

Critical Financial Analysis for Financial Strategy

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Abstract

Analysis of Financial statement is one of the most important steps in gaining an understanding of the current and potential profitability of a company. Critical Financial analysis is also critical in evaluating the relative stability of revenues and earnings at different levels of operating and also the financial risk for the financial performance of management. The main purpose of Critical Analysis of Financial Statement is to understand the trend of earning capacity of Profitability, and predict the future prospects of Financial strengths and probability of any variance in achieving the prudence of the company. Such study is crucial all about analysis of past and current financial position for future financial strategy either for short term or long term or combination of both. This study is based on the secondary data like Annual reports of 5 years (2016 to 2020) of Tata Motors Limited. Techniques like Return on Investment and Economic Value Added is used to evaluate the financial performance of the company and Altman's Standard Z Score Model is one of the predictive model for analyzing the stability of the business. After the analysis of Financial Statements, though according to Altman's Standard Z company's financial prospect/solvency status which is the Standards of Financial performance or Standard financial indicator is stable in the last 5 years, indicates just stability for its survival. Altman's Standard Z-Score Model is a general rule, a score below 1.81 is dangerous while a score above 2.99 is comfortable. If these financial analyses are critically evaluated, company can make feasible solution to grow its profitability positions for better performance and sustainability. The process of critical evaluation of the financial statements can be converted into the financial information that would modify the conceptual framework for matching the prime objective of any business that is perpetual in nature for longer terms.

Introduction:

Financial statement is an organized collection of data according to standard accounting norms and the purpose is to convey an understanding of some financial aspects of a business form. Analysis of Financial statement is one of the most important steps in gaining an understanding of the current and potential profitability of a company. The purpose of the Analysis of Financial Statement is to assess the company's economic standing and profit levels. Financial Analysis is the process of assessing the financial position of a company by

analyzing its viability, profitability and sustainability. Financial analysis is also crucial in evaluating the relative stability of revenues and earnings, the levels of operating and financial risk, and ultimately the performance. It is basically a study of relationship among various financial variables, facts, figures and the interpretation thereof to gain an insight into factors influencing the profitability and operational efficiency of the firm. The term analysis of financial statements includes both 'analysis and interpretation'. