showed above average debt equity ratio among the selected Steel companies.

## NET PROFIT MARGIN RATIO

### Table 5.10:- Net Profit Margin Ratio

|  | 2016 | 2017 | 2018 | 2019 | 2020 | Average |
|---|---|---|---|---|---|---|
| **TATA STEEL** | 15.37 | 15.41 | 12.82 | 7.17 | 6.99 | 11.55 |
| **JSW STEEL** | 9.79 | 8.85 | 12.05 | 11.26 | 10.75 | 10.54 |
| **VISA STEEL** | 3.23 | 3.60 | 5.18 | 6.87 | 2.20 | 4.22 |
| **JINDAL STEEL** | 1.76 | 1.89 | 2.12 | 2.22 | 2.19 | 2.04 |
| **SAIL** | 0.88 | 3.92 | 6.17 | 3.07 | 3.99 | 3.61 |
| **Average** |  |  |  |  |  | 6.39 |



**FIG 5.10**

**INTERPRETATION**

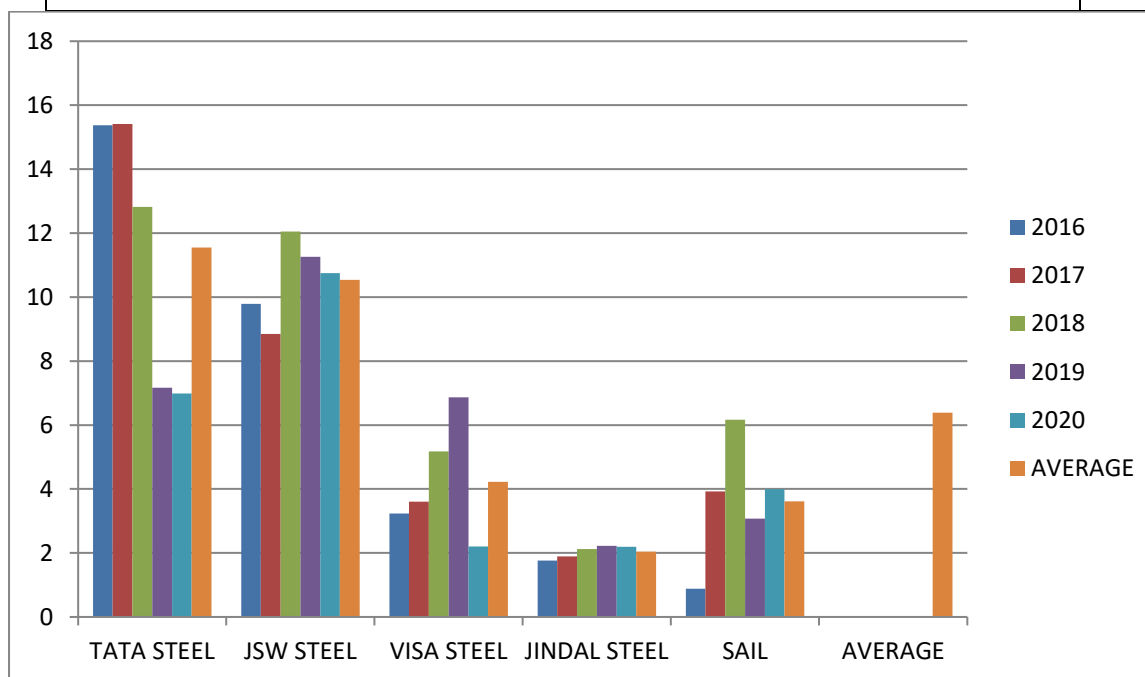From the above table and chart it is understood that the average Net profit margin ratio is Rs

6.39. Tata Steel is having high net profit margin ratio. Tata Steel and JSW steel showed

above average Net profit margin ratio among the selected Steel companies.

