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# A Fundamental Analysis of Selected Steel Companies in India

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*In this paper an attempt has been made to do fundamental analysis of selected steel companies in India. The data collected from the annual reports from 2010-11 to 2014-15 from the selected five steel companies in India. The study concentrates on the various accounting ratios to analyze the financial performance in terms of solvency of the selected companies. The statistical tools like Average, Standard Deviation and Co-efficient of variation have been applied.*

**Keywords:** *Fundamental analysis, Financial Performance, Efficiency.*

## INTRODUCTION

India is the world's third-largest producer of crude steel and is expected to become the second-largest producer by 2016. The growth in the Indian steel sector has been driven by domestic availability of raw materials such as iron ore and cost-effective labor. Consequently, the steel sector has been a major contributor to India's manufacturing output. The Indian steel industry is very modern with state-of-the-art steel mills. It has always strived for continuous modernization and up-gradation of older plants and higher energy efficiency levels.

Being a core sector, steel industry tracks the overall economic growth in the long term. Also, steel demand, being derived from other sectors like automobiles, consumer durables and infrastructure, its fortune is dependent on the growth of these user industries. The Indian steel sector enjoys advantages of domestic availability of raw materials and cheap labour. Iron ore is also available in abundant quantities. This provides major cost advantage to the domestic steel industry.

### *Market Size*

India's crude steel production grew by 4.9 per cent year-on-year to at 8 Million Tonnes (MT) in May 2016. Total steel production in the country is expected to increase by 7 per cent in 2016. During FY 2015-16, hot metal production increased at a rate of 1.3 per cent year-on-year to 57.13 MT, whereas the production for sale of total finished steel stood at 90.39 MT. India's consumption of total finished steel

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increased by 4.5 per cent to 80.45 MT during FY 2015-16. Total finished steel exports during FY 2015-16 stood at 4.08 MT, whereas total finished steel imports stood at 11.71 MT for the same period. India's crude steel capacity has increased 7.6 per cent to 118.2 MT. The steel sector in India contributes nearly two per cent of the country's Gross Domestic Product (GDP) and employs over 600,000 people. The per capita consumption of total finished steel in the country has risen from 51 Kg in 2009-10 to about 61.9 Kg in 2015-16.

Investments

Steel industry and its associated mining and metallurgy sectors have seen a number of major investments and developments in the recent past. 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\$ 8.89 billion, respectively, in the period April 2000–March 2016.

Steel demand has outpaced supply over the last five years

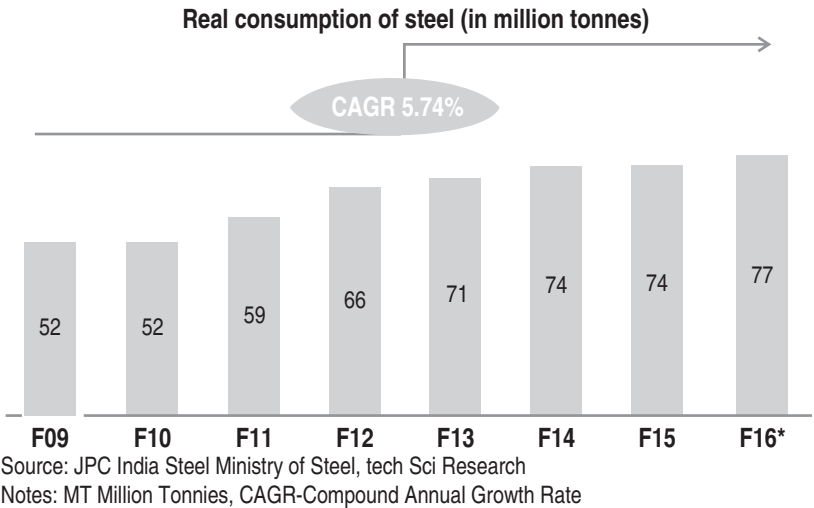
- In FY15, the consumption of finished steel grew to 76.99 MT while the CAGR increased to 5.74 per cent during FY08-15
- Driven by rising infrastructure development

and growing demand for automotives, steel consumption is expected to reach 104 MT by 2017

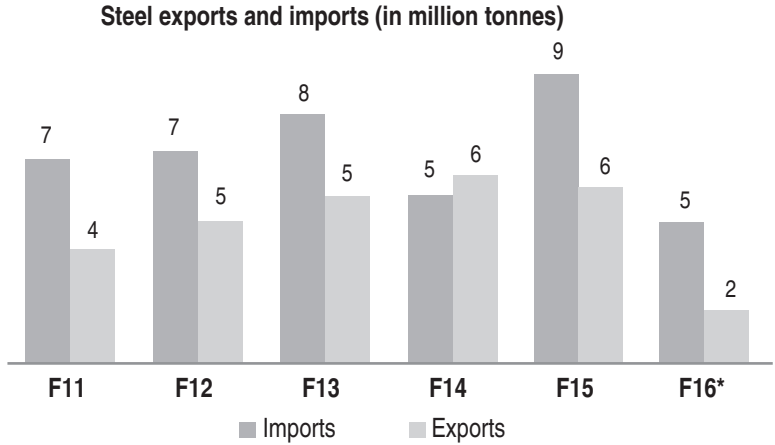
- It is expected that consumption per capita would increase supported by rapid growth in the industrial sector, and rising infra expenditure projects in railways, roads & highways, etc.
- For FY15, per capita consumption of steel in India was 60 kg against the world average of 222 kg

Demand supply gap resulting in increased imports

- With growth in demand for steel outpacing growth in domestic production over the last few years, imports have increased
- India was a net importer of steel till FY13, but turned a net exporter of the same in FY14. In 2015, India imported 9.32 MT of steel while exports declined to 5.59 MT in FY15 from 5.98 MT during 2013-14
- During FY11-15, import of steel grew at a compounded annual rate of 9.01 per cent, whereas, exports increased at a CAGR of 11.32 percent
- Total domestic demand for steel is estimated at 113.3 MTPA by 2016-17



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Government Initiatives

The Government of India is aiming to scale up steel production in the country to 300 MT by 2025 from about 90 MT in 2015-16. The government has launched the National Mineral Exploration Policy (NMEP), which will help to adopt comprehensive exploration of non-fuel and non-coal mineral resources that would give a major boost to the economy. Metal Scrap Trade Corporation (MSTC) Limited and the Ministry of Steel have jointly launched an e-platform called 'MSTC Metal Mandi' under the 'Digital India' initiative, which will facilitate sale of finished and semi-finished steel products. The Parliament of India has cleared amendments to the Mines and Minerals Development and Regulation (MMDR) Act, which will enable companies to transfer captive mines leases similar to mines won through an auction, and which is expected to lead to increased Mergers and Acquisitions (M&A) of steel and cement companies

Keeping the above background in mind, the main objective of the study is to know the liquidity and financial performance of selected Steel companies in India. For this purpose, the present study has been organized into five sections where section one introduced the problem, section two provides data base and research methodology, section three discusses results and analysis and in section fourth conclusions of the study have been drawn.

DATA BASE AND METHODOLOGY

The study has been undertaken for the period of five years from 2010-11 to 2014-15. Top five companies were calculated on the basis of market capitalization as there are very few companies having significant market capitalization. Selected companies are: TATA steel, Jindal, JSW, SAIL and RINL. In order to analyze the liquidity and solvency, various accounting ratios have been used. Various statistical measures have been used i.e. Average, SD, CV and t-test. In this connection an attempt has been made to analyze the liquidity position of selected steel companies and to understand the company's capacity to repay the short-term debt as well as long-term debt. The trend of these ratios over time is studied to check whether they are improving or deteriorating. Ratios are also compared across different companies in the same sector to see how they stack up, and to get an idea of comparative valuations

EMPIRICAL RESULTS

1. Analysis of Liquidity

Current ratio, quick ratio and cash ratio are showing decreasing trend for all the companies. These ratios show the ability to meet their short terms obligations. These ratios measure the ability of a company to pay off its short-term liabilities when

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they fall due. Generally, the higher the liquidity ratios are, the higher the margin of safety that the company possesses to meet its current liabilities. Liquidity ratios greater than one indicate that the company is in good financial health and it is less likely fall into financial difficulties.

The trend we are seeing all these 5 companies is that, all liquidity ratios are decreasing for last 5 years which is not a good sign considering it is ability of company to meet short term obligations.

