

# Impact of Capital Structure on Firm's Value in Manufacturing Industries

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## Abstract

*Due To Its Interaction With Other Financial Decision Factors, Capital Structure Is One Of The Most Complicated Areas Of Financial Decision Making. The Capital Structure Of A Company Is The Mix Of Debt And Equity Capital Used To Fund Its Assets. It May Be Recast As Net Worth Plus Preferred Stock Plus Long-Term Obligations. The Issue Statement To Be Investigated In This Study Is: Does Capital Structure Effect Listed Manufacturing Businesses In India? The Study Sample Includes 12 Manufacturing Enterprises That Are Publicly Traded On The Bombay Stock Exchange. The Net Profit Ratio Is A Metric For Determining Profitability. The Capital Structure Of A Company Is Measured Using The Debt Equity Ratio, Long Term Loans To Total Assets, And Short Term Loans To Total Assets Ratios. The Results Show A Substantial Negative Relationship Between Debt And Profitability When Using Correlations And Fixed Effect Regression Analyses. This Shows That Profitable Businesses Rely On Equity As Their Primary Source Of Funding. However, Depending On The Findings, Recommendations Are Made To Enhance Specific Elements, Such As The Firm's Financial Structure.*

**Keywords:** Capital Structure; Long Term Liabilities; Net Profit Ratio; Profitability.

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## I. INTRODUCTION

In Order For A Company To Expand And Sustain Itself, It Must Constantly Make Investment Decisions That Affect Its Capital Structure. A Group's Capital Is The Money It Has Set Aside For The Many Endeavors It Plans To Undertake. When We Talk About A Company's Capital Structure, We're Talking About How Long-Term Sources Of Funding Are Used To Fund The Firm's Assets. Debt And Equity Capital Are The Long-Term Sources Of Money. Debentures, Bonds, And Long-Term Notes Are Examples Of Debt, Whereas Equity Includes Common Stock, Preferred Stock, And Cash. Long-Term Sources Of Capital Are Used To Finance The Company's Assets And To Run The Business As A Whole. It Is Possible To Define An Optimal Capital Structure As The Combination Of Debt And Equity That Generates The Highest Value For The Company. Maximizing The Company's Worth And Maximizing The Wealth Of Its Owners Are The Primary Goals Of An Ideal Capital Structure.

The Company's Long-Term Financial Mix Is Referred To As Its "Capital Structure." No Other Area Of Financial Management Has Been Given As Much Attention As The Problem Of Capital Structure. With Regard To Present Market Rules, Companies' Decision-Making About What Kinds Of Safeguards To Offer Is Managed By The Capital Structure Question. For A Variety Of Reasons, Corporate Financial Managers Have Been Compelled To Increase Their Use Of Debt-Financing. The Management Has Had To Deal With Increased Expectations For Execution From Owners, Especially The Usually Forward-Thinking Institutional Financial Experts, Most Of Which Were Articulated As A Need For A Continual Increase In Profits Per Share. Low-Debt Enterprises, On The Other Hand, Are A Big Draw For Conglomerate Bosses Who Aren't Fans Of Leverage. It Is Impossible To Underline Enough How Important It Is To Have An Optimum Capital Structure And To Maximize Shareholder Value That Increased Use Of Leveraged Financing Is Considered A Viable Option For Increasing A Company's Profits While Also Reducing Its Attractiveness As A Target For Takeovers.

## II. DETERMINANTS OF CAPITAL STRUCTURE

Leverage Or Equity Trading, Growth Of The Company, Nature And Size Of Business Holding Control, Adaptability Of Capital Structure, Speculator Requirements, Costs For Flotation Of New Protections, Timing, Corporate Tax Rate, And Legal Necessities Are All Factors That Influence A Company's Capital Structure. Every Element Has Varying Importance, And The Influence Of Individual Variables On A Company Might Alter Over Time. It Is Impossible To Rank Them. Every Time Money Is Needed, The Company's Finance Head Conducts An Analysis Of The Benefits And Drawbacks Of Various Funding Options. Capital Structure Of A Company Is Strongly Affected By The Full-Scale Elements Of A Nation's Economy, Such As Tax Policy, Growth Rate, And Capital Economic Position. Capital Structure Is Also Influenced By The Characteristics Of An Individual Business, Which Are Referred To Here As Miniature Scale Factors (Interior). The Elements That Affect A Company's Capital In Relation To Relevant Capital Speculations Are Explained Below.