## A. INTRINSIC VALUE ANALYSIS

### 1. TATA STEEL

**Table 5.11:- Computation of Pay-out Ratio (DPS/EPS) of Tata Steel Ltd.**

| Year | DPS(Rs) | EPS(Rs) | Pay-out Ratio |
|------|---------|---------|---------------|
| 2015-2016 | 10 | 64.21 | 0.155 |
| 2016-2017 | 8 | 64.49 | 0.124 |
| 2017-2018 | 8 | 48.67 | 0.164 |
| 2018-2019 | 10 | 31.74 | 0.315 |
| 2019-2020 | 10 | 38.57 | 0.25 |

**AVERAGE DIVIDEND PAYOUT RATIO (ADPR)**

=0.155+0.124+0.164+0.315+0.25÷5

**= 0.2016**

**AVERAGE RETENTION RATIO (ARR) = 1 - ADPR**

$$= 1 - 0.2016$$

$$= \textbf{0.7984}$$

**Table 5.12:- Computation of Return on Equity (Net Profit / Net worth) of Tata Steel Ltd.**

| Year | Net Profit | Net worth | ROE |
|------|-----------|-----------|-----|
| 2015-2016 | 6412.19 | 61147.99 | 0.104 |
| 2016-2017 | 6,439.12 | 66,663.89 | 0.096 |
| 2017-2018 | 4,900.95 | 70,476.72 | 0.069 |
| 2018-2019 | 3,444.55 | 49,659.00 | 0.069 |
| 2019-2020 | 4,169.55 | 61,514.82 | 0.067 |

**AVERAGE RETURN ON EQUITY (AROE)**

= 0.104+0.096+0.069+0.069+0.067÷5

**= 0.081**


## Table 5.13:- Computation of Price Earnings Ratio of Tata Steel Ltd.

| Year | Average Price | EPS | P/E Ratio |
|---|---|---|---|
| 2015-2016 | 292.357 | 64.21 | 4.55 |
| 2016-2017 | 403.041 | 64.49 | 6.24 |
| 2017-2018 | 243.323 | 48.67 | 4.99 |
| 2018-2019 | 357.23 | 31.74 | 11.25 |
| 2019-2020 | 575.347 | 38.57 | 14.91 |


**NORMALIZED AVERAGE PRICE EARNING RATIO**

= 4.55+6.24+4.99+11.25+14.91÷ 5

**= 8.388**


**GROWTH RATE = (ARR * AROE)**

GROWTH RATE = 0.7984*0.081

　　　　= **0.064**

**PROJECTED EPS = CURRENT YEAR EPS *(1 + GROWTH RATE)**

　　　　= 38.57(1+0.0646)

　　　　= **41.061**

**INTRINSIC VALUE = ROJECTED EPS * NORMALIZED AVERAGE PE RATIO)**

　　　　= 41.601*8.388

　　　　**= 348.94**

**PROJECTED DPS = CURRENT YEAR DPS *(1 + GROWTH RATE)**

=10*(1+0.0646)

=**10.646**

## TABLE 5.14 <u>SHOWING INTRINSIC VALUE OF TATA STEEL LTD</u>

| | |
|---|---|
| AVERAGE DIVIDEND PAYOUT RATIO | 0.2016 |
| AVERAGE RETENTION RATIO | 0.7984 |
| AVERAGE RETURN ON EQUITY | 0.081 |
| NORMALISED AVERAGE PRICE EARNING RATIO | 8.30 |
| LONG TERM GROWTH RATE IN EQUITY | 0.064 |
| PROJECTED EPS | 41.061 |
| INTRINSIC VALUE | 348.94 |
| PROJECTED DPS | 10.646 |
| **INTRINSIC VALUE** | **MARKET VALUE** |
| **348.94** | **468.20** |

**INTERPRETATION**

Tata Steel has a lower intrinsic value compared to the market value. So it is preferable to sell the share of this company as per the thumb rule of earning multiplier model**.**

## 2. JSW STEEL

## Table 5.15:- Computation of Pay-out Ratio (DPS/EPS) of JSW STEEL.

| Year | DPS(Rs) | EPS(Rs) | Pay-out Ratio |
|------|---------|---------|---------------|
| 2015-2016 | 5.00 | 26.06 | 0.191 |
| 2016-2017 | 5.00 | 22.16 | 0.225 |
| 2017-2018 | 3.00 | 35.10 | 0.085 |
| 2018-2019 | 0.00 | 37.00 | 0 |
| 2019-2020 | 0.00 | 41.55 | 0 |

