

ANALYSIS OF THE CAPITAL STRUCTURE THAT IMPROVES THE PROFITABILITY OF PARTICULAR STEEL COMPANIES IN INDIA

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ABSTRACT

Capital structure is a combination of long-term finances, including debt, equity, retained earnings, preference share capital, and debentures. Firms can raise equity funds and borrowed funds, with equity shares representing ownership rights and dividends and capital gains representing shareholder returns. Financial management focuses on the efficient use of capital funds, an important economic resource. The capital structure is decided by the firm for running its business, and investment decisions are made every time financing decisions are made. New capital structures are formed based on the amount and type of funds raised, requiring an understanding of the existing capital structure and factors involved in financial decision-making.

KEY WORDS: Capital structure, Share Capital, Debentures and Financial Decision.

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1.1 INTRODUCTION OF THE STUDY

Globally, the production of steel is regarded as the foundation of any economy. Since steel has a wide range of applications, rising steel consumption and utilization is a sign of newer building projects, manufacturing, the growth of infrastructure, the use of capital goods, defense spending, an increase in agriculture, and other factors. There is always a clear correlation between economic investments and the expansion of the steel sector as there is a strong link between a nation's GDP growth and its relevant steel consumption for that particular year. The success of several industries affects the economy's growth in India, a growing nation. This is the rationale behind economists' planning and put in place a variety of plans and programs to promote industry growth. Policymakers have paid close attention to the steel sector since it is a significant industry in India and ranks sixth globally in terms of production. Since gaining independence, the steel sector in India has performed steadily better.

1.2 SCOPE OF THE STUDY

This research is mostly limited to the modern world is evolving quickly, and India is no exception. The idea that industries constitute the engine of economic growth has long been understood since industry advancement speeds up economic expansion. This is especially true for emerging nations like India, where calls for quicker economic growth are common. It becomes crucial to evaluate if a few chosen steel businesses are developing consistently. Overuse of debt might jeopardize the company's ability to survive at all. On the other hand, a cautious approach can prevent the company from increasing the rate of return for its stock investors. Therefore, it is important to evaluate the financial standing of this It uses capital structures that have the power to dramatically impact profitability, one of the key indicators, as well as assess efficiency to determine if a firm is in distress or faces the prospect of going bankrupt.

1.3 OBJECTIVES OF THE STUDY

- The aim of this study is to assess the capital structures and profitability financial parameters that distinguish the highest and lowest performing steel businesses in India throughout the given period of time.
- To evaluate the monetary effectiveness of the chosen steel enterprises.
- To offer recommendations about the management's implications for policy.

1.4 STATEMENT OF THE PROBLEM

The deregulation strategy has given this industry both benefits and drawbacks. The government's liberal policies have encouraged the industry's increased supply of steel, but because the product's market price has dropped, the company's earnings have decreased as a result of the higher supply. The practical question of how financially sustainable the steel industries are arising as more public and private capital pours into this sector. In order to boost profitability in this cutthroat market, industry players are boosting productivity. The purpose of this research project is to determine how finance affects the profitability of the 21 companies. In particular, this study is being conducted to comprehend the functioning of this industry.

1.5 HYPOTHESES

- The capital structures of the Indian steel manufacturing enterprises that were chosen for the study do not significantly differ from one another.
- The profitability of the Indian steel manufacturing enterprises included for the study does not significantly differ from one another.

1.6 METHODOLOGY

This study is analytical in nature. Research is the methodical, in-depth examination of a certain topic, subject, or field of study, supported by the gathering, organizing, presenting, and interpreting of pertinent information. Unlike applied research, which has a narrower focus, fundamental research's main goals are to find, understand, and build techniques and systems that will enhance human knowledge on a wide range of scientific topics related to our world and the cosmos.

1.7 SAMPLING DESIGN

In operation in India are 227 Sponge Iron plants, 650 Mini Furnace units, and 1200 Re-Roller plants. The current study is only focused on sponge iron units since they are the foundation for the manufacture of other iron and steel units. 54 of the 227 Sponge Iron units have been operational during the previous five years. Consequently, the continuity of the data led to the selection of around 10% of the sample for the current investigation.

1.8 STATISTICAL TOOLS USED

The 'Z' Score Model, correlation, regression analysis, mean, standard deviation, and ratio analysis were the statistical methods employed for the investigation.

1.9 REGRETS ON THE STUDY

These are the restrictions and limitations that apply to the current study. There is a ten-year maximum study time. Consequently, a thorough trend study spanning a considerable amount of time has not been done. The secondary data used in the study was gathered via the CMIE package. As a result, the quality of the study is solely dependent on the quality, dependability, and correctness of the secondary data sources.

