

# A STUDY ON FINANCIAL PERFORMANCE OF SELECTED STEEL COMPANIES OF INDIA

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## Abstract

India was the world's second-largest steel producer with production standing at 111.2 million tonnes (MT) in 2019. The growth in the Indian steel sector has been driven by domestic availability of raw materials such as iron ore and cost-effective labour. India's crude steel and finished steel production increased to 108.5 MT and 101.03 MT in FY20P, respectively. The primary objective is to study the financial performance of the Steel industry and the secondary objectives are to evaluate the profitability, liquidity, Solvency and the efficiency position of the industry. The secondary data is used for the research. It has been collected from the company's annual report and balance sheet. Tools such as Ratio the data. The results of the study indicate that the company's all the liquidity, Profitability and efficiency ratio for out of five company is not good. So Improved in liquidity, Profitability and efficiency ratio only 1 company is NMDC liquidity, Profitability and efficiency ratio is better.

**Keywords:** Steel Industry, Financial Performance, Financial Ratio.

## INTRODUCTION

### Global Steel Industries Scenario

#### World Steel Association

The World Steel Association (worldsteel) is a non-profit organisation with headquarters in Brussels, Belgium. A second office in Beijing, China, opened in April 2006. worldsteel is one of the largest and most dynamic industry associations in the world, with members in every major steel-producing country. worldsteel represents steel producers, national and regional steel industry associations, and steel research institutes. Members represent around 85% of global steel production. It was founded as the International Iron and Steel Institute on 10 July 1967. It changed its name to the World Steel Association on 6 October 2008.

#### ABOUT STEEL

Steel is the world's most important engineering and construction material. It is used in every aspect of our lives; in cars and construction products, refrigerators and washing machines, cargo ships and surgical scalpels. It can be recycled over and over again without loss of property.

#### Meaning of steel

Steel is an alloy of iron and carbon containing less than 2% carbon and 1% manganese and small amounts of silicon, phosphorus, sulphur and oxygen. Steel is the world's most important engineering and construction material. It is used in every aspect of our lives; in cars and construction products, refrigerators and washing machines, cargo ships and surgical scalpels.

**World crude steel production 1950 to 2019**

Years	World.	Years	World.	Years	World.
1950	189	2000	850	2010	1433
1955	270	2001	852	2011	1538
1960	347	2002	905	2012	1560
1965	456	2003	971	2013	1650
1970	595	2004	1063	2014	1671
1975	644	2005	1148	2015	1621
1980	717	2006	1250	2016	1629
1985	719	2007	1348	2017	1732
1990	770	2008	1343	2018	1814
1995	753	2009	1239	2019	1869

Source: World Steel Association Report 2020

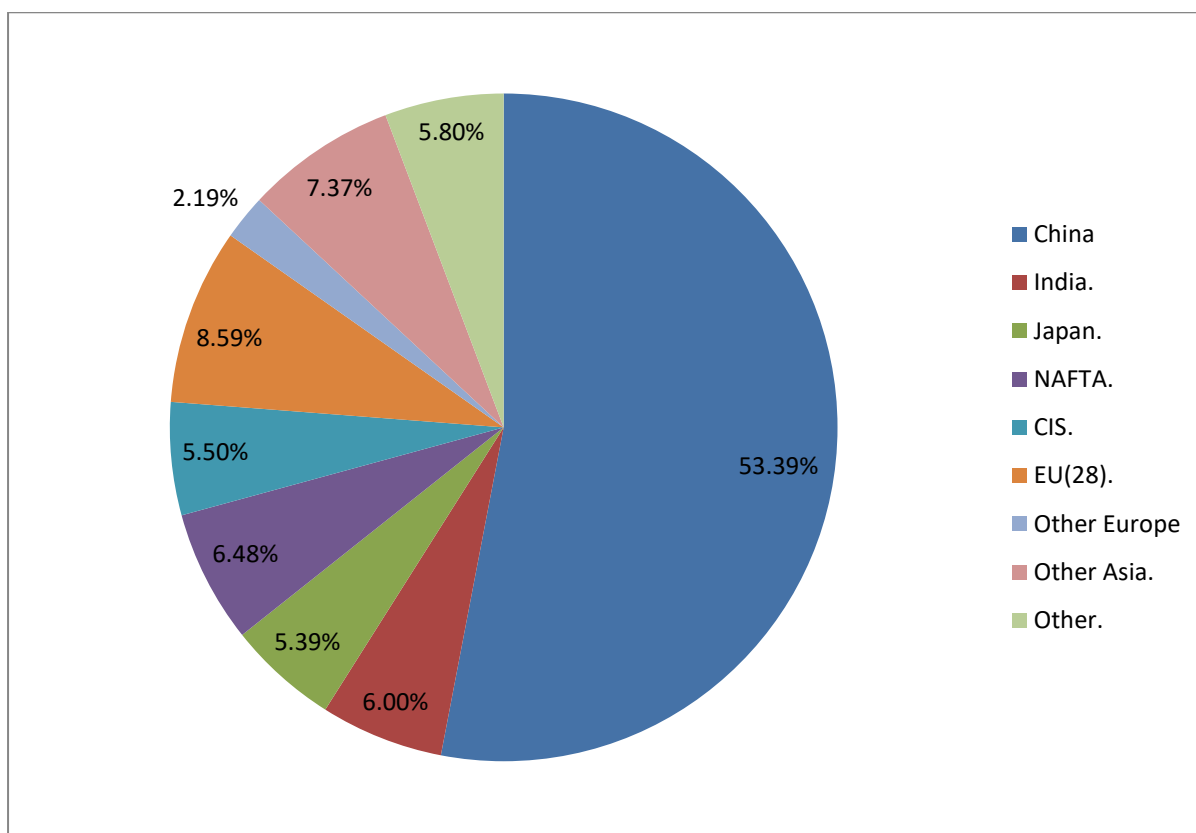
**Major steel-producing countries 2018 and 2019**  
Milliontonnes, crude steel production million tonnes,

Country	2019	2018
China	996.3	920.0
India	111.2	109.3
Japan	99.3	104.3
United States	87.8	86.6
Russia	71.9	72.1
South Korea	71.4	72.5
Germany	39.7	42.4
Turkey	33.7	37.3
Brazil	32.2	35.4
Iran	25.61	24.5

Source: Worled SteelAssioston Report 2020

**Steel production: geographical distribution 2019**  
Crude steel production World total: 1869 million tones

China	53.39 %
India.	6.0 %
Japan.	5.39 %
NAFTA.	6.48 %
CIS.	5.50 %
EU(28).	8.59 %
Other Europe	2.19 %
Other Asia.	7.37 %
Other.	5.8 %



Source: Worled SteelAssioston Report 2020

**Major importers and exporters of steel 2019**

No	Country	Net exports (exports-imports)Mt	Country	Net imports (imports - exports)Mt
1	China	8.3	United States	19.8
2	Japan	26.7	Thailand	15.1
3	Russia	22.7	European Union	12
4	Ukraine	14.0	Vietnam	10.3
5	South Korea	13.6	Indonesia	9.2
6	Brazil	11.0	Mexico	7.8
7	Iran	7.9	Philippines	7.2
8	Turkey	7.4	Poland	5.1
9	India	4.4	Saudi Arabia	3.9
10	Belgium	4.3	Algeria	3.2

Source: Worled SteelAssioston Report 2020

**Indian Steel Industries Scenario**  
**Market Size of Indian Steel Industries**

Years (FY)	Total Crude steel production (million tonnes)	Consumption of Steel (million tonnes)
2020	108.50	100.01
2019	110.92	97.54
2018	103.13	90.71
2017	97.95	84.04
2016	89.79	81.52

Source: IBEF Report September 2020

The steel sector contributes over 2% to India's GDP. Steel manufacturing output of India is expected to increase to 128.6 MT by 2021, accelerating the country's share of global steel production from 5.9% in 2018 to 7.7% by 2021. India's finished steel consumption grew at a CAGR of 5.2% during FY16-FY20 to reach 100MT.

**TRENDS IN IMPORT AND EXPORT OF STEEL**

In FY20, India exported 8.24 MT of finished steel. During the same period, the country's finished steel import reached 6.69 MT.

Finished steel export and import (in million tonnes)

Years (FY)	Imports	Exports
2020	6.69	8.24
2019	7.83	6.36
2018	7.48	9.62
2017	7.22	8.24
2016	11.71	4.08

Source: IBFF Report September 2020

**LITERATURE REVIEW**

**Musulmov (2005)** concluded that the privatization was associated with a declining value added and shareholders' profitability in Turkish cement industry. A decline in the value added and shareholders' profitability were mainly caused by the decrease in return on assets. The decline in the return on asset was traced to declining asset productivity. These results are not consistent with previous cross-sectional privatization studies and a number of country studies.

**Barati et al. (2015)** examined the financial performance of identified units in the steel industry in India in terms of financial ratios such as Liquidity, Solvency, Activity and Profitability position. For this study, Tata Steel Ltd., Jindal Steel & Power Ltd., J S W Steel Ltd., Bhushan Steel Ltd. and Steel Authority of India Ltd. are selected for this study. The study evaluated the impact of selected variables on the financial performance of identified units in the steel industry, ANOVA-Test analysis is used.

**Balakrishnan (2016)** observed that financial performance of any organization is influenced by several factors like capital structure, cost, revenue and the consequential profit margin. The study can be analysed with many aspects like financial facts, financial ratios, financial health, financial strength and

utilization of assets, etc. The study revealed that financial performance can be influenced by the operational and financial efficiency of the steel industry, which are related to cost and

### SCOPE OF THE RESEARCH STUDY

The present study will confine to and highlights the financial performance of the selected Steel companies of India through facts and figures of published financial statements. The financial performance of Steel industry will be evaluated on parameters, such as profitability, utilization of assets, growth of performance, financial strength and financial health. The present study has also identified the nature of relationship between the various aspects of financial performance of Steel industry.

### OBJECTIVES OF THE STUDY

The study has the following objectives:

1. To study the growth of Steel industry in India.
2. To study various ways to measure the profitability of selected Steel companies of India
3. To study various ways to measure the liquidity of selected Steel companies of India
4. To study various ways to measure the efficiency of selected Steel companies of India
5. To study various ways to measure the Solvency of selected Steel companies of India

### RESEARCH METHODOLOGY

#### SOURCES OF DATA

Secondary sources of data will be utilised for this proposed research study Secondary data have been collected from Company Annual Reports. Information regarding financial statements was collected from Annual Reports of the Steel companies and other data collected to websites of World Steel Association and other websites to related Steel industry

#### SAMPLE SIZE

In the research study selected 5 Steel companies for the period FY 2016 to FY 2020 comprise the universe of the research study.

#### PERIOD OF DATA COVERAGE

Five years of financial statements will be analysed for Steel companies taken under study. Financial ratios from FY 2016 to FY 2020 will be studied.

#### ANALYSIS OF DATA

##### Tools for Analysis

Ratio analysis: 1. Liquidity ratio 2. Profitability ratio 3. Efficiency Ratios 4. Solvency ratio

##### Definition of Ratio

A ratio is defined as “the indicated quotient of two mathematical expressions and as the relationship between two or more things.” Here ratio means financial ratio or accounting ratio which is a mathematical expression of the relationship between accounting figures.

### ANALYSIS AND DISCUSSION

#### Liquidity Ratios

Liquidity means the ability of business unit to pay short-term liabilities. Short-term liabilities means current liabilities. The terms ‘liquidity’ and ‘short-term solvency’ are used synonymously.

##### Current Ratio

Current Ratio = Current Assets / Current Liabilities

(Times)

COMPANY NAME	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016
Tata Steel Ltd	0.95	0.97	1.22	1.01	0.95
SAIL	0.91	0.78	0.69	0.55	0.63
JSW Steel Ltd	0.84	0.80	0.80	0.72	0.58
Jindal Steel & Power ltd	0.69	0.67	0.74	0.62	0.77
NMDC Ltd	2.64	2.60	2.50	3.1	5.66

COMPANY NAME	COUNT	TOTAL	AVERAGE	STDEV	VARIANCE	COV
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Tata Steel Ltd	5	5.1	1.02	0.11	0.01	11.22
SAIL	5	3.56	0.71	0.14	0.02	19.52
JSW Steel Ltd	5	3.74	0.75	0.10	0.01	13.84
Jindal Steel & Power Ltd	5	3.49	0.70	0.06	0.00	8.44
NMDC Ltd	5	16.5	3.30	1.34	1.79	40.59

### Profitability Ratios

Profitability ratios are a class of financial metrics that are used to assess a business's ability to generate earnings relative to its revenue, operating costs, balance sheet assets, and shareholders' equity over time, using data from a specific point in time

Net Profit Margin Ratio

Net Profit Margin Ratio = Net Profit (PAT) / Net Operation Revenue \* 100. (%)

COMPANY NAME	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016
Tata Steel Ltd	0.70	5.62	13.30	-3.71	-0.36
SAIL	3.12	3.17	-0.98	-6.62	-10.59
JSW Steel Ltd	5.46	8.91	8.64	6.21	-1.20
Jindal Steel & Power Ltd	-1.08	-6.12	-5.93	-12.06	-16.79
NMDC Ltd	30.78	38.15	32.74	29.25	41.87

COMPANY NAME	COUNT	TOTAL	AVERAGE	STDEV	VARIANCE	COV
Tata Steel Ltd	5	15.55	3.11	6.60	43.62	212.38
SAIL	5	-11.9	-2.38	6.09	37.10	(255.92)
JSW Steel Ltd	5	28.02	5.60	4.09	16.71	72.94
Jindal Steel & Power Ltd	5	-41.98	-8.40	6.10	37.17	(72.61)
NMDC Ltd	5	172.79	34.558	5.29	28.03	15.32

### Efficiency Ratios

The efficiency ratio is typically used to analyze how well a company uses its assets and liabilities internally. An efficiency ratio can calculate the turnover of receivables, the repayment of liabilities, the quantity and usage of equity, and the general use of inventory and machinery.

Inventory Turnover Ratio

Inventory Turnover = Net Operation Revenues ÷ Inventory. (Times)

COMPANY NAME	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016
Tata Steel Ltd	4.50	4.98	4.66	4.53	5.31
SAIL	2.59	3.43	3.38	2.83	2.66
JSW Steel Ltd	5.29	5.83	5.58	4.88	4.99
Jindal Steel & Power Ltd	5.80	6.05	5.52	5.85	5.65
NMDC Ltd	16.17	18.24	20.32	16.35	10.38

COMPANY NAME	COUNT	TOTAL	AVERAGE	STDEV	VARIANCE	COV
Tata Steel Ltd	5	23.98	4.80	0.34	0.12	7.18
SAIL	5	14.89	2.98	0.40	0.16	13.43
JSW Steel Ltd	5	26.57	5.31	0.40	0.16	7.47
Jindal Steel & Power Ltd	5	28.87	5.77	0.20	0.04	3.49
NMDC Ltd	5	81.46	16.29	3.71	13.75	22.76

### Solvency Ratio

Solvency Ratio The solvency ratio is a key metric used to measure an enterprise's ability to meet its debt obligations and is used often by prospective business lenders.

Debt to Equity Ratio

Debt to Equity Ratio = Total liabilities / Total Shareholders' Equity. (Times)

COMPANY NAME	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016
Tata Steel Ltd	1.59	1.37	1.51	2.32	1.94
SAIL	1.23	1.05	1.14	1.05	0.82
JSW Steel Ltd	1.45	1.03	1.21	1.65	1.96
Jindal Steel & Power Ltd	0.95	1.07	1.29	1.33	1.36
NMDC Ltd	0.02	0.01	0.02	0	0.05

COMPANY NAME	COUNT	TOTAL	AVERAGE	STDEV	VARIANCE	COV
Tata Steel Ltd	5	8.73	1.75	0.38	0.15	21.97

SAIL	5	5.29	1.06	0.15	0.02	14.42
JSW Steel Ltd	5	7.3	1.46	0.37	0.13	25.02
Jindal Steel & Power Ltd	5	6	1.20	0.18	0.03	15.02
NMDC Ltd	5	0.1	0.02	0.02	0.00	93.54

### LIMITATIONS OF THE RESEARCH STUDY

1. The present study will be largely based on ratio analysis which has its inherent limitations.
2. As researcher being an external analyst, the scope of access to internal data related to the financial performance of Steel companies is limited. Hence, the results of this research may not hold good water.
3. The different views have been applied in the calculation of different ratios.
4. This study is based on secondary data taken from published annual reports of selected Steel companies of India.
5. Only 5 Steel companies of India been taken under study

### FINDINGS

Ideal Current ratio is 2:1 during the period in highest current ratio is 5.66 times of NMDC Ltd and lowest current ratio is 0.55 times of SAIL and average the current ratio is highest in 3.30 times of NMDC Ltd and lowest Average current ratio is 0.70 times of Jindal Steel and Power Ltd  
 Highest profitability ratio is 41.87 % and cheapest profitability ratio is (1.08) % First and second highest Average Net Profit Margin Ratio is 34.56 % and 5.60 % For NMDC and JSW Steel Ltd FY 2020 all company net profit margin ratio is decrease  
 Average inventory turnover ratio is highest in 16.29 times of NMDC Ltd and lowest average inventory turnover ratio in 2.98 times of SAIL Second lowest inventory turnover ratio is Tata Steel limited in 4.80 times  
 Ideal debt to equity ratio is 2:1 During the Period Tata Steel limited is maximum debt to equity ratio is 2.32 times and minimum debt to equity ratio is 0 for NMDC Ltd second highest average debt to equity ratio is 7.3 times of JSW Steel Ltd

### SUGGESTIONS

During the period only for NMDC company is better current ratio and other 4 company is not satisfactory current ratio show all four companies suggested to improve for current ratio and increase in investment in short term assets and reduce the short term liabilities  
 The profitability ratio of four out of five company is not good so all 4 company Advised to improve for profitability ratio so it is used maximum utilization in your production capacity and reduce in operating cost  
 Company improve for inventory turnover ratio is recommend to increase in net Operation revenue and reduce the inventory and cost of goods  
 All the five companies are recommendation to increase is owners fund and reduce the debit fund

### CONCLUSION

This research to study the financial performance of selected Steel Company in India in terms of financial ratio such as liquidity, profitability, efficiency and solvency position in and different statistical tools have been used like average, Standard deviation and Coefficient of variation applied for processing the data to give reliable conclusion. Compare is on all the liquidity, Profitability and efficiency ratio four out of five companies is not good So Improved in liquidity, Profitability and efficiency ratio only 1 company is NMDC liquidity, Profitability and efficiency ratio is better And Solvency ratio is all the five companies not good so improved in efficiency ratio

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