

PROFITABILITY ANALYSIS OF TATA MOTORS

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ABSTRACT

The study examines the profitability position of Tata Motors for the past ten years. It involves in-depth analysis of profitability of the company with the help of key ratios, statistical analysis and growth chart in terms of turnover & profit.

Profitability ratios help in ascertaining the position of the company with respect to various profitability measures like Operating Profit, Net Profit & Return on Net Worth. Comparative study of annual increase in sales and profitability is made to understand the growth of the company. Conclusions are drawn with the help of results obtained through aforesaid techniques.

Keywords: Net profit, EBIDT, PBT, PAT, Return on Net worth

INTRODUCTION

Profitability is the ability to earn profit from all the activities of an enterprise. It indicates how well management of an enterprise generates earnings by using the resources at its disposal. A business needs profits not only for its existence but also for expansion and diversification. The investors want an adequate return on their investments, workers want higher wages, creditors want higher security for their interest and loan and so on. Profit is the most useful measure of overall efficiency of a business.

For Management, Profit is the test of efficiency and a measurement of control. It is a measure of worth of investment for owners. For creditors, it is the margin of safety. For employees, a source of fringe benefits. For Government, it is a measure of tax paying capacity & basis of legislative action. For customers, it is a hint to demand for better quality and price cuts and for an enterprise, profit symbolizes existence and growth.

OBJECTIVES OF THE STUDY

- To know the profitability position of the company for the past ten years
- To assess the growth of company in light of sales & profitability

HYPOTHESIS

Null hypothesis is taken to understand the relationship between Company's Sales & Profitability.

H_0 = There is no relation between Sales and Profitability

REVIEW OF LITERATURE

Daniel Moses Joshuva stated in his study 'Financial Status of Tata Motors Ltd' (2012) that company has stable growth and also suggested to reduce the expenditure. Decrease in expenses will increase the profitability. He also suggested that company should utilize its working capital efficiently.

Patel Vivek (2010) indicated in his study on 'Financial Performance of Tata motors' that the company has issued equity capital rather than going for preference share which means the company's dividend will not be fixed but the company has provided a good amount of dividend to share holders. Despite of having large reserves, company has opted for loan funds. The company had a good operating income which shows that the company has a sustainable growth.

METHODOLOGY

The study is concerned with the ten year's data of Tata Motors i.e. (2001-02 to 2010-11). The data is secondary in nature and is obtained from the published annual reports of Tata Motors. Data is analyzed through various profitability ratios and statistical techniques to comment upon the profitability position of the company.

Profitability Analysis of Tata Motors

For Profitability analysis, some ratios are to be calculated that help in measuring how well a company is performing by analyzing how profit was earned relative to sales, total assets and net worth. The purpose of analysis of profitability ratios is to help in assessing the adequacy of profits earned by the company and to discover whether profitability is increasing or declining.

EBIDT Ratio

This ratio is used in analyzing the profitability of a company by taking the company's revenue figures and comparing them with the earnings of the company. This ratio helps in determining the percentage of revenue left over after the company pays its operating expenses.

Table 1. EBIDT Ratio of Tata Motors (In %) (Rs Crores)

Years	Net Sales	EBIDT	EBIDT Ratio
2001-02	8918.06	763.35	8.56
2002-03	9111.26	1157.45	12.70
2003-04	13282.12	1889.06	14.22
2004-05	17585.22	2270.06	12.91
2005-06	20891.31	2795.02	13.38
2006-07	27535.24	3473.89	12.62
2007-08	28730.82	3511.15	12.22
2008-09	25660.79	2627.24	10.24
2009-10	35593.05	5887.7	16.54
2010-11	48040.46	4848.4	10.09
Average	23534.83	2922.33	12.35

Table 1. EBIDT Ratio of Tata Motors (In %) (Rs Crores) (Contd....)