2.1 REVIEW OF LITERATURE

Anushu Handoo and Kapil Sharma (2014) concentrated on the constitutional resources and noted that the constructional principle of every firm in India is determined by earnings, progress, tangible positive aspects, size, balance due, tariff cost, money owing, operational or functional competence, etc. Revolutionization has made way for reform administration's tenets, conflicts, and circumstances. In 2013, Igbinsola Osaretin and Chijuka Ify Michael conducted a study on the examination of the elements that determine the capital structure of Nigerian enterprises. Regression analysis is used to see how self-determining modifiable ratios, such as business size and profitability, affect debt. According to Bhattacharjee et al. (2015), choosing a capital structure is an important choice for economic management. To increase the shareholder's holdings by the effective integration of equity shares, the primary source of funding, retained earnings, preference shares, and debentures are the main priorities of every administration. The study's findings indicate that collateral value of assets has a stronger correlation with financial leverage and a less correlation with profitability.

3.1 ANALYSIS AND DISCUSSION

In order to quantify the financial performance of the enterprises, this study utilized return on equity (ROE) and return on assets (ROA) as dependent variables. To measure the impact on the profitability of the firms, a set of independent variables with varying expected signs was employed.

TABLE:3.1.1

DESCRIPTIVE STATISTICS OF CAPITAL TRUCTURES AND PROFITABILITY

	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
STD	0.131	0.099	0	0.659	0.12	2.249	1.187
LTD	0.431	0.458	0.012	1.296	0.292	-0.487	0.318
Sales	0.11	0.074	-0.622	1.901	0.282	16.249	2.646
ROE	-9.04	11.32	-533.7	120.59	81.31	21.377	-4.249
ROA	2.32	3.38	-25.45	28.87	7.646	2.921	-0.502
TDR	0.562	0.6	0.037	1.296	0.245	0.268	-0.066
DER	3.121	1.47	-6.48	41.55	6.912	20.087	4.348
Size	9.383	9.53	5.526	11.426	1.408	-0.404	-0.694

Source: Computed from Secondary data

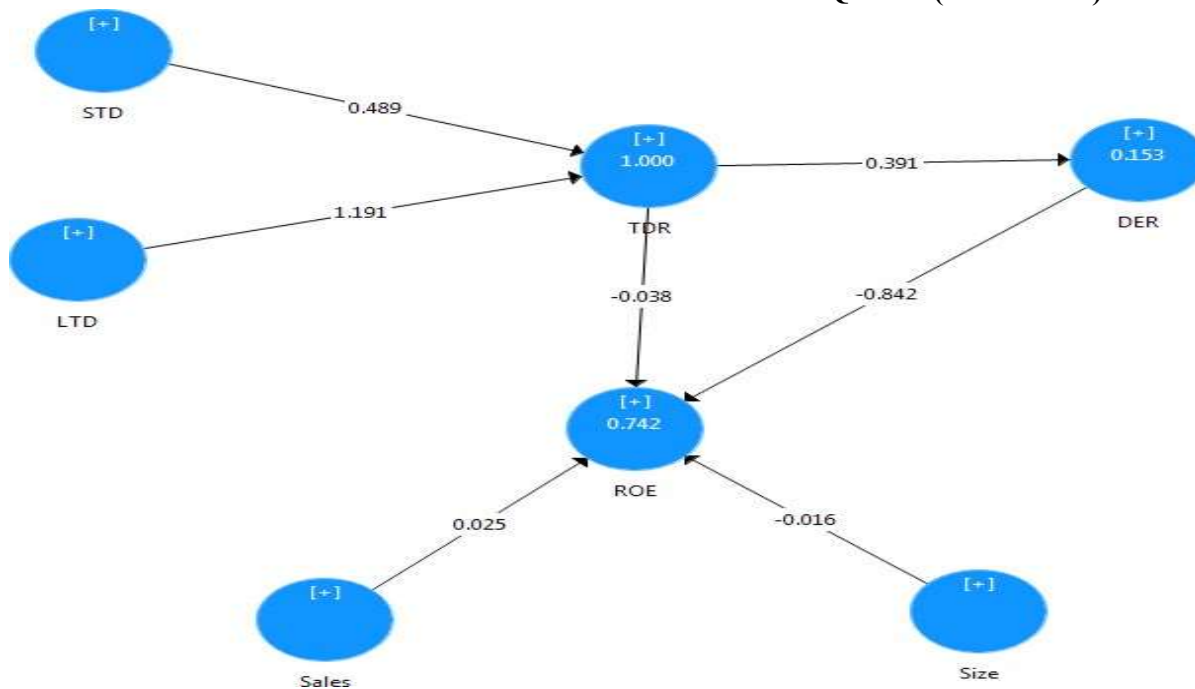
TABLE:3.1.2

CORRELATION BETWEEN CAPITAL STRUCTURE AND PROFITABILITY

	DER	LTD	ROA	ROE	STD	Sales	Size	TDR
DER	1.000	0.380**	-0.364**	-0.861**	-0.127	-0.171	0.004	0.391
LTD		1.000	-0.568**	-0.333	-0.564	0.175	-0.443	0.915
ROA			1.000	0.541**	0.230	0.075	0.129	-0.564
ROE				1.000	0.082	0.165	-0.008	-0.357
STD					1.000	-0.107	0.325	-0.183
Sales						1.000	-0.076	0.156
Size							1.000	-0.368
TDR								1.000