**AVERAGE DIVIDEND PAYOUT RATIO (ADPR)**

$= 0.191+0.225+0.085+0+0 \div 5$

$= \mathbf{0.1002}$

**AVERAGE RETENTION RATIO (ARR) = 1 - ADPR**

$$= 1 - 0.1002$$

$$= \mathbf{0.8998}$$

## Table 5.16:- Computation of Return on Equity (Net Profit / Net worth) of JSW STEEL.

| Year | Net Profit | Net worth | ROE |
|------|------------|-----------|-----|
| 2015-2016 | 82.16 | 538.73 | 0.152 |
| 2016-2017 | 69.88 | 587.69 | 0.118 |
| 2017-2018 | 92.31 | 540.37 | 0.170 |
| 2018-2019 | 97.32 | 638.39 | 0.152 |
| 2019-2020 | 108.62 | 647.64 | 0.167 |

**AVERAGE RETURN ON EQUITY (AROE)**

$$= \quad 0.152+0.118+0.170+0.152+0.167 \div 5$$

$$= \mathbf{0.151}$$

## Table 5.17:- <u>Computation of Price Earnings Ratio of JSW STEEL.</u>

| Year | Average Price | EPS | P/E Ratio |
|------|---------------|-----|-----------|
| 2015-2016 | 82.312 | 26.06 | 3.15 |
| 2016-2017 | 185.137 | 22.16 | 8.35 |
| 2017-2018 | 200.733 | 35.10 | 5.70 |
| 2018-2019 | 343.20 | 37.00 | 9.27 |
| 2019-2020 | 477.33 | 41.55 | 11.48 |

**NORMALIZED AVERAGE PRICE EARNING RATIO**

= 3.15+8.35+5.70+9.27+11.48÷ 5

**= 7.59**

**GROWTH RATE = (ARR * AROE)**

GROWTH RATE = 0.8998*0.151

$$= \mathbf{0.1358}$$

**PROJECTED EPS = CURRENT YEAR EPS *(1 + GROWTH RATE)**

$$= 41.55(1+0.1358)$$

$$= \mathbf{47.192}$$

**INTRINSIC VALUE = PROJECTED EPS * NORMALIZED AVERAGE PE RATIO)**

$$= 47.192*7.59$$

$$= \mathbf{358.18}$$

**PROJECTED DPS = CURRENT YEAR DPS *(1 + GROWTH RATE)**

$$=0*(1+0.1358)$$

$$= \mathbf{0}$$

**TABLE 5.18**

## SHOWING INTRINSIC VALUE OF JSW STEEL

| | |
|---|---|
| AVERAGE DIVIDEND PAYOUT RATIO | 0.1002 |
| AVERAGE RETENTION RATIO | 0.8998 |
| AVERAGE RETURN ON EQUITY | 0.151 |
| NORMALISED AVERAGE PRICE EARNING RATIO | 7.59 |
| LONG TERM GROWTH RATE IN EQUITY | 0.1358 |
| PROJECTED EPS | 47.192 |
| INTRINSIC VALUE | 358.18 |
| PROJECTED DPS | 0 |
| **INTRINSIC VALUE** | **MARKET VALUE** |
| **358.18** | **413.10** |

**INTERPRETATION**

JSW STEEL has a lower intrinsic value compared to the market value. So it is preferable to sell the share of this company as per the thumb rule of earning multiplier model.

## 3. VISA STEEL

### Table 5.19:- Computation of Pay-out Ratio (DPS/EPS) of VISA STEEL.

| Year | DPS(Rs) | EPS(Rs) | Pay-out Ratio |
|------|---------|---------|---------------|
| 2015-2016 | 1.25 | 2.90 | 0.431 |
| 2016-2017 | 1.25 | 3.59 | 0.348 |
| 2017-2018 | 1.25 | 4.20 | 0.297 |
| 2018-2019 | 1.75 | 6.60 | 0.265 |
| 2019-2020 | 1.25 | 2.77 | 0.451 |

**AVERAGE DIVIDEND PAYOUT RATIO (ADPR)**

**=** 0.431+0.348+0.297+0.265+0.451 ÷ 5

= **0.3584**

**AVERAGE RETENTION RATIO (ARR) = 1 - ADPR**

$$= 1 - 0.3584$$

**= 0.6416**

### Table 5.20:- Computation of Return on Equity (Net Profit / Net worth) of VISA STEEL.

| Year | Net Profit | Net worth | ROE |
|------|-----------|-----------|-----|
| 2015-2016 | 39.84 | 426.44 | 0.093 |
| 2016-2017 | 49.28 | 455.03 | 0.108 |
| 2017-2018 | 57.73 | 492.03 | 0.117 |
| 2018-2019 | 87.83 | 582.57 | 0.150 |
| 2019-2020 | 38 | 592.48 | 0.064 |