Years	Net Sales	EBIDT	EBIDT Ratio
Std Deviation	12304.66	1582.07	2.27
Co-efficient of Variance	52.28	54.14	18.42

Source: Annual Reports of Tata Motors

The ratio assumes great importance to moneylenders and financiers as it reveals the cash availability of the firm for payment of interest to the financiers. Tata Motors has grown significantly in terms of this ratio and recorded highest EBIDT in FY 2009-10 at Rs5,887.70 Crores. Accordingly best year in terms of this ratio is Financial Year 2009-10. Average ratio of the company is however 12.35% which is lower than the highest ratio recorded by the company. However, low standard deviation of 2.27 indicates consistency in the performance of the company.

Profit before Tax (PBT) Ratio

This ratio measures the company's profitability before taxation as percentage of Sales. Ratio is extremely useful as it measures returns from the business pre tax. Ratio is preferred to the PAT (Profit After Tax) ratio as it measures capacity of the firm to generate returns from operating activities and before the tax expense.

Table 2. Profit before tax ratio of Tata Motors (In %) (Rs. Crores)

Years	Net Sales	PBT	PBT Ratio
2001-02	8918.06	-63.39	-0.71
2002-03	9111.26	516.37	5.67
2003-04	13282.12	1345.2	10.13
2004-05	17585.22	1665.75	9.47
2005-06	20891.31	2047.73	9.80
2006-07	27535.24	2574.53	9.35
2007-08	28730.82	2576.47	8.97
2008-09	25660.79	1079.02	4.20
2009-10	35593.05	3749.99	10.54
2010-11	48040.46	2343.64	4.88
Average	23534.83	1783.53	7.23
Std Deviation	12304.66	1116.74	3.63

Source: Annual Reports of Tata Motors

Company's PBT ratio is mostly in line with the EBIDT ratio above. Average PBT ratio for the company is 7.23% as against average EBIDT ratio of 12.35%. Difference in EBIDT Ratio and PBT ratio indicates Interest and Depreciation expenses to that tune.

Highest PBT is recorded by the company in Financial Year 2009-10 which has the EBIDT in ten years under study. However, Standard deviation and Co-efficient of Variance are high at 3.63 and 50.23 respectively; indicating inconsistency in Profit Before Tax of the company.

Such a situation is owing to poor performance of the company in initial years of the study i.e. FY 2001-02 & 2002-03. Financial Years 2008-09 and 2010-11 have also been below par for the company in terms of PBT ratio.

Net Profit Ratio

Net Profit Ratio shows the relationship between Net Profit of the concern and its Net Sales.

Table 3. Net Profit ratio of Tata Motors (In %)(Rs.Crores)

Years	Net Sales	PAT	Net Profit Ratio
2001-02	8918.06	-53.73	-0.60
2002-03	9111.26	300.11	3.29
2003-04	13282.12	810.34	6.10
2004-05	17585.22	1236.95	7.03
2005-06	20891.31	1528.88	7.32
2006-07	27535.24	1913.46	6.95
2007-08	28730.82	2028.92	7.06
2008-09	25660.79	1001.26	3.90
2009-10	35593.05	2240.08	6.29
2010-11	48040.46	1811.82	3.77
Average	23534.83	1281.81	5.11
Std Deviation	12304.66	765.06	2.52
Co-efficient of Variance	52.28	.03	49.37

Source: Annual Reports of Tata Motors

Difference between Net profit ratio and PBT ratio reflects tax provisions made by the company. It may also include items of extraordinary nature. Net profit ratio indicates the final amount added to the net worth of the company after making provision for taxes at applicable rates. Rates of Income tax have a direct bearing on this ratio. We have seen that Financial Year 2009-10 has been the best year for the company as it has recorded highest EBIDT & PBT in that year.

However, ratio indicates that company witnessed its highest Net profit in Financial Year 2005-06. On an average, company's net profit ratio stands at 5.11%. Standard deviation and co efficient of variance is high at 2.52 and 49.37 respectively.

Return on Net worth ratio

It is the ratio of net profit to share holder's investment. The Ratio is of great importance to investors as it helps in deciding whether to invest in a particular firm or not.