➤ **Size Of Firm**

The Static Exchange Off Hypothesis Accepts A Positive Association Between The Firm's Debt-To-Capital Ratio And The Firm's Size. It Is Possible For Large Corporations To Reduce The Costs Of Long-Term Debt Issuance Via The Use Of The Static Exchange-Off Hypothesis. Smaller Enterprises, According To The Hierarchy Hypothesis, Will Have To Pay A Higher Percentage Of Their Assets In Debt Than Their Larger Counterparts, Resulting In Lower Debt-To-Capital Ratios. These Kinds Of Businesses Tend To Have A Higher Degree Of Financial Debt Than Their Larger Counterparts. Using The Entire Assets' Book Value As A Measure, The Determinant Will Be Determined.

➤ **Tangibility**

The Tangibility Of Variable Resources Will Be Examined. Because Of Collateral, A Positive Outcome Is Expected From The Static Exchange-Off Hypothesis. Since, If A Company Has Assets That Are Moderate To High In Value, The Risk To The Loan Specialist Is Reduced Because These Assets May Be Used As Collateral. In Order To Determine The Extent To Which A Variable Resource's Tangibility May Be Quantified, Fixed Assets Are Divided By Total Assets.

➤ **Growth**

When A Company's Assets Are Backed By Internally Produced Money (Kept Profits), Its Growth Rate Is Lower; When External Accounts Are Used, It Is Greater. The Growth Rate Is A Percentage Of The Overall Asset Growth Rate.

$$\text{Assets Growth} = \frac{\text{Assets of Current Year} - \text{Assets of Previous year}}{\text{Assets of current year}}$$

➤ **Profitability**

The Rate Of Generation Of Earnings Decides The Proficiency Of Capital Utilized. To A Degree The Exceptionally Beneficial Firms Can Retain Earnings And Money Further Speculation. Such Firms Can Be Relied Upon To Utilize Less Debt In Their Capital Structure. The Ratio Of Earnings Before Interest And Taxes Scaled Over Contributed Capital Is Utilized As A Pointer Of Profitability.

➤ **Earning Risk**

Earning Risk Will Have A Negative Relationship To All Debt Levels, Ceteris Paribus. The Co-Efficient Of Variation Of Return On Capital Utilized (Varroce) And The Co-Efficient Of Variation Of Return On Assets (Varroa) Are The Two Pointers To Gauge The Earnings Risk.

$$\text{Return on Capital Employed (ROCE)} = \frac{\text{PBDIT}}{\text{Net Worth} + \text{Long Term Debt}}$$

PBDIT = Profit Before Depreciation, Interest and Tax

➤ **Non-Debt Tax Shield**

Devaluation May Be Used By Businesses, As Can The Transmission Of Losses In The Future. To Prevent Taxes From Being Levied. The Yearly Tax Rules Evaluate How Much Deterioration There Has Been. Regardless, The Expense Of Submitting Taxes Is Tax Deductible. As A Result, The Company Has A Lower Tax Bill. There Should Be A Negative Correlation Between Leverage And The Non-Debt Tax Shield For Companies With Larger Non-Debt Tax Shields, According To This. A Negative But Not Statistically Significant Co-Efficient For The Non-Debt Tax Shield Was Also Identified In The Experiments Conducted By Allen And Mizuno. The Non-Debt Tax Shield Is To Be Estimated Using The Degradation Of Total Assets. An Inverse Link Between The Capital Structure Ratio And The Non-Debt Tax Shield Is To Be Expected. The Dangers Of Doing Business

➤ **Business Risk**

Organizational And Liquidation Cost Hypotheses Both Point To A Negative Relationship Between Capital Structure And Company Risk. The Link Between A Company's Transactions And Its Profits Before Interest And Tax May Be Described As One Of Business Risk. When A Company Has An Efficient Capital Structure, Its Overall Risk Is Kept To A Minimum. The Idea Of Liquidation Costs Contends That The Greater The Risk Of Company Failure And The Greater The Weight Of Chapter 11 Charges On Large Corporate Financing Decisions, The More Significant Is The Chance For Business Disappointment. Debt-Related Concerns At Work Get More And More Irritated As The Probability Of Bankruptcy Increases. As A Result, According To This Idea, The Amount Of Debt A Company Has As Part Of Its Capital Structure Should Decrease As Business Risk Increases.

➤ **Debt Equity Ratio**

The Debt Equity Ratio Shows The Overall Commitments Of Loan Bosses And Owners. The Numerator Of This Ratio Incorporates All Advances, Present Moment Just As Long Haul, Verified Just As Unbound Credits And The Denominator Of This Ratio Comprises Of Net Worth Which Incorporates Shareholder Equity, Reserves And Surplus.

### III. METHODOLOGY

The Goal Of This Study Is To Make A Contribution To A Critical Area Of Financial Management Known As Capital Structure. The Impact Of Capital Structure Policies On Profitability Of 12 Publicly Traded Manufacturing Businesses Will Be Investigated During A Five-Year Period From 2015 To 2019.

