

# A STUDY ON CAPITAL STRUCTURE OF TATA MOTORS LTD

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## ABSTRACT

The capital structure is how a firm finances its overall operations and growth by using different sources of funds.. Ratios have been used to analyze the capital structure of Tata Motors Ltd. The break-even point is the price level at which the market price of a security is equal to the original cost. The secondary data have been used for this study to analyze the financial statements of Tata Motors Ltd for the period of 5 years from 2013-14 to 2017-18. Ratios and Financial Break-even point have been used to analyze the data of Tata Motors Ltd. The main objective of this study is to analyze the solvency and activity ratios and financial break- point of Tata Motors Ltd from 2013-14 to 2017-18. The study highlights the financial performance of Tata Motors Ltd.

## KEYWORDS

Ratios, Financial Break-point, Financial performance.

## Introduction

Tata Motors Ltd was founded in 1945 as a manufacturer of locomotives, the company manufactured its first commercial vehicle in 1954 in collaboration with Daimler-Benz AG, which ended in 1969. Tata Motors entered the passenger vehicle market in 1988 with the launch of the Tata Mobile followed by the Tata Sierra in 1991, becoming the first Indian manufacturer to achieve the capability of developing a competitive indigenous automobile. Tata Motors is listed on the (BSE) Bombay Stock Exchange, where it is a constituent of the BSE SENSEX index, the National Stock Exchange of India, and the New York Stock Exchange. The company is ranked 226th on the Fortune Global 500 list of the world's biggest corporations as of 2016. On 17 January 2017, Natarajan Chandrasekaran was appointed chairman of the company Tata Group. Capital Structure is a mix of company's debts includes debentures, long term loans, common equity and preferred equity. The most crucial decision of any company is involved in the formulation of its appropriate capital structure. The break-even point is a point where total costs and total sales are equal. This allows us to discover exactly how much we must sell at the present level of costs to avoid making a loss. To

accurately calculate your break-even point, the fixed and variable costs on which your based calculation must be correct.

## Objectives of the study

The main objective of the study is

1. To analyse the financial performance of Tata Motors Ltd by using solvency and activity ratios
2. To find out the Financial break-even point of Tata Motors Ltd

## Limitations of the study

- If promoters miscalculate in working out financial requirement of a company, then company may land in a situation where it has a large surplus of capital.
- This study is limited to a period of 5 years (2014-18) as it is a secondary data collected from previous information.

## Scope of the Study

. Capital structure provides flexibility in raising funds. Companies like to issue debt because of the tax advantages. Interest payments are tax deductible. Debt also allows a company or business to retain ownership. In equity financing, the entrepreneurs are able to make key strategic decisions and also to keep and reinvest more company profits. The break-even analysis is a useful tool to study the relationship between fixed costs and variable costs and revenue. The break-even analysis calculates the size of production at a certain price that is necessary to cover all the costs that have been incurred.

## Statement of the Problem

The main problem associated with debt financing is that its availability is often limited to established businesses. Since lenders primarily seek security for their funds, it can be difficult for unproven businesses to obtain loans. Financial break-even point is more dependent on certain assumptions, such as the price of goods remaining unchanged, whereas the fluctuation in cost is only considered. This is main reason where many businesses do not understand the importance of break-even point and how it can be calculated.

## Review of Literature

"The effective to the firm value and profitability; Empirical evidences incase of Personal Goods (textile) sector of KSE 100 Index" was explored by Muhammad Shadab Abdul Sattar (2015) to analyse the value of firms and its profitability of certain textile sectors like Nishat Mills Ltd, Kohinoor Textile Mills Ltd from 2003-2004 to 2012-2013. The datas has been taken from the previously collected information about

the Textiles Sectors. Return on Assets, Weighted Average Cost of Capital, Total Debt Ratio have been used as tools to analyse the datas of various textile sectors for the period from 2003-2004 to 2012-2013. From the data collected it has been analysed that all investors wants their capital to be invested in the firm where they can have maximum return otherwise they will not be able to retain in the firm. If the rate of return is not higher than the cost of capital, then the firm cannot survive and shareholders will switch to another firm where they can get maximum benefit. Therefore, a firm should make a strategy in the sense where their profit margins can be maximised and they can give benefits to their shareholders.