**AVERAGE RETURN ON EQUITY (AROE)**

=0.093+0.108+0.117+0.150+0.064÷ 5

**= 0.106**

**Table 5.21:- <u>Computation of Price Earnings Ratio of VISA STEEL.</u>**

| Year | Average Price | EPS | P/E Ratio |
|------|---------------|-----|-----------|
| 2014-2015 | 20.295 | 2.90 | 6.99 |
| 2015-2016 | 50.904 | 3.59 | 14.17 |
| 2016-2017 | 52.375 | 4.20 | 12.47 |
| 2017-2018 | 76.570 | 6.60 | 11.60 |
| 2018-2019 | 92.90 | 2.77 | 33.53 |

**NORMALIZED AVERAGE PRICE EARNING RATIO**

= 6.99+14.17+12.47+11.60+33.53÷ 5

**= 15.752**

**GROWTH RATE = (ARR * AROE)**

 GROWTH RATE = 0.6416* 0.106

             **= 0.068**

**PROJECTED EPS = CURRENT YEAR EPS *(1 + GROWTH RATE)**

             = 2.77(1+0.068)

             **= 2.95**

**INTRINSIC VALUE = ROJECTED EPS * NORMALIZED AVERAGE PE RATIO**

             = 2.95*15.752

             **= 46.46**

**PROJECTED DPS = CURRENT YEAR DPS *(1 + GROWTH RATE)**

$$=1.25*(1+0.068)$$

$$\mathbf{=1.3}$$

**TABLE 5.22**

## SHOWING INTRINSIC VALUE OF VISA STEEL

| | |
|---|---|
| AVERAGE DIVIDEND PAYOUT RATIO | 0.3584 |
| AVERAGE RETENTION RATIO | 0.6416 |
| AVERAGE RETURN ON EQUITY | 0.106 |
| NORMALISED AVERAGE PRICE EARNING RATIO | 15.752 |
| LONG TERM GROWTH RATE IN EQUITY | 0.068 |
| PROJECTED EPS | 2.95 |
| INTRINSIC VALUE | 46.46 |
| PROJECTED DPS | 1.33 |
| **INTRINSIC VALUE** | **MARKET VALUE** |
| **46.46** | **82.90** |

**INTERPRETATION**

VISA STEEL has a lower intrinsic value compared to the market value. So it is preferable to sell the share of this company as per the thumb rule of earning multiplier model.

### 4. JINDAL STEEL.

### Table 5.23:- Computation of Pay-out Ratio (DPS/EPS) of JINDAL STEEL.

| Year | DPS(Rs) | EPS(Rs) | Pay-out Ratio |
|------|---------|---------|---------------|
| 2015-2016 | 1.00 | 12.17 | 0.082 |
| 2016-2017 | 1.00 | 12.34 | 0.081 |
| 2017-2018 | 1.00 | 14.16 | 0.070 |
| 2018-2019 | 1.50 | 15.11 | 0.099 |
| 2019-2020 | 2 | 19.86 | 0.100 |

**AVERAGE DIVIDEND PAYOUT RATIO (ADPR)**

= 0.082+0.081+0.070+0.099 +0.100÷ 5

= **0.0864**

**AVERAGE RETENTION RATIO (ARR) = 1 - ADPR**

$$= 1 - 0.0864$$

**= 0.9136**

### Table 5.24:- Computation of Return on Equity (Net Profit / Net worth) of JINDAL STEEL.

| Year | Net Profit | Net worth | ROE |
|------|-----------|-----------|-----|
| 2015-2016 | 53.36 | 773.91 | 0.060 |
| 2016-2017 | 54.09 | 811.02 | 0.066 |
| 2017-2018 | 63.10 | 691.46 | 0.091 |
| 2018-2019 | 86.28 | 950.92 | 0.090 |
| 2019-2020 | 108.04 | 1,047.32 | 0.103 |

