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LIQUIDITY ANALYSIS OF SELECT STEEL COMPANIES IN INDIA

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SECTION I

INTRODUCTION

Steel plays a significant part in the construction industry. Being the skeleton of the design, it provides fundamental support and strength. Steel is a mixture of iron, carbon, and a variety of other elements. They feature great tensile strength and structural integrity, making them one-of-a-kind. Steel is highly regarded for its long-term durability that contributes to prolonging shelf life.India has been known for its steel and iron production and it has been ranked in **2nd**position in global manufacturing in terms of steel production and export. It is a fact that steel is one of the most important facts in the infrastructure growth of a country and India is one of the best examples.

In 2023, India produced 128.15 million tonnes (MT) of crude steel, up 12.1% year-on-year. Steel has an employment multiplier effect of 6.8x while it has an output multiplier effect of 1.4x. Further, India has now overtaken Japan to become the world's second largest producer of crude steel, producing more than 100 MT of it each year. Steel now contributes about 2% to India's GDP and employs some 6 lakh people directly and 20 lakh people indirectly.

Against this background, the researcher has made an attempt to analyse the liquidity and solvency analysis of the top 5 steel companies in India. For the analysis purpose, ratio analysis and CAGR is used. This paper includes five sections, **FirstSection** gives Introduction, Review of literature, objective of the study, Research methodology. **SecondSection**Conceptual background. **ThirdSection**serves brief profile of selected top 5 steel companies in India. **FourthSection** consists of Results and Analysis. And the **Fifth & last section**provides findings and suggestions.

REVIEW OF LITERATURE:

P Megaladevi (2018) in her she found that liquidity and profitability have close relationship in each ratio.

Vikas Garg, Pooja Tewari, Shalini Srivastav(2018) On the basis of their calculation it is clear that there is no difference between various organizations in return on net worth, return on capital employed and also on

dividend payout ratio. It is clear from the above ratios that the Maruti Suzuki India is having an outstanding performance in terms of Operating profit ratio, net profit ratio and gross profit ratio .Return on net worth and long term funds of Mahindra and Mahindra is below average.

Sudarshan Kumar (2021) in his study of selected automobiles companies, It was found that the sales value of Mahindra and Mahindra Ltd. increased at high rate during the study period followed by Maruti Suzuki India Ltd. and TVS Motor Company Ltd. Sales of Bajaj Auto Ltd. increased at normal rate during thestudy period, whereas, sales of Tata Motors Ltd. increased at very low rate during the study period.

Mansiben J. Patel(2022) In her Study of liquidity position of the company indicates the strength of payment of its current liabilities by using current assets of the company. Both over and under situation of liquidity is harmful for company's profitability. Liquidity position of Infosys is very good as compare to other firms as it has highest value in all four types of ratios. Further it can conclude that all firms are operating well as overall liquidity point of view and have a sound liquidity position.

Dr. Vani Majumdar, Dr. Pooja Sharma (2022), They concluded in their study, To increase profitability, cautious attention must be paid to liquidity. The net cash flows from operating activities are very strong, indicating that the firm's revenues are rising year after year, indicating that the business is growing. As a result, even after the second wave of the pandemic, the overall financial condition of the automobile industry is adequate and can be strengthened further in the future.

OBJECTIVE OF THE STUDY:

1. To know the liquidity and solvency position of the top 5 steel companies in India.
2. To give suggestions in the light of findings.

RESEARCH METHODOLOGY:

Data collection: The study is conducted based on the secondary data which are collected from the various sources such as annual reports, research articles, websites etc.

Period of the study: The study is conducted for the period of ten years from 2014-15 to 2023-24

Sample size & methodology: Top 5 Steel Companies of India are selected for the study are as follows;

1. TATA Steel
2. Vedanta Ltd.
3. JSW Steel
4. SAIL
5. Jindal Steel & Power Ltd.

Tools used: Ratio Analysis, we used Liquidity and Solvency Ratios, simple statistical tools such as Mean, Standard deviation, & Co-efficient of Variance. CAGR (Compund Annual Growth Rate).

SECTION II

CONCEPTUAL BACKGROUND

I. Liquidity Ratios

The capacity of a business to fulfil its immediate financial responsibilities is known as liquidity. It is a ratio that indicates one's capacity to pay off debt as it becomes due. To put it another way, we can say that this ratio reveals how rapidly a business can turn its cash-generating current assets into debt repayment funds. The measurement of indicators such as the current ratio, quick ratio, and operating cash flow ratio allows us to calculate liquidity ratios, which assess a company's capacity to satisfy debt obligations as well as its margin of safety.

