

www.ijprems.com editor@ijprems.com INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS) e-ISSN : 2583-1062 Impact Factor: 5.725

Vol. 04, Issue 06, June 2024, pp: 835-841

# A STUDY ON CAPITAL STRUCTURE ANALYSIS

# Nallavalla Aishwarya<sup>1</sup>, Ms. C. Jyothika Sony<sup>2</sup>

<sup>1</sup>Department of Management Studies Aristotle PG College, Chilkur, Moinabad, Ranga Reddy District, Telangana, india.

<sup>2</sup>Assistant Professor Aristotle PG College, Chilkur, Moinabad, Ranga Reddy District, Telangana, india. DOI: https://www.doi.org/10.58257/IJPREMS34874

# ABSTRACT

The choice of capital structure for firms is by and large the most fundamental issue of the financial framework of a business entity. The main focus of the paper is on the financing decisions of the firms and to investigate whether these issuance decisions are consistent with market timing behavior or traditional theories notably trade-off and pecking order theories. The study also gives more importance to the effects of two major factors market performance and profitability of the firms in determining the type of finance that they issue. In order to increase the scope of drawing inference and differentiating between the theories of capital structure the dual issuers are included in the study as a separate issue type. Dual issuers are considered to be an important issue type since they can alter the capital structure at a much lesser cost. The Dual issuers in case of the Indian corporate sample considered in this study show that highly profitable firms, firms with high-market-to-book ratio, larger firms and firms that invest more in R&D are dual issuers. This shows that more healthy firms in the Indian context issue debt and equity simultaneously rather than go for a single issue type. The paper also concludes that the results are unequivocally consistent with the market timing theory. However, particular impact of pecking order and tradeoff on the financing decisions cannot be justified.

Keywords: capital structure, fundamental issue

### 1. INTRODUCTION

#### **Definition of Capital Structure:**

Capital structure is the mix of the long-term sources of funds used by a firm. It is made up of debt and equity securities and refers to permanent financing of a firm. It is composed of long-term debt, prefer-ence share capital and shareholders' funds.

#### Some of the important definitions are presented below:

'Capital structure of a company refers to the composition or make up of its capitalization and it includes all long term capital resources viz., loans, reserves, shares and bonds'. Keown et al. defined capital structure as, 'balancing the array of funds sources in a proper manner, i.e. in relative magnitude or in proportions'.

#### **By Gerestenberg**

Capital structure refers to the mix of long term sources of funds such as debentures long term debt, preference share capital and equity share capital Including reserves and surplus(Retained earnings). Ever time the firm makes an Investment decision. It is at the same time making a financing decision also. The investment projects of a firm can be financed either by increasing the owners claims or the creditors claims. The owner's claims increase when the firm raises funds by issuing common shares or by retaining the earnings, the creditor's claims increase by borrowing.

The financing or capital structure, decision is a significant managerial decision. It influences the shareholders return and risk. Consequently the market value of the share may be affected by the capital structure decision. The firm will have to plan its capital structure initially at the time of its promotion. The decision will involve an analysis of the existing capital structure and factors, which will govern the decision at present shareholders equity position, strengthen by retention of earnings. Thus, the dividend decision has a bearing on the capital structure decision, the dividend policy of the firm should be considered the new financing decision of the firm might affect its debt equity mix.

#### **Equity Shares**

Equity shares represent the ownership position in a firm and they provide permanent capital. They have voting rights and receive dividend at the discretion of the board of directors.

#### **Preference Shares**

The holders of the preference share have a preference over the equity share holders in the event of the liquidation of the firm. A reference share may also provide for the accumulation of dividend. It is called cumulative preference share.



www.ijprems.com

editor@ijprems.com

# INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS) Impa Eact

Vol. 04, Issue 06, June 2024, pp: 835-841

e-ISSN : 2583-1062 Impact Factor: 5.725

# Debentures

Debentures refers long term loan given by the holders of debentures to the firm. The rate of interest is specified and interest charges are treated has deductible expenses in the hands of the firm. Debentures may be issued without interest rare. They are called zero interest rate debentures. Such debentures are issued at a price much lower than their face value. Therefore, they are also called deep discount debentures.