Source: Computed from Secondary data

FIGURE: 3.1.3
MODEL MEASURING RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND PROFITABILITY BASED ON RETURN ON EQUITY (R2 VALUE)



Source: Computed from Secondary data

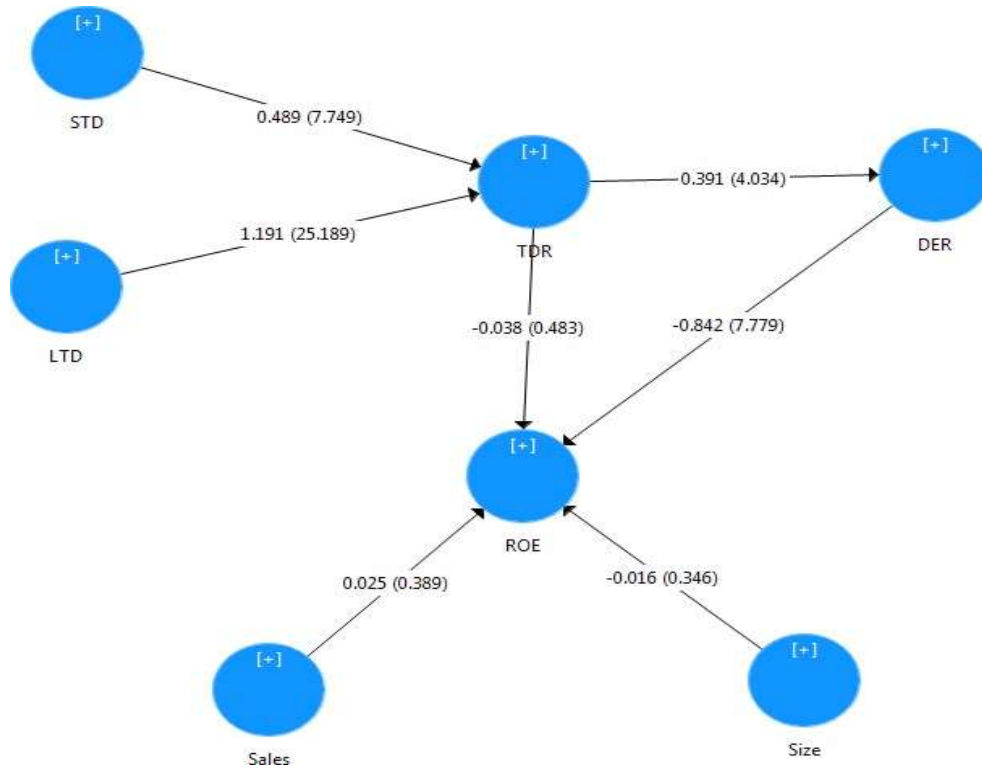
TABLE:3.1.4
MODEL MEASURING RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND PROFITABILITY BASED ON RETURN ON EQUITY (COEFFICIENTS)

	DER	LTD	ROE	STD	Sales	Size	TDR
DER	---	---	-0.842	---	---	---	---
LTD	---	---	---	---	---	---	1.191
ROE	---	---	---	---	---	---	---
STD	---	---	---	---	---	---	0.489
Sales	---	---	0.025	---	---	---	---
Size	---	---	-0.016	---	---	---	---
TDR	0.391	---	-0.038	---	---	---	---

Source: Computed from Secondary data

FIGURE:3.1.5

MODEL MEASURING RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND PROFITABILITY BASED ON RETURN ON EQUITY (T-VALUE)



Source: Computed from Secondary data

The parameters used in the study to calculate the ROE and ROA, as displayed in Fig. 1, exhibit a positive and highly significant correlation ($r = 0.861$) with the dependent variables, and the R2 contribution is determined to be 0.742. This showed that there is a substantial variance of 74.2% on return on equity for independent factors including business sizes (sales and total assets) and debt to equity, as well as long- and short-term debt, total debt, and debt to equity.

The significant correlation with the R2 contribution is determined to be 0.363, while the correlation with the dependent variable (ROA) reveals $r = 0.619$, which is likewise regarded as a positive correlation. This showed that the return on assets is significantly influenced by independent factors, including debt to equity, total debt, short- and long-term debt, and

business sizes, with a variance of 36.3%. A "t"-value greater than 1.96 indicates that the study hypotheses were evaluated at the 5% level of significance (95% confidence level). It is believed that the null hypothesis is disproved, and this conclusion may be drawn from the theory that underpins the idea of how capital structures affect profitability.