Table 1: Liquidity Ratios

SAIL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Current Ratio	1.514	1.507	1.204	0.949	0.827	1.200	1.204
Acid test Ratio	1.043	0.786	0.492	0.412	0.312	0.609	0.492
Cash ratio	0.724	0.345	0.171	0.101	0.067	0.281	0.171

TATA Steel	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Current Ratio	1.383	0.761	0.699	0.612	0.713	0.834	0.713
Acid test Ratio	1.081	0.473	0.380	0.294	0.229	0.492	0.380
Cash ratio	0.316	0.234	0.135	0.051	0.029	0.153	0.135

RINL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Current Ratio	1.446	1.176	0.980	0.823	0.640	1.013	0.980
Acid test Ratio	0.810	0.705	0.604	0.444	0.296	0.572	0.604
Cash ratio	0.391	0.286	0.160	0.017	0.004	0.172	0.160

JINDAL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Current Ratio	0.777	0.701	0.841	0.665	0.877	0.772	0.777
Acid test Ratio	0.540	0.466	0.581	0.403	0.520	0.502	0.520
Cash ratio	0.005	0.002	0.003	0.051	0.022	0.016	0.005

JSW	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Current Ratio	0.705	0.823	0.920	0.726	0.932	0.821	0.823
Acid test Ratio	0.357	0.514	0.603	0.423	0.511	0.482	0.511
Cash ratio	0.149	0.170	0.090	0.023	0.088	0.104	0.090

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2. Analysis of Leverage ratios

Financial leverage ratios help to determine the overall level of financial risk faced by a company and its shareholders. Generally speaking, the greater the amount of debt of a company the greater the financial risk is. A company with greater amount of debts and financial obligations is more likely to fail to repay its debts. Debt ratio and debt to equity ratios

for all the 5 companies are showing increasing trend which is not a good sign. A lower ICR means less earnings are available to meet interest payments and that the business is more vulnerable to increases in interest rates. When a company's interest coverage ratio is only 1.5 or lower, its ability to meet interest expenses may be questionable. Except from Tata steel all other companies ICR is around 1.5.

Table 2: Leverage ratios

SAIL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Debt ratio	0.518	0.487	0.513	0.536	0.562	0.523	0.518
D/E	0.424	0.469	0.504	0.491	0.491	0.476	0.491
Capitalization ratio	0.204	0.241	0.246	0.228	0.215	0.227	0.228
Interest coverage ratio	1.067	1.125	1.215	1.427	1.616	1.290	1.215
Long term debt to total debt	0.394	0.494	0.479	0.425	0.383	0.435	0.425

TATA Steel	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Debt ratio	0.459	0.431	0.436	0.429	0.404	0.432	0.431
Debt equity	0.876	0.791	0.804	0.779	0.701	0.790	0.791
Capitalization ratio	0.313	0.255	0.274	0.259	0.260	0.272	0.260
Interest coverage ratio	6.259	5.854	5.535	6.413	4.349	5.682	5.854
Long term debt to total debt	0.596	0.517	0.531	0.500	0.511	0.531	0.517

RINL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Debt ratio	0.306	0.365	0.494	0.508	0.584	0.451	0.494
Debt equity	0.440	0.574	0.976	1.032	1.403	0.885	0.976
Capitalization ratio	0.037	0.029	0.081	0.094	0.043	0.057	0.043
Interest coverage ratio	6.968	6.824	2.465	2.624	1.238	4.024	2.624
Long term debt to total debt	0.000	0.000	0.102	0.096	0.004	0.040	0.004

JINDAL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Debt ratio	0.671	0.677	0.690	0.698	0.729	0.693	0.690
D/E	0.965	0.896	1.106	1.160	1.634	1.152	1.106
Capitalization ratio	0.318	0.290	0.343	0.351	0.443	0.349	0.343
Interest coverage ratio	1.104	1.189	1.368	1.677	13.166	3.701	1.368
Long term debt to total debt	0.474	0.428	0.497	0.503	0.607	0.502	0.497

JSW	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Debt ratio	0.866	0.924	0.985	0.988	1.040	0.961	0.985
D/E	0.698	0.792	0.959	0.966	1.118	0.907	0.959
Capitalization ratio	0.280	0.290	0.350	0.343	0.384	0.329	0.343
Interest coverage ratio	1.307	1.407	1.601	1.751	1.798	1.573	1.601
Long term debt to total debt	0.324	0.313	0.355	0.347	0.369	0.342	0.347

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3. Efficiency or Activity Ratios:

Activity ratios, also known as asset management (turnover) ratios, efficiency, velocity or turnover ratios, measure how effectively the firm is using its assets. Some aspects of activity analysis are closely related to liquidity analysis. Asset management ratios indicate how successfully a company is

utilizing its assets to generate revenues. Analysis of asset management ratios tells how efficiently and effectively a company is using its assets in the generation of revenues. They indicate the ability of a company to translate its assets into the sales.

ACP as well as inventory days are the least for Tata steel while for other companies it ranges from 30-40 (for ACP) and for DIO it varies a lot.

Table 3: Efficiency Ratios

SAIL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Receivable turnover ratio	10.979	9.894	10.298	8.679	14.640	10.898	10.298
Receivable days	33.000	37.000	35.000	42.000	25.000	34.400	35.000
Inventory turnover ratio	3.893	3.451	2.846	3.130	2.635	3.191	3.130
Inventory days	94.000	106.000	128.000	117.000	139.000	116.800	117.000
Fixed asset turnover ratio	1.148	1.019	0.865	0.787	0.715	0.907	0.865
Asset turnover ratio	0.574	0.611	0.541	0.517	0.470	0.543	0.541
CA turnover ratio	1.206	1.646	1.682	1.769	1.641	1.589	1.646
Working capital turnover ratio	3.551	4.891	9.946	-32.797	-7.820	-4.446	3.551

TATA Steel	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Receivable turnover ratio	70.574	38.514	49.066	55.135	86.208	59.899	55.135
Receivable days	5.172	9.477	7.439	6.620	4.234	6.588	6.620
Inventory turnover ratio	7.569	7.166	7.437	7.074	5.268	6.903	7.166
Inventory days	48.225	50.934	49.081	51.598	69.282	53.824	50.934
Fixed asset turnover ratio	1.718	1.270	1.164	0.994	0.877	1.205	1.164
Asset turnover ratio	0.334	0.363	0.384	0.383	0.366	0.366	0.366
CA turnover ratio	1.652	2.716	3.391	3.675	3.576	3.002	3.391
Working capital turnover ratio	5.965	-8.664	-7.886	-5.808	-8.874	-5.054	-7.886

RINL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Receivable turnover ratio	33.295	31.791	12.446	15.349	9.243	20.425	15.349
Receivable days	10.963	11.481	29.327	23.780	39.489	23.008	23.780
Inventory turnover ratio	3.379	3.990	3.282	3.193	1.848	3.138	3.282
Inventory days	108.032	91.472	111.207	114.307	197.533	124.510	111.207
Fixed asset turnover ratio	1.001	1.095	0.912	0.810	0.568	0.877	0.912
Asset turnover ratio	0.577	0.631	0.510	0.500	0.344	0.512	0.510
CA turnover ratio	1.486	1.599	1.259	1.468	0.993	1.361	1.468
Working capital turnover ratio	4.815	10.688	-60.729	-6.812	-1.765	-10.761	-1.765

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JINDAL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Receivable turnover ratio	13.183	14.937	10.598	10.056	10.359	11.826	10.598
Receivable days	28.000	24.000	34.000	36.000	35.000	31.400	34.000
Inventory turnover ratio	4.409	4.430	4.200	3.732	3.679	4.090	4.200
Inventory days	83.000	82.000	87.000	98.000	99.000	89.800	87.000
Fixed asset turnover ratio	0.569	0.613	0.589	0.491	0.445	0.541	0.569
Asset turnover ratio	0.368	0.403	0.380	0.340	0.296	0.357	0.368
CA turnover ratio	1.343	1.485	1.301	1.473	1.181	1.357	1.343
Working capital turnover ratio	-4.680	-3.475	-6.897	-2.929	-8.404	-5.277	-4.680

JSW	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Receivable turnover ratio	28.142	23.716	19.199	20.565	22.969	22.918	22.969
Receivable days	13.000	15.000	19.000	18.000	16.000	16.200	16.000
Inventory turnover ratio	5.703	6.237	7.450	7.364	5.423	6.435	6.237
Inventory days	64.000	59.000	49.000	50.000	67.000	57.800	59.000
Fixed asset turnover ratio	0.880	1.091	1.093	1.033	1.004	1.020	1.033
Asset turnover ratio	0.568	0.638	0.655	0.667	0.622	0.630	0.638
CA turnover ratio	2.642	2.252	2.496	3.042	2.447	2.576	2.496
Working capital turnover ratio	-6.307	-10.450	-28.889	-8.043	-33.553	-17.448	-10.450

4. Profitability Ratios

Profitability ratios measure a company's ability to generate earnings relative to sales, assets and equity. These ratios assess the ability of a company to generate earnings, profits and cash flows relative to relative to some metric, often the amount of money

invested. They highlight how effectively the profitability of a company is being managed.