#### **Reserves and Surplus**

The second part of the share capital is referred to as retained earnings or reserves and surplus. The difference between the total earnings to date and total amount of dividends to date is reserves and surplus. It represents total undistributed earnings.

# 2. REVIEW OF LITERATURE

### **ARTICLE: 1**

Tile: Empirical Capital Structure: A Review

Author: Sheridan Titman

Source: ISBN: 978-1-60198-203-2,

### Abstract

This survey provides a synthesis of the empirical capital structure literature. Our synthesis is divided into three parts. The first part examines the evidence that relates to the cross-sectional determinants of capital structure. This literature identifies and discusses the characteristics of firms that tend to be associated with different debt ratios. In the second part, we review the literature that examines changes in capital structure. The papers in this literature explore factors that move firms away from their target capital structures as well as the extent to which future financing choices move firms back toward their targets. Finally, we complete our review with a set of studies that explore the *consequences* of leverage, rather than its determinants. These studies are concerned with feedback from financing to real decisions. For example, we explore how a firm's financing choices influences its incentive to invest in its workers, price its products, form relationships with suppliers, or compete aggressively with competitors.

### **ARTICLE: 2**

Tile: Capital Structure Analysis Source: The Journal of Business Management

# Author: Pieter van Beurden

The firm's capital structure - how it funds operations by raising capital from a variety of sources – has attracted considerable attention from both academics and practitioners. The empirical capital structure literature explores both the cross-sectional determinants of capital structure as well as time-series changes. Empirical Capital Structure reviews both aspects of this literature. Empirical Capital Structure is organized around a simple framework that contains three key ingredients: the costs and benefits that determine a firm's capital structure; the existence of shocks that cause firms to deviate, at least temporarily, from their targets; the presence of factors that may prevent firms from constantly maintaining debt ratios that match their targets. Empirical Capital Structure is organized as follows. Section II discusses specification and econometric issues that will be important for many of the tests considered. Section III reviews cross-sectional capital structure determinants. Section IV explores factors that pull firms away from their leverage targets. Section V discusses reasons why firms might not immediately reverse the effect of these leverage shocks, apparently allowing deviations from their targets to persist for extended periods of time. Section VI explores a group of studies that look at how leverage feeds back into a firm's real business decisions. Finally, Section VII concludes and provides suggestions for new research.

#### **ARTICLE: 3**

### Tile: The effect of market conditions on capital structure adjustment

**Author Murray Z. Frank** 

### Source: Finance Research Letters

#### Abstract

The empirical implications of the trade-off theory, the market timing theory, and Welch's theory [Journal of Political Economy (in press)] of capital structure are examined using aggregate US data for 1952 to 2000. There is a long-run leverage ratio to which the system reverts. Deviations from that ratio help to predict debt adjustments, but not equity

	INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT	e-ISSN : 2583-1062
IJPREMS	AND SCIENCE (IJPREMS)	Impact
www.ijprems.com editor@ijprems.com	Vol. 04, Issue 06, June 2024, pp: 835-841	Factor: 5.725

adjustments. A high market-to-book ratio is associated with subsequent debt reduction, but there is no effect in the equity market.

# **RESEARCH GAP:**

This survey provides a synthesis of the empirical capital structure literature. Our synthesis is divided into three parts. The first part examines the evidence that relates to the cross-sectional determinants of capital structure. This literature identifies and discusses the characteristics of firms that tend to be associated with different debt ratios.

### **OBJECTIVES:**

- 1. To find out the debt equity ratio of the Neural Systems.
- 2. To compare the capital structure of the past two years of the company.
- 3. To assess the increase or decrease in the value of shares and debentures for the

Past five years.

- 4. To study the pricing process adopted per shares.
- 5. To analyze the causes for the change in the value of the share.

# 3. RESEARCH METHODOLOGY

### **Need For The Study**

- > Knowing the relationship between capital structure and value of firm value.
- > To analyze the reason for low stock prices of the company.
- > Studying relationship between capital structure and cost of capital.
- > To assess the impact of alternative capital structure on return on equity.
- > It caters to large extent towards development economy of the nation.

### Scope Of The Study:

The finance is blood stream for the any organization. The company issue securities in the stock market determine the value of the firm, as a whole needs to determine the value of the shares and debentures of earning for every year.

The purpose of the study is to analyze and to explore the present value of the shares and debentures in Neural Systems. The findings of research explain how the value of shares and debentures have increased or decreased in the past two years and the reasons for the change.

#### Methodology

#### **Research Design**

The research design refers to preplanning of what a researcher does in his study. The design adopted in this study comes under analytical design since the data collected from the financial statements of the company is analyzed under various financial and tactical tools.

### **Data Collection Methods**

The study is based on primary and secondary data obtained from Neural Systems.

#### **Primary Data**

Primary data is obtained through the discussion with officials of Neural Systems.

### Secondary data

Secondary data is based on the five years annual reports from 2018-2023. Additional information have also been collected from magazines, prospectus, journals etc.

### **TOOLS & TECHNIQUES**

#### Ratio analysis

The relationship between the figures expressed mathematically is called as "RATIO". It is a numerical relationship between two numbers, which are related in some manner. Ratio analysis is a technique of analysis and interpretation of figures for helping in decision making.

It also helps the analyst to make qualitative judgment about firm's financial performance.

### CAPITAL STRUCTURE MODELS-MM MODEL

### Limitations Of The Study

The study is mainly based on secondary data as obtained from the financial reports of the company. So, the result obtained depends on the geniuses of the data.



e-ISSN:

www.ijprems.com editor@ijprems.com

Vol. 04, Issue 06, June 2024, pp: 835-841

As the balance sheet is prepared on a particular data, it does not reflect the averages. The value of the shares and debentures market prices is based on book value. It does not consider the effect of inflation or deflation, which may make the value to increase or decrease.

> Time is a crucial factor for the study; it is not possible to analyze all the aspects in detail within the time allowed.

# 4. DATA ANALYSIS & INTERPRETATION

# Capital Structure Analysis

Year	2019	2020	2022	2022	2023
Funds:					
a) Capital	674386.71	807234.56	846049.04	1046450.56	2536834.09
b) Reserves & Surplus	-	-	-	-	-
Total(A)	674386.71	807234.56	846949.04	1046450.56	2536834.09
Loan funds:					
a) Secured loans	36547.00	556541.00	352681.00	510072.00	1266479.00
b)Unsecured Loan	105000.00	105000.00	105000.00	795000.00	795000.00
Total (B)	141547.00	661541.00	457681.00	130562.00	2061479.00
Total (A+B)]	815933.71	1468775.56	1303730.04	2351522.56	4598313.09

### Pattern of financing

The above table depicts the various possible sources of neural systems. The total sources are divided in to internal and external sources. Under internal sources there are two components such as capital, reserves and surplus.

# CAPITAL STRUCTURE ANALYSIS

CAPITAL STRUCTURE OF STERLITE INDUSTRIES FOR THE YEAR 2019 AND 2020

Particulars	2019	2020	% of 2019	% of 2020
Funds:				
a) Capital	674386.71	807234.56	82.65	54.95
b) Reserves& Surplus	-	-	-	-
Total equity (A)	674386.71	807234.56	82.65	54.95
Loan funds:				
a) Secured loan	36547.00	556541.00	4.47	37.89
b) Unsecured Loan	105000.00	105000.00	12.86	7.14
Total debt (B)	141547.00	661541.00	17.33	45.03
Total (A+B)	815933.71	1468775.56	99.98	99.98

# **INTERPRETATION:**

The percentage of capital was decreased from 82.65% to 54.95% and total debt was increased 17.33 to 45.03. The profitability position of the firm has decreased.

CAPITAL STEUCTURE OF STERLITE INDUSTRIES FOR THE YEAR 2020 AND 2021

Particulars	2020	2021	% of 2018	% of 2019
Funds:				
a) Capital	807234.56	846049.04	54.95	57.06
b) Reserves& Surplus	-	-	-	-
Total equity (A)	807234.56	846949.04	54.95	57.06
Loan funds:				
a) Secured loan	556541.00	352681.00	37.89	27.02



e-ISSN : 2583-1062

\_

# www.ijprems.com editor@ijprems.com

Vol. 04, Issue 06, June 2024, pp: 835-841

Impact Factor:

5.725

b) Unsecured Loan	105000.00	105000.00	7.14	8.05
Total debt (B)	861541.00	457681.00	45.03	35.07
Total (A+B)	1468775.56	1303730.04	99.98	92.67

### **INTERPRETATION:**

The percentage of capital was increased from 54.95% to 57.60% and the total debt was decreased when compared to the previous year. The profitability of the firm was increased in 2021 when compared to 2020.

### CAPITAL STRUCTURE OF STERLITE INDUSTRIES FOR THE YEAR 2021 AND 2022.

Particulars	2021	2022	% of 2021	% of 2022
Funds:				
a) Capital	846049.04	1046450.46	57.60	44.50
b) Reserves& Surplus	-	-	-	-
Total equity (A)	846049.04	1046450.46	57.60	44.50
Loan funds:				
a) Secured loan	352681.00	510072.00	27.05	21.69
b) Unsecured Loan	105000.00	795000.00	8.05	33.80
Total debt (B)	457681.00	1305072.00	35.10	55.49
Total (A+B)	1303730.04	2351522.46	92.70	99.99

#### **INTERPRETATION:**

The percentage of capital was decreased from 57.60% to 44.50% and debt was increased from 35.10% to 55.49%. The profitability of the firm was decreased.

#### CAPITAL STRUCTURE OF STERLITE INDUSTRIES FOR THE YEAR 2022 AND 2023.

Particulars	2022	2023	% of 2008	% of 2009
Funds:				
a) Capital	1046450.46	2536834.09	44.50	55.16
b) Reserves& Surplus	-	-	-	-
Total equity (A)	1046450.46	2536834.09	44.50	55.16
Loan funds:				
a) Secured loan	510072.00	1266479.00	21.69	27.54
b) Unsecured Loan	795000.00	795000.00	33.80	17.28
Total debt (B)	1305072.00	2061470.00	55.49	44.82
Total (A+B)	2351522.46	4598313.09	99.99	99.98

### **INTERPRETATION:**

The percentage capital was increased from 44.50% to 55.16%. the total debt was decreased from 55.49% to 44.82%. the profitability of the firm was increased in the year 2009 when compared to 2022.

#### CAPITAL STRUCTURE OF STERLITE INDUSTRIES FOR THE YEAR 2023AND 2019

Particulars	2023	2019	% of 2023	% of 2019
Funds:				
a) Capital	2536834.09	674386.71	55.16	82.65
b) Reserves& Surplus	-	-	-	-
Total equity (A)	2536834.09	674386.71	55.16	82.65
Loan funds:				



e-ISSN : 2583-1062

Impact

# www.ijprems.com editor@ijprems.com

Vol. 04, Issue 06, June 2024, pp: 835-841

Factor: 5.725

a) Secured loan	1266479.00	36547.00	27.54	4.47
b) Unsecured Loan	795000.00	105000.00	17.28	12.86
Total debt (B)	2061479.00	641547.00	44.82	17.33
Total (A+B)	4598313.09	815933.71	99.98	99.98

### **INTERPRETATION:**

The percentage of the capital was decreased in the year 2023 when compared to 2019. The total debt also increased in 2023. The profitability of the firm was decreased in 2023 when compared to 2019.