#### Variable Of This Study

##### I. **Dependent Variable (Profitability Variable)**

The Net Profit Ratio (Npr) Is A Commonly Used Profitability Metric That Depicts The Connection Between Net Profit After Taxes And Net Sales. It's Calculated By Multiplying Net Profit (After Taxes) By Net Sales.

##### II. **Independent Variable (Capital Structure Variables)**

- **Debt To Equity Ratio:** Financial Leverage Is Determined By Dividing A Company's Total Liabilities By Its Stockholders' Equity. It Shows How Much Debt And How Much Equity The Firm Is Utilizing To Fund Its Assets.

- **Total Debt To Total Assets:** A Statistic For Assessing How Percent Of A Company's Assets Are Financed By Debt In Order To Assess Its Financial Risk. Short-Term And Long-Term Debt Are Added Together, Then Divided By The Company's Total Assets.
- **Short Term Debt To Total:** The Link Between Current Assets And Total Assets Is Described By This Crucial Ratio.

### III. Controlled Variable

- **Firm Size:** Firm Size Is Measured By Taking The Natural Logarithm Of The Total Assets.
- **Non-Debt Tax Shield (Ndts)** Is Defined As A Ratio Of Total Annual Depreciation To Total Assets.
- **Capital Intensity Ratio:** A Company's Capital Intensity Ratio Is A Measurement Of The Amount Of Capital Required Per Rupee Of Revenue. It Is Computed By Dividing A Company's Total Assets By Its Revenues. It's The Inverse Of Total Asset Turnover.
- **Tangibility** Is Measured As A Ratio Of Net Fixed Assets Divided By Total Assets.

## IV. RESULTS AND DISCUSSION

**Tables 1: Industry Average of Related Variables In This Study**

Year	Long Term To Total Assets Ratio	Short Term Total Debt Ratio	Equity / Debt	Capital Intensity	Tangibility	Non Debt Tax Shield	Profitability	Firm Size
2015	0.1020	0.411	0.509	1.18	0.455	0.0042	0.0092	9.05
2016	0.1342	0.3388	0.469	1.330	0.483	0.00078	0.0010	9.29
2017	0.1310	0.313	0.443	1.2333	0.456	0.1024	0.10180	9.623
2018	0.10732	0.392	0.526	1.4277	0.429	0.059	0.0739	9.07
2019	0.0989	0.338	0.431	1.359	0.490	0.0756	0.0833	9.88

Table 1 Displays The Average Statistics For Variables In This Study From 2015 To 2019. When We Look At The Long-Term Debt To Total Assets Ratio, We Can See That It Was 10.20 Percent In 2015 And Has Since Dropped To 9.89 Percent In 2019. This Represents A Decrease In Long-Term Debt Funding. The Short Term To Total Asset Ratio Was 0.411 In 2015, While It Was .338 In 2019.

While The Debt-To-Equity Ratio Was .509 In 2015, It Has Decreased To .431 In 2019. This Shows That Corporations Have Used Equity As A Form Of Asset Finance. The Capital Intensity Ratios Ranges From 1.18 To 1.35. The Amount Of Capital Required Throughout This Time Has Grown. When We Look At The Tangibility Ratio, We Can See That It Was 0.45 In 2015 And Is Now 0.49 In 2019. The Non-Debt Tax Shield Is 0.0042 In 2015. In 2019, It Rises To 0.0756. In 2015, Companies' Average Net Profit Was 0.92 Percent; In 2019, It Will Be 8.33 Percent.

**Table 2: Correlation Matrix**

Variables	Debt / Equity	Long Term Debt To Total Assets	Short Term Debt To Total Assets	Non Tax Shield	Firm Size	Tangibility	Capital Intensity	Profitability
Debt/Equity	1	.545**	-.296*	-.271*	-.114	.318*	.076	-.317*
Long Term Debt To Total Assets		1	.560**	-.389**	-.201	.121	.093	-.300**
Short Term Debt			1	-.216	-.073	-.171	.129	-.237

To Total Ass								
Non Tax Shield			1	.264*	.112	.275*	.945**	
Firm Size				1	.202	.389**	.257	
Tangibility					1	.383**	-.007	
Capital Intensity						1	.163	
Profitability							1	

\* Correlation Significant At The 0.05level \*\*Correlation Significant At The 0.01 Level.

The Pearson Correlation Summary Between The Variables Utilized In This Investigation Is Shown In Table 2. The Co-Efficient Value Of Loans To Equity And Profitability Is.317, According To These Findings. At A 5% Level, This Is Considerable. This Indicates That When The Debt-To-Equity Ratio Rises, Profitability Will Suffer.