TABLE:3.1.6
Z-SCORE OF CONSOLIDATED ALTMAN'S 'Z' SCORE MODEL

Years	Tata SteelLtd.	Uttam Galva	Visa Steel	Essar Steel	Rashtriyalspat
2011-12	3.60	2.02	1.69	2.56	2.92
2012-13	3.91	2.14	0.77	1.61	2.80
2013-14	4.07	2.26	1.36	1.65	2.90
2014-15	1.71	1.87	1.15	1.98	3.26
2015-16	5.10	1.55	0.21	1.94	3.05
2016-17	5.30	1.54	0.70	1.82	3.09
2017-18	4.64	1.19	0.58	1.84	3.55
2018-19	5.48	1.42	0.08	1.25	3.56
2019-20	3.68	0.41	-0.97	0.50	2.54
2020-21	3.43	0.46	-0.56	1.29	2.55
Z	4.092	1.489	0.500	1.643	3.022

Source: Computed from Secondary data

In summary, based on the financial efficiency of all ten steel manufacturing companies, it was highly likely that Bhushan Steel was in bankruptcy. This was evident only from the years 2010–11 to 2016–17, during which time the company had shown a marked decline in performance. Similarly, Uttam Galva saw a sharp downturn in business performance from 2011–12 to 2016–17 when it reached the doubtful zone. Due to its unsatisfactory performance during the course of the research, Visa Steel is in severe distress, although Essar Steel's performance only drastically decreased from 2014–15 to 2016–17, falling just short of the threshold (1.8). Out of the four businesses, JSW Steel and Jindal Steel were clearly identified as being in the zone of ignorance, their somewhat higher ratings were in comparison to other units in trouble. When compared to the six other firms, SAIL and Steel Exchange were deemed to be robust enough to withstand hardship, although not having achieved the threshold level (>3). Tata Steel and Rashtriya Ispat were the two businesses that had favorable outcomes and were over the criteria (>3). In the years 2015–16 and 2016–17, Rashtriya Ispat entered the ignorant zone and Tata Steel showed a downward trend.

4.1 FINDINGS, SUGGESTIONS AND CONCLUSION

Soloman states that "the effective use of an important economic resource, namely, Capital Funds," is the focus of financial management. "Financial management is broadly concerned with the acquisition and use of funds by a business firm," according to Chandra Prasanna. A need for money raises a new capital structure since it necessitates choosing the type and amount of funding. An study of the current capital structure will be part of this choice, and current governing criteria will be considered.

The link between earnings and capital, or the fixed resources put aside to generate those profits, is known as profitability. A business can be considered successful if its profitability outpaces the cost of its capital, which is the weighted average cost of its borrowed and equity capital. Investing extra cash, reducing inventory, collecting receivables quickly, and getting rid of expensive, pointless short-term borrowing are all strategies that help maximize profits. The significance of capital structure management, its different components, and their influence on profitability are therefore relevant to discuss. To this end, the researcher identified a hypothetical relationship between capital structure and its impact on profitability of ten Indian steel manufacturing companies that were specifically chosen for a ten-year period from From 2007–08 to 2016–17. In particular, capital structures are examined to see if they have a direct or indirect effect in outcomes. The elements that are taken into account to evaluate the impact include size, total assets, debt to equity, total debt, long-term debt, and short- and long-term debt.

SUGGESTIONS

- It has been shown that as overall assets decline, the percentage of debt financing increases. Additionally, it was discovered that leverage and the firm's profitability were associated, which is in line with the results of other studies.
- This typically suggests that a company's ability to develop its profits depends more on debt than it does on the availability of equity sources for smaller, slower-growing companies. It is advised that Businesses must have sufficient reserves before sharing earnings.
- They must also manage their borrowing in order to limit their debt-to-income ratio and preserve a stable system of capital structures. Impact of capital structures on profitability increases with respect to operating profit, net profit and return on equity which confirms that better management of a company shall

always increase its return on assets and improve the company's .

- Hence, researcher recommends that policy makers in the select steel manufacturing companies shall direct improved management tactics that can be identified from the results of the study as well as from the actual financial statements and forecasted result shall definitely support to increase companies returns leading towards future growth.

CONCLUSION

The study found that the selected steel companies are in a favorable financial position, with capital structure indicators significantly influencing their profitability. However, some companies predicted bankruptcy due to financial distress. Debt and equity contributed significantly to the growth of these companies, achieving profit and contributing to their growth. The findings are expected to be useful for policymakers, economists, government, and corporate bodies, particularly investors, in making financial and investment policy decisions.

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