Comparative Capital Structure of Sterlite Industries of the year 2021 and 2022

Particulars	2021	2022	Absolute Change	% of Change
Funds:				
a) Capital	674386.71	807234.56	132847.85	19.69
b) Reserves& Surplus	_	_	_	_
Total equity (A)	674386.71	807234.56	132847.85	19.69
Loan funds:				
a) Secured loan	36547	556541	519994	142.8
b) Unsecured Loan	105000	105000	_	_
Total debt (B)	141547	661541	159994	367.36
Total (A+B)	815933.71	1468775.56	-652841.85	80.01

# **INTERPRETATION:**

The above table shows the capital was to 19.69 percent and the loans are also showing increased.

#### Comparative Capital Structure of Sterlite Industries of the year 2020 and 2021

Particulars	2020	2021	Absolute Change	% of Change
Funds:				
a) Capital	807234.56	846049.04	38815.08	4.8
b) Reserves& Surplus	-	-	-	-
Total equity (A)	807234.56	846949.04	38815.08	4.8
Loan funds:				
a) Secured loan	556541.00	352681.00	-203860	-36.62
b) Unsecured Loan	105000.00	105000.00	-	-
Total debt (B)	861541.00	457681.00	-203860	30.81
Total (A+B)	1468775.56	1303730.04	-165044.92	11.23

# **INTERPRETATION:**

The capital was showing an increased to 4.80 percent and loan funds are showing negative value that is it was decreased to 30.81 percent.

Comparative Capital Structure of Sterlite Industries of the year 2021 and 2022

Particulars	2021	2022	Absolute Change	% of Change
Funds:				
a) Capital	846049.04	1046450.46	200401	23.68
b) Reserves& Surplus	-	_	_	_
Total equity (A)	846949.04	1046450.46	200401	23.68
Loan funds:				



e-ISSN: 2583-1062

Impact

# www.ijprems.com editor@ijprems.com

Vol. 04, Issue 06, June 2024, pp: 835-841

**Factor:** 5.725

a) Secured loan	352681.00	510072	157391	44.62
b) Unsecured Loan	105000.00	795000	690000	657.14
Total debt (B)	457681.00	1305072	847391	185
Total (A+B)	1303730.04	2351522.46	10407791.82	44.55

# **INTERPRETATION:**

The capital structure was showing an increased to 23.68 percent and total loan funds are also increased to 44.55 percent.

Comparative Capital Structure of Sterlite Industries of the year 2022 and 2023

Particulars	2022	2023	Absolute Change	% of Change
Funds:				
a) Capital	1046450.46	253634.09	1490383.63	58.74
b) Reserves& Surplus	_	_	_	_
Total equity (A)	1046450.46	253634.09	1490383.63	58.74
Loan funds:				
a) Secured loan	510072	1266479	756407	59.72
b) Unsecured Loan	795000	795000	-	_
Total debt (B)	1305072	2061479	756407	59.72
Total (A+B)	2351522.46	4598313.09	2246790.63	48.86

### **INTERPRETATION:**

The capital of the firm will increase to 58.74 percent and total loan funds are also increased to 48.86 percent.

# 5. CONCLUSION

- 1. After analyzing the financial position of Sterlite Industries and evaluating its Capital Structure Analysis in respect of Ratio Analysis and source and utilization of founds. The following conclusions are drawn from the project preparation.
- 2. The progress of Sterlite Industries shows that Equity Capital to Rs.41605.00 Lakhs from during the year 2019-20 and the Net worth of the Company 39.04%.
- 3. Regarding Capital Structure Analysis Equity Capital was decreased from 2018-19 to 2021-22 and tOotal Debt Value increased from 87289.00 to 121481.00 Lakhs during the year.
- 4. Regarding Capital Structure Analysis Turn Over was increased and decreased in the year 2019-20 and profit after tax was increased during the year 2021-22.
- 5. Regarding Capital Structure Analysis Equity Ratio was decreased from 1.23 to 1.33 and current ratio decreased from 2.8to 2.39.
- From the above study can be said that the Sterlite Industries financial position on Capital Structure Analysis is 6. quite satisfactory.

# 6. REFERENCES

- www. Sterlite Industries.com [1]
- [2] www.nseindia.com
- [3] www.bseindia.com
- www.sebi.gov.in [4]