Table 4. Return on Net Worth ratio of Tata Motors (In %)(Rs.Crores)

Years	Net Worth	PAT	Return on Net Worth Ratio
2001-02	2465.06	-53.73	-2.18
2002-03	2597.16	300.11	11.56
2003-04	3593.6	810.34	22.55
2004-05	4111.39	1236.95	30.09
2005-06	5537.07	1528.88	27.61

Table 4. Return on Net Worth ratio of Tata Motors (In %) (Rs.Crores) (contd....)

Years	Net Worth	PAT	Return on Net Worth Ratio
2006-07	6869.75	1913.46	27.85
2007-08	7839.5	2028.92	25.88
2008-09	12230.15	1001.26	8.19
2009-10	14965.47	2240.08	14.97
2010-11	20013.3	1811.82	9.05
Average	8022.25	1281.81	17.56
Std Deviation	5892.17	765.06	10.80
Co-efficient of Variance	73.45	.03	61.54

Source: Annual Reports of Tata Motors

Stakeholders of the company are most concerned with this ratio as it indicates return on amount invested by them in the firm. Generally, a return of more than 8% or the rate offered by the bank on deposits is considered to be the minimum benchmark return for any investment. This is because one can safely earn this much return without risking his/her money.

The ratio demonstrates strong performance of the company as average ratio stands at 17.56%, which is considerably above the benchmark level. Financial year 2004-05 emerges as the best year for the company in terms of return on net worth. Company's performance has peaked in the middle of the decade after poor show in the first year. Standard deviation is high at 10.80 but towards positive.

Percentage increase in Profits in proportion to percentage increase in Sales

Table 5.

Years	Percentage Increase in Sales	Percentage Increase in Profits
2001-02	-	-
2002-03	2.17	658.55
2003-04	45.78	170.01
2004-05	32.4	52.65
2005-06	18.8	23.60
2006-07	31.8	25.15
2007-08	4.34	6.03
2008-09	-10.69	-50.65
2009-10	38.71	123.73
2010-11	34.97	-19.12
Average	22.03	110.00
Std Deviation	19.37	216.77
Co-efficient of Variance	87.90	50.74

Other things remaining same, a firm must register higher profits if its sales go up. Above table shows the comparison of increase in sales with increase in profits with respect to presiding financial years. Above study reveals interesting facts as there is no definite pattern

in which one can comprehend the increase in profits of the company vis a vis its sales. For Instance, there has been an increase in sales of the company by 34.97% in FY 10-11 in comparison to previous year i.e. FY 09-10. However, the net profit has declines by 19.12%.

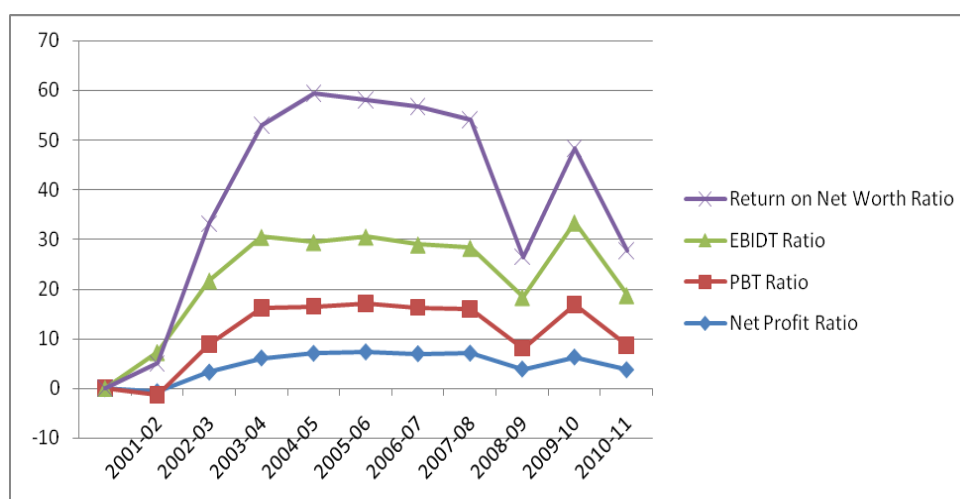
Nonetheless, Business of the company has grown significantly as it has registered 22.03% of growth in sales on an average. Similarly Net profits have also registered an increase of 110% on an average. Sensitivity of company's profit is high to sales as reflected by High Standard deviation and variance of 216.77 & 5.74 respectively.

RESULTS

Table 6. Profitability Ratios of Tata Motors (At a glance)

Years	EBIDT Ratio	PBT Ratio	Net Profit Ratio	Return on Net Worth Ratio
2001-02	8.56	-.71	-.60	-2.18
2002-03	12.7	5.67	3.29	11.56
2003-04	14.22	10.13	6.10	22.55
2004-05	12.91	9.47	7.03	30.09
2005-06	13.38	9.80	7.32	27.61
2006-07	12.62	9.35	6.95	27.85
2007-08	12.22	8.97	7.06	25.88
2008-09	10.24	4.20	3.90	8.19
2009-10	16.54	10.54	6.29	14.97
2010-11	10.09	4.88	3.77	9.05
Average	12.35	7.23	.05	17.56
Std Deviation	2.27	3.63	.03	10.80
Co-efficient of Variance	18.42	50.23	49.37	61.54

Source: Published Annual Reports of Tata Motors



Source: Published Annual Reports of Tata Motors

Graph 1. Profitability ratios of Tata Motors (At a Glance)

Above graph indicates considerable growth attained by the company in last ten years. Company's performance has been consistently good in the middle of the decade after poor first year. Except EBIDT, Both PBT & PAT of the company have significant fluctuations during last ten years as contemplated by high standard deviation and co-efficient of variance of PBT Ratio and PAT Ratio.

Profitability had suddenly slumped in the Financial Year 2008-09 but company bounced back with improved show in the next financial year i.e. 2009-10, thereby making it a best year in terms of EBIDT Ratio and PBT Ratio. However, profitability has again declined in the Financial Year 2010-11. Company performance has been inconsistent during the last three years as reflected by the curve.

HYPOTHESIS TESTING

There is no relation between Sales and Profitability. This hypothesis is tested statistically and results are tabulated as under

Table 7.

Years	Net Sales	PAT
2001-02	8918.06	-53.73
2002-03	9111.26	300.11
2003-04	13282.1	810.34
2004-05	17585.2	1236.95
2005-06	20891.3	1528.88
2006-07	27535.2	1913.46
2007-08	28730.8	2028.92
2008-09	25660.7	1001.26
2009-10	35593	2240.08
2010-11	48040.4	1811.82
Average	23534.83	1281.81
(r)	0.808	
Calculated Value of 't'	3.906	
Critical Value	2.306	

The Calculated value of 't' is more than the critical value'; hence null hypothesis is not accepted. Therefore, we deduce that there exists a strong relationship between Sales & Profitability of Tata Motors

CONCLUSION

It can be concluded from the study that company has grown significantly from having a turnover of 8918.06 Crores in 2001-02 to 48040.46 Crores of Turnover in 2010-11.

Company has created significant wealth for its stakeholders and provided handsome return on investment. Company's net worth has grown from 2465.06 Crores in 2002 to 20013.3 Crores in 2011 which implies more than 700% growth in net worth of the company. Company's operating margins have always been in double digit after first year of study. Return on net worth is much higher than the reasonable expected return which is a promising factor for the investors.

Company's profit margins have shown fluctuations in last three years which is a worrying factor. Out of last three years, return on net worth has been below 10% in two years namely FY 08-09 & FY 10-11. This may be due to various reasons such as:

1. High cost of borrowed funds
2. High taxation
3. High amortization/depreciation costs

Silver lining remains that operational profit margin is good on company's products as reflected by steady EBIDT ratio. Thus, it can be concluded that inner strength of the company is remarkable. Company can further improve its profitability through optimum capital gearing & reduction in Administration and Financial Expenses.

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