Current Ratio

The current ratio measures a company's ability to pay off its current liabilities (payable within one year) with its total current assets such as cash, accounts receivable, and inventories. The higher the ratio, the better the company's liquidity position. The standard current ratio should be 2:1

Computation of current ratio

Current Ratio=Current Assets/Current Liabilities

Quick Ratio

The quick ratio measures a company's ability to meet its short-term obligations with its most liquid assets and therefore excludes inventories from its current assets. The standard Quick ratio should be 1:1

It is also known as the acid-test ratio:

Quick ratio= (Current assets - inventory - prepaid expenses)/Current liabilities

II. Solvency Ratios

A company's ability to pay all of its debts, including both current and non-current liabilities, is referred to as its "solvency." One of the many factors used to assess a company's long-term viability is the solvency ratio. This cash flow capacity is evaluated in relation to all liabilities, not only short-term debt. The ability of a company to pay off its long-term debt and the interest on that debt is assessed by looking at its solvency ratio.A solvent business is one that has positive net worth – the total assets are more than the total liabilities.

Solvency ratios are as follows;

Debt-to-Equity (D/E) Ratio

The D/E ratio is similar to the debt-to-assets ratio, in that it indicates how a company is funded, in this case, by debt. The higher the ratio, the more debt a company has on its books, meaning the likelihood of default is higher. The ratio looks at how much of the debt can be covered by equity if the company needed to liquidate.As a rule of thumb, a debt-to-equity ratio of below one (1) is considered safe.

Debt to Equity Ratio=Debt Outstanding/Equity

Interest Coverage Ratio

The interest coverage ratio measures how many times a company can cover its current interest payments with its available earnings. In other words, it measures the margin of safety a company has for paying interest on its debt during a given period. The higher the ratio, the better. If the ratio falls to 1.5 or below, it may indicate that a company will have difficulty meeting the interest on its debts.As a rule of thumb, an ICR of more than three (3) is considered a healthy indicator of solvency.

Interest Coverage Ratio= EBIT/Interest Expenses

where:

- EBIT = Earnings before interest and taxes

SECTION IV

DATA ANALYSIS & RESULTS:

Table 4.1:Table Showing Current Ratio of select steel companies for the period 2014-15 to 2023-24

YEAR	TATA STEEL	JSW LTD.	VEDANTA LTD.	SAIL	JINDAL
2015	1.17	0.75	1.49	0.83	1.04
2016	0.95	0.58	1.34	0.63	0.77
2017	1.01	0.72	0.93	0.55	0.62
2018	0.98	0.81	0.54	0.7	0.52
2019	0.91	0.67	0.42	0.65	0.5
2020	0.91	0.69	0.53	0.68	0.51
2021	0.68	0.78	0.76	0.56	0.74
2022	0.79	0.91	0.75	0.61	0.79
2023	0.89	0.97	0.69	0.86	1
2024	0.72	0.98	0.66	0.9	1.11
Mean	**0.90**	**0.79**	**0.81**	**0.70**	**0.76**
SD	**0.14**	**0.13**	**0.33**	**0.12**	**0.22**
CV (%)	**15.18**	**16.00**	**40.97**	**17.00**	**28.44**
CAGR	**-5%**	**3%**	**-8%**	**1%**	**1%**

(Source: Moneycontrol.com)

The above table shows that the current ratio of select Steel Companies in India for the study period 2014-15 to 2023-24The average current ratio ranges from 0.70 to 0.90 times. Thehighest current ratio wasreported by the TATA STEEL and lowest current ratio was reported in SAIL and Jindal. The Standard

Deviation ranges from 0.12 to 0.33. The Co-efficient of Variance ranges from 15.18% to 40.97%. The CAGR ranges from -8 to 3. The highest CAGR found in case of JSW LTDand lowest in case of VEDANTA Ltd.

Table 4.2: Table Showing Quick Ratio of select steel companies for the period 2014-15 to 2023-24

YEAR	TATA STEEL	JSW LTD.	VEDANTA LTD.	SAIL	JINDAL
2015	0.62	0.31	1.29	0.32	0.73
2016	0.54	0.25	1.19	0.25	0.57
2017	0.52	0.33	0.81	0.21	0.45
2018	0.84	0.46	0.47	0.4	0.56
2019	0.74	0.53	0.46	0.41	0.41
2020	0.95	0.64	0.62	0.59	0.39
2021	0.52	0.56	0.79	0.52	0.58
2022	0.65	0.71	0.84	0.28	0.78
2023	0.33	0.5	0.52	0.21	0.62
2024	0.22	0.4	0.49	0.29	0.67
Mean	**0.59**	**0.47**	**0.75**	**0.35**	**0.58**
SD	**0.21**	**0.14**	**0.28**	**0.12**	**0.12**
CV	**35.20**	**29.98**	**37.77**	**35.33**	**21.58**
CAGR	**-0.10**	**0.03**	**-0.09**	**-0.01**	**-0.01**

(Source: Moneycontrol.com)

By cursory glance at the table shows that Quick ratio of select steel companies in India for the study period. The average quick ratio ranges from 0.35 to 0.75 times. The highest quick ratio reported in case of VEDANTA Ltd. and the lowest quick ratio reported in case of SAIL. The Standard Deviation ranges from 0.12 to 0.28. The Co-efficient of Variance ranges from 21.58% to 37.77%. The CAGR ranges from -0.01 to 0.03. The highest CAGR seen in case of **JSW LTD.**and lowest in case of **TATA STEEL**.