The Long Term To Total Assets Ratio To Profitability Has A Correlation Co-Efficient Of -0.317. At The 1% Level, This Is Also Substantial. This Indicates That Increasing The Use Of Long-Term Debt Ratios Will Diminish Company Profitability.

The Short-Term Loan To Total Assets Ratio And The Profitability Ratio Have A Connection Coefficient Of -0.237. This Is Of No Consequence.

**Table 3: Regression Results Model 01**

Variables	Co Efficient	T Value	Sig
Constant	0.046	4.064	.000
Debt Equity	-0.024	-.413	.061
Non Tax Shield	.965	20.917	.000
Firm Size	.056	1.209	.232
Capital Intensity	-0.012	-2.080	0.043
Tangibility	-0.087	-1.847	0.071
R2 .913			

The Regression Results Of The Regression Model 01 Are Shown In Table 3. The Debt To Equity Ratio Is The Independent Variable In This Model. The Profitability Ratio Is A Dependent Variable. The Debt To Equity Ratio's Beta Value Is -0.024, And The P Value Is 0.061, According To The Report. At A 10% Level, This Is Considerable. That Is The Debt-To-Equity Ratio Has A Substantial Influence On The Profitability Of India's Publicly Traded Manufacturing Enterprises. Leverage Is Influenced By The Size Of The Company. Non-Tax Shielding, Company Capital Intensity, And Tangibility All Have A Substantial Influence On Profitability.

**Table 4: Regression Results Model 02**

Variables	Co Efficient	T Value	Sig
Constant	0.019	3.051	0.004
Total Debt To Total Assets Ratio	-0.022	-.752	.455
Non Tax Shield	.933	19.641	.000
Firm Size	0.55	1.207	.233
Capital Intensity	-.012	-2.127	.038
Tangibility	-.046	-2.059	0.045
R2 .893			

The Regression Results Of Model 02 Are Shown In Table 4. The Beta Value Of Total Debt To Total Assets Ratio Is -0.022, And The P Value Is 0.0455, According To The Summary Of Table 4. As A Result, The Total Debt To Total Assets Ratio Has A Major Influence On Manufacturing Company Profitability. At A 5% Level, This Is Considerable. That Is, The Debt-To-Equity Ratio Has A Major Influence On The Profitability Of India's Publicly

Traded Manufacturing Enterprises. The Non-Tax Shield Connection, Company Capital Intensity, And Tangibility Have A Substantial Influence On Profitability.

**Table 5: Regression Results Model 03**

Variables	Co Efficient	T Value	Sig
Constant	.018	3.883	.000
Short Term Debt Ratio	-.076	-1.735	.089
Non Tax Shield	.954	21.630	.000
Firm Size	.060	1.343	.185
Capital Intensity	-.119	-2.636	.011
Tangibility	-.094	-1.999	.051
R2 .905	-.076	-1.735	.089

The Regression Results Of Model 03 Are Shown In Table 5. The Beta Value Of Total Short Term Debt To Total Assets Ratio Is -0.076, And The P Value Is 0.089, According To The Summary Of Table 5. As A Result, The Ratio Of Short-Term Debt To Total Assets Has A Considerable Influence On Manufacturing Company Profitability. At A 10% Level, This Is Considerable. Short-Term Debt To Total Asset Ratio Has A Substantial Influence On The Profitability Of India's Listed Manufacturing Enterprises. The Non-Tax Shield Connection, Company Capital Intensity, And Tangibility Have A Substantial Influence On Profitability.

## V. CONCLUSION

The Influence Of Capital Structure On Profitability Of Industrial Businesses Listed On The Colombo Stock Exchange Was Investigated In This Article. The Findings Of The Study, Based On Fixed Effect Estimates, Demonstrate That The Variables Debt To Equity, Long Term Debt To Total Assets, And Short Term Debt To Total Assets In Models 01, 02, And 03 Have A Strong Significant Impact On The Profitability Of The Organisation. An Investment's Goal Is To Increase The Wealth Of Its Owners. In Order To Reach This Goal, Investors Should Purchase Shares In Firms That Are More Profitable. As A Result, The Conclusions Of This Study Will Assist Investors In Choosing Lucrative Stocks By Taking Into Account Their Capital Structure And Maximizing Their Return. Companies Might Change Their Capital Structure To Suit Their Requirements. The Outcomes Of This Study Will Also Assist Businesses In Determining The Best Leverage For Maximizing Profits. Companies Can Raise The Market Value Of Their Shares By Boosting Their Profitability.

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