**AVERAGE RETURN ON EQUITY (AROE)**

= 0.060+0.066+0.091+0.090+0.103÷ 5

**= 0.082**

**Table 5.25:- <u>Computation of Price Earnings Ratio of JINDAL STEEL</u>.**

| Year | Average Price | EPS | P/E Ratio |
|------|---------------|-----|-----------|
| 2015-2016 | 72.504 | 12.17 | 5.95 |
| 2016-2017 | 102.437 | 12.34 | 8.30 |
| 2017-2018 | 132.033 | 14.16 | 9.32 |
| 2018-2019 | 186.733 | 15.11 | 12.35 |
| 2019-2020 | 338.379 | 19.86 | 17.03 |

**NORMALIZED AVERAGE PRICE EARNING RATIO**

= 5.95+8.30+9.32+12.35+17.03÷ 5

= **10.59**

**GROWTH RATE = (ARR * AROE)**

GROWTH RATE = 0.9136* 0.082

= **0.074**

**PROJECTED EPS = CURRENT YEAR EPS *(1 + GROWTH RATE)**

= 19.86(1+0.074)

= **21.32**

**INTRINSIC VALUE = ROJECTED EPS * NORMALIZED AVERAGE PE RATIO**

$$= 21.32*10.59$$

**=225.77**

**PROJECTED DPS = CURRENT YEAR DPS \*(1 + GROWTH RATE)**

$$=2*(1+0.074)$$

**=2.14**

TABLE 5.26

## SHOWING INTRINSIC VALUE OF JINDAL STEEL

| | |
|---|---|
| AVERAGE DIVIDEND PAYOUT RATIO | 0.0864 |
| AVERAGE RETENTION RATIO | 0.9136 |
| AVERAGE RETURN ON EQUITY | 0.082 |
| NORMALISED AVERAGE PRICE EARNING RATIO | 10.59 |
| LONG TERM GROWTH RATE IN EQUITY | 0.074 |
| PROJECTED EPS | 21.32 |
| INTRINSIC VALUE | 225.77 |
| PROJECTED DPS | 2.148 |
| **INTRINSIC VALUE** | **MARKET VALUE** |
| **225.77** | **217.20** |

**INTERPRETATION**

JINDAL STEEL has a lower intrinsic value compared to the market value. So it is preferable to sell the share of this company as per the thumb rule of earning multiplier model.

5. **SAIL**

**Table 5.27:- Computation of Pay-out Ratio (DPS/EPS) of SAIL.**

| Year | DPS(Rs) | EPS(Rs) | Pay-out Ratio |
|------|---------|---------|---------------|
| 2015-2016 | 1.00 | 1.56 | 0.641 |
| 2016-2017 | 1.50 | 9.38 | 0.159 |
| 2017-2018 | 1.50 | 15.06 | 0.099 |
| 2018-2019 | 1.50 | 5.72 | 0.262 |
| 2019-2020 | 1.50 | 11.01 | 0.136 |

**AVERAGE DIVIDEND PAYOUT RATIO (ADPR)**

$= 0.641+0.159+0.099+0.262+0.136 \div 5$

**= 0.2594**

**AVERAGE RETENTION RATIO (ARR) = 1 - ADPR**

$$= 1 - 0.2594$$

$$= 0.7406$$

**Table 5.28:- <u>Computation of Return on Equity (Net Profit / Net worth) of SAIL.</u>**

| Year | Net Profit | Net worth | ROE |
|------|-----------|-----------|-----|
| 2015-2016 | 8.90 | 663.26 | 0.013 |
| 2016-2017 | 53.56 | 488.63 | 0.109 |
| 2017-2018 | 85.99 | 569.35 | 0.151 |
| 2018-2019 | 32.65 | 600.30 | 0.054 |
| 2019-2020 | 62.86 | 653.35 | 0.096 |

**AVERAGE RETURN ON EQUITY (AROE)**

= 0.013 + 0.109 + 0.151 + 0.054 + 0.096 ÷ 5

= 0.084

**Table 5.29:- <u>Computation of Price Earnings Ratio of SAIL.</u>**

| Year | Average Price | EPS | P/E Ratio |
|------|--------------|-----|-----------|
| 2015-2016 | 70.354 | 1.56 | 45.09 |
| 2016-2017 | 65.654 | 9.38 | 6.99 |
| 2017-2018 | 85.091 | 15.06 | 5.65 |
| 2018-2019 | 52.90 | 5.72 | 9.24 |
| 2019-2020 | 97.575 | 11.01 | 8.86 |