Table 4.3: Showing Debt Equity Ratio of select steel companies for the period 2014-15 to 2023-24

YEAR	TATA STEEL	JSW LTD.	VEDANTA LTD.	SAIL	JINDAL
2015	2.21	1.57	1.34	0.69	2.01
2016	1.94	1.96	1.4	0.82	1.36
2017	2.32	1.65	1.03	1.05	1.33
2018	1.55	1.21	0.77	0.81	1.29
2019	1.4	1.03	0.93	0.78	1.08
2020	1.62	1.45	1.08	0.83	0.95
2021	1.13	1.11	0.8	0.43	0.68
2022	0.66	1.04	0.81	0.15	0.36
2023	0.76	1.2	1.68	0.47	0.32
2024	0.95	1.1	2.34	0.64	0.36
Mean	**1.45**	**1.33**	**1.22**	**0.67**	**0.97**
SD	**0.55**	**0.30**	**0.47**	**0.24**	**0.52**
CV	**38.10**	**22.25**	**38.51**	**36.52**	**53.63**
CAGR	**-0.08**	**-0.03**	**0.06**	**-0.01**	**-0.16**

(Source: Moneycontrol.com)

The above table shows that Debt- equity ratio of select steel companies in India for the study period. The average Debt- equity ratio ranges from 0.67 to 1.45. The highest Debt- equity ratio reported by TATA STEEL and the lowest Debt- equity ratio reported by SAIL. The Standard Deviation ranges from 0.24 to 0.55. The Co-efficient of Variance ranges from22.25% to 53.63%. The CAGR ranges from -0.16 to 0.06. The highest CAGR reported in case of VEDANTA Ltd and lowest in case of JINDAL.

Table 4.4: Showing Interest Coverage Ratio of select steel companies for the period 2014-15 to 2023-24

YEAR	TATA STEEL	JSW LTD.	VEDANTA LTD.	SAIL	JINDAL
2015	1.52	1.74	3.16	2.5	1.14
2016	0.73	0.9	1.91	-2.08	-0.15
2017	2.34	2.36	3.35	-0.86	0.22
2018	3.06	3.13	3.88	0.7	0.67
2019	3.06	3.86	3.33	2.18	0.69
2020	1.44	1.92	2.83	2.11	0.97
2021	2.91	4.06	4.43	3.37	3.73
2022	10.1	6.95	8.03	10.56	7.13
2023	5.29	2.84	5.99	4.41	6.91
2024	3.21	3.61	3.99	4.94	8
Mean	**3.37**	**3.14**	**4.09**	**2.78**	**2.93**
SD	**2.54**	**1.59**	**1.66**	**3.32**	**3.06**
CV	**75.50**	**50.67**	**40.64**	**119.33**	**104.51**
CAGR	**0.08**	**0.08**	**0.02**	**0.07**	**0.22**

(Source: Moneycontrol.com)

The cursory glance of the table shows that Interest coverage ratio of select steel companies in India for the study period. The average Interest coverage ratio ranges from 2.78 to 4.09. The highest Interest coverage ratio reported by VEDANTA Ltd and the lowest Interest coverage ratio reported by SAIL. The Standard Deviation ranges from 1.59 to 3.32. The Co-efficient of Variance ranges from 40.64% to 119.33%. The CAGR ranges from 0.02 to 0.22. The highest CAGR seen in case of JINDAL and lowest in case of TATA STEEL & JSW LTD.

SECTION V

Findings of the study:

1. It is found from the study that no company has shown minimum standard current ratio of 2:1 over the study period. All the companies for the study period shown scarcity in working capital , TATA STEEL, VEDANTA Ltd have shown negative CAGR which means these companies suffering from inadequate current assets to meet its current liabilities.
2. It is found from the study that no company has shown minimum standard Quick ratio of 1:1 over the study period. VEDANTA Ltd tried to maintain the standard Quick ratio. TATA STEEL, VEDANTA Ltd,SAIL and JINDAL has shown negative CAGR which means the company is suffering from inadequate quick assets to meet its quick liabilities.
3. Debt equity ratio of select pack of steel companies for the study period shows that no company has maintained minimum Debt equity ratio of 2:1
4. It is found from the study that all select steel companies are having more than standard ratio of 1.5. which shows they are good in paying interest.

Suggestions:

1. The Company has to improve its revenue in order to generate more profit to cover short term obligations.
2. The Company has to improve its revenue in order to generate more profit and to maintain more liquid assets to cover short term obligations.
3. The select steel companies need to raise their debt fund toenjoy the tax shield benefits.

Limitations:

1. The study is based on secondary data.
2. The study is for the period of 10 years from 2013-2022
3. There are so many other parameters are there to know the liquidity of steel company but researcher has considered here two liquidity ratios and two solvency ratios.
4. The accuracy of the study is based on the accuracy of the data in website of stock market.

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