"A Brief Review of Capital Structure Theories" was analyzed by Hashemi Tilehnoei Mostafa and Shivaraj Boregowda (2014) by using the secondary data collected for the year 2013-2014. Various tools like capital structure, risk return trade of theory, agency models has been used to analyse the data of the selected firms. From this study it is not concluded whether any debt or tax benefit is on balance or not. Long term debt significantly depends on firm's efficient marginal tax. Agency models predict that leverages is positively related to the firm value, liquidity value and interest coverage on the other hand, leverage seems to have inverse relationship with growth opportunities importance of managerial Reputation.

Sahadev Bhatt and Ram Garg (2016) has made a study on the "Corporate Capital Structure and Dividend Policy". The data of 8 years from 2006 -2007 to 2014-2015 has been used to analyze different sectors like IT, Banking, Pharmaceutical, etc from various countries. From the review it was found that the capital structure and the dividend policy are still unresolved by the empirical literature. The empirical literature has recorded systematic variations in capital structure and dividend behaviour across firms, countries and time. It has also been concluded that the pile evidence collected is not conclusive on the determinants of capital structure and dividend policy.

### **Period of the study**

The study period covers from 2013-2014to 2017-2018.

### **Source of the study**

Secondary data have been used in this study which are sourced from the annual reports of Tata Motors Ltd from various articles, journals, books, publications and websites.

### **Tools and techniques used**

The Following tools are used to analyze the financial performance of Tata Motors ltd:

1. Ratios – Fixed asset turnover ratio, Working capital turnover ratio, Interest coverage ratio.
2. Financial break-even point.

## Analysis & Interpretation

The process by which sense and meaning are made of the data gathered in qualitative research, and by which the emergent knowledge is applied to client's problems.

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## RATIOS

Structural ratio is based on the proportions of debt and equity in the capital structure of the firm. The capital structure ratio may be defined as those financial ratios which measure the long term stability and structure of the firm. These ratios indicate the mix of funds provided by owners and lenders and assure the lenders of the long term funds. When a company has issued a variety of securities at different points of time to raise at difficult terms terms, it may need to consolidate such securities to simply the financial plan as and when the market conditions are favorable.

- Fixed assets turnover ratio
- Working capital turnover ratio
- Interest coverage ratio

### Fixed asset turnover ratio

The fixed asset turnover ratio is in general, used by analysts to measure operating performance. It is a ratio of net sales to fixed assets. This ratio specially measures a company's ability to generate net sales from fixed asset investments namely property, plant and equipment, net of depreciation. In general, a higher fixed asset turnover ratio indicates that a company has more effectively utilized investment in fixed assets to generate revenue.

**Fixed Asset Turnover Ratio = Net sales / Net property, Plan and Equipment**

**Table 1- Fixed Assets Turnover Ratio****(Rs. In crores)**

Year	Net Sales (Rs)	Fixed Assets (Rs)	Ratio (Times)
2017-18	58831.41	26800.35	2.20
2016-17	44363.60	28043.91	1.58
2015-16	42845.47	26762.34	1.60
2014-15	35890.50	21824.02	1.64
2013-14	33906.97	21595.64	1.57

Source: Secondary Data ([www.moneycontrol.com](http://www.moneycontrol.com))

### Interpretation

It is inferred from the above table, that the fixed assets turnover ratio is high (2.20) in the year 2017-18 and it indicates that the company have effectively utilized investments in fixed assets to generate revenue. The Fixed assets turnover ratio is low (1.57) in the year 2013-2014 and a fall in fixed asset turnover ratio represents that the company has not invested more in its fixed assets.