**NORMALIZED AVERAGE PRICE EARNING RATIO**

= 45.09+6.99+5.65+9.24+8.86÷ 5

**= 15.16**

**GROWTH RATE = (ARR * AROE)**

GROWTH RATE = 0.7406* 0.084

$\qquad$ **= 0.062**

**PROJECTED EPS = CURRENT YEAR EPS \*(1 + GROWTH RATE)**

$\qquad$ = 11.01(1+0.062)

$\qquad$ = **11.09**

**INTRINSIC VALUE = ROJECTED EPS \* NORMALIZED AVERAGE PE RATIO**

$\qquad$ = 11.09*15.16

$\qquad$ =**168.12**

**PROJECTED DPS = CURRENT YEAR DPS \*(1 + GROWTH RATE)**

$\qquad$ =1*(1+0.062)

$\qquad$ =**1.062**

**TABLE 5.30**

## SHOWING INTRINSIC VALUE OF SAIL

| | |
|---|---|
| AVERAGE DIVIDEND PAYOUT RATIO | 0.2594 |
| AVERAGE RETENTION RATIO | 0.7406 |
| AVERAGE RETURN ON EQUITY | 0.084 |
| NORMALISED AVERAGE PRICE EARNING RATIO | 15.16 |
| LONG TERM GROWTH RATE IN EQUITY | 0.062 |
| PROJECTED EPS | 11.09 |
| INTRINSIC VALUE | 168.12 |
| PROJECTED DPS | 1.062 |
| **INTRINSIC VALUE** | **MARKET VALUE** |
| **168.12** | **50.10** |

**INTERPRETATION**

Man Industries have more intrinsic value compared to the market value. So it is preferable to buy the share of this company as per the thumb rule of earning multiplier model.

**CHAPTER 6**

**FINDINGS OF THE STUDY**

## Findings of the Study

- Economic analysis and forecasting shows that Indian economy is growing. This is obtained from various indicators such as GDP, stock market index, etc.

- Competition in steel sector is comparatively high when compared to other sectors in the economy.

- Industry analysis shows steel industry is having stable and growing demand.

- The 4 stocks such as Tata steel, JSW steel, VISA steel and Jindaal steel were considered to be overpriced and the study reveals that it is the best time to sell those 4 shares.

- Intrinsic Value calculation points out the future value of a share.

- JSW steel has the highest intrinsic value (358.18) among the 5companies.

- Tata steel has the highest EPS (49.536) as well as DPS (9.2), in which the investor is capable of generating a significant dividend among other companies.

- JSW steel has high current ratio (2.12) and quick ratio (1.55), which ensures Liquidity.

- Jindaal steel has high debt equity ratio (1.13), it indicates Jindal steel has been aggressive in financing its growth with debt.

- VISA steel is having high inventory turnover ratio (9.91).it indicates how fast VISA steel is selling inventory.

- Tata Steel has high net profit margin ratio (11.55), ensures that the company is able to effectively control its costs.

- JSW steel has high return on equity ratio (15.27) and high return on asset ratio (9.62). It indicates that JSW steel has the ability to generate profits from its shareholder's investments.

- As per multiplier model, the study recommend buy shares of man industries and disinvest or not to buy share of Tata steel, JSW steel, Jindaal steel, VISA

**CHAPTER 7**
**CONCLUSSIONS**

## CONCLUSION

The fundamental analysis on steel sector is a very relevant topic on account of the increased investor interest in steel industry. There is always a need to study and analyse a share before investing in the share market. Investor can arrive at rational decisions and avoid unnecessary losses if they make a fundamental analysis of the stocks.

Nowadays majority of the stock brokers use this technique, along with the others to advice clients on investment matters. The project study proved fruitful as it opened my eyes to the reality of stock market. The analysis of the stocks under study and the prospective returns from each was very useful. Though the return from some shares will be satisfactory, there is an increased need on the part of the investor or the portfolio manager to study the associated risk.

The study gives several insights into the stock market but it is not decisive in nature. The calculations are based on past figures which have already happened and become a part of history. The economy is uncertain and a rational investor should incorporate several other aspects before taking an investment decision

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