Overall trend for profitability ratios is they are decreasing till 2014 but a bit improvement is shown in the last year 2015, but the profitability of JSW ha got hampered badly. A cheaper import from China has affected this industry from profitability aspect.

Table 4: Profitability Ratios

SAIL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Gross Profit Ratio	16.32%	11.73%	7.81%	4.85%	5.16%	9.17%	7.81%
Net Profit Ratio	11.33%	7.69%	4.88%	5.60%	4.58%	6.82%	5.60%
ROE	13.04%	8.85%	5.29%	6.13%	4.81%	7.63%	6.13%
ROTA	6.28%	4.54%	2.58%	2.85%	2.11%	3.67%	2.85%
return on fixed assets	12.57%	7.57%	4.12%	4.33%	3.20%	6.36%	4.33%

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TATA Steel	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Gross Profit Ratio	40.14%	35.68%	30.76%	32.01%	25.00%	32.72%	32.01%
Net Profit Ratio	22.94%	19.23%	12.95%	15.09%	15.20%	17.08%	15.20%
ROE	14.63%	12.82%	9.17%	10.49%	9.66%	11.35%	10.49%
ROTA	7.67%	6.99%	4.97%	5.77%	5.57%	6.19%	5.77%
return on fixed assets	39.42%	24.43%	15.07%	14.99%	13.34%	21.45%	15.07%

RINL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Gross Profit Ratio	12.52%	12.07%	8.42%	9.38%	8.39%	10.16%	9.38%
Net Profit Ratio	5.99%	5.53%	2.81%	2.97%	0.65%	3.59%	2.97%
ROE	4.98%	5.50%	2.83%	3.02%	0.54%	3.37%	3.02%
ROTA	3.46%	3.49%	1.43%	1.49%	0.22%	2.02%	1.49%
return on fixed assets	5.99%	6.06%	2.56%	2.41%	0.37%	3.48%	2.56%

JINDAL	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Gross Profit Ratio	28.75%	21.32%	14.90%	11.01%	1.26%	15.45%	14.90%
Net Profit Ratio	21.56%	15.83%	10.65%	8.88%	-2.32%	10.92%	10.65%
ROE	23.75%	19.46%	12.90%	9.89%	-2.48%	12.70%	12.90%
ROTA	7.82%	6.29%	4.00%	2.99%	-0.67%	4.09%	4.00%
return on fixed assets	12.08%	9.58%	6.21%	4.32%	-1.01%	6.24%	6.21%

JSW	2010-11	2011-12	2012-13	2013-14	2014-15	Average	Median
Gross Profit Ratio	11.89%	9.08%	8.09%	8.05%	7.91%	9.00%	8.09%
Net Profit Ratio	8.60%	5.06%	5.08%	2.95%	4.70%	5.28%	5.06%
ROE	12.04%	8.79%	9.03%	5.50%	8.42%	8.76%	8.79%
ROTA	4.84%	3.21%	3.30%	1.95%	2.89%	3.24%	3.21%
return on fixed assets	7.50%	5.49%	5.51%	3.02%	4.67%	5.24%	5.49%

CONCLUSION

Current ratio, quick ratio and cash ratio are showing decreasing trend for all the companies.

- Also leverage ratios i.e. debt ratio and debt to equity ratios for all the 5 companies are showing increasing trend which is not a good sign. Except

from Tata steel all other companies ICR is around 1.5.

- Overall trend for profitability ratios is they are decreasing till 2014 but a bit improvement is shown in the last year 2015, but the profitability of JSW ha got hampered badly. Cheaper imports from China has affected this industry from profitability aspect.

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She has published in the area of price discovery in capital market, return –volume linkage, information efficiency in equity markets, impact of capital market innovations on cash market liquidity, information asymmetry and conditional volatility and impact of global financial crisis on stock market.

Dr. Mahajan is widely travelled and has presented many research papers at International and National Conferences. She is also an editorial member of Applied Economics and Finance, United States and International Journal of Financial Management.