### CAPITAL TURNOVER RATIO

Capital Turnover Ratio indicates the efficiency of the organization with which the capital employed is being utilized. A high capital turnover ratio indicates the capability of the organization to achieve maximum sales with minimum amount of capital employed. Higher the capital turnover ratio better will be the situation.

$$\text{Capital Turnover Ratio} = \text{Sales} / \text{Capital Employed}$$

**Table 2- CAPITAL TURNOVER RATIO****(Rs. In crores)**

Year	Sales (Rs)	Capital Employed (Rs)	Ratio (Times)
2017-18	58831.41	34993.35	1.68
2016-17	44363.60	37339.93	1.19
2015-16	42845.47	37974.26	1.13
2014-15	35890.50	29572.54	1.21
2013-14	33906.97	30936.89	1.10

Source: Secondary Data ([www.moneycontrol.com](http://www.moneycontrol.com))

### Interpretation

From the table-2, it is understood that during the study period from 2013-2014 to 2017-2018 of Tata Motors Ltd, it is inferred that the capital turnover ratio is low (1.10) in 2013-2014 and high (1.68) in the year 2017-2018. A high level of working capital working capital turnover ratio indicates that the company has insufficient quantity of working capital in the business. So the company has to increase its working capital in the future.

### Interest coverage ratio

The Interest coverage ratio is a measure of a company's ability to meet its interest payments. Interest coverage ratio is equal to earnings before interest and taxes (EBIT) for a time period, often one year, divided by interest expenses for the same period.

$$\text{Interest coverage ratio} = \text{EBIT} / \text{Interest}$$

**Table -3 INTEREST COVERAGE RATIO**

(Rs. In Crores)

Year	EBIT	Interest	Ratio (Times)
2017-18	1764.17	1744.43	1.01
2016-17	-491.91	1569.01	-0.31
2015-16	1796.74	1592	1.13
2015-16	1796.74	1592	1.13
2013-14	851.58	1353.18	0.63

Source: Secondary Data ([www.moneycontrol.com](http://www.moneycontrol.com))

### Interpretation

From the table-3, it is found that the interest coverage ratio is fluctuating during the study period from 2013-2014 to 2017-2018. A decrease in interest coverage ratio indicates that the company is able to pay off its debts in future. From the study it can be concluded that the interest coverage is at low level, and it may not have enough money to pay of its debts.

### Financial break-even point

Financial break-even point is the level of earnings before interest and taxes that will result in zero net income or zero earnings per share. It equals the company's interest expense plus dividends paid to preferred stock- holders and associated taxes.

$$\text{Financial Break-even point} = \text{Fixed cost} / \text{Contribution}$$

Table-4 Financial Break-even point

(Rs .in crores)

Year	Fixed Cost	Contribution	Financial Break Even Point
2017-18	4846.32	3308.46	1.46
2016-17	4559.54	1611.18	2.83
2015-16	3921.22	2946.56	1.33
2014-15	4214.90	-1641.72	-2.57
2013-14	3407.82	-1292.29	-2.64

Source: Secondary Data ([www.moneycontrol.com](http://www.moneycontrol.com))

### Interpretation

From the above table, it is found that the Financial Break-even point of Tata Motors Ltd is high in the year(2.83) in the year 2017-18 and low(-2.57) in the year 2014-2015. From the above study of financial break-even point it is concluded that a company is able to pay of its fixed interest charges.

### CONCLUSION

"A study on capital structure of Tata Motors ltd" is based on ratios, financial-break even point and financial position of the company. The study shows the solvency and activity position of the company from 2013-14 to 2017-2018. It is concluded that there is fluctuation in the ratios over the study period from 2013-2014 to 2017-2018 and there is no constant increase or decrease in the ratios as there is no losses in the company during the study period from 2013-2014 to 2017-2018. It is also concluded from the study that the company is able to pay of its fixed interest charges over the study period from 2013-2014 to 2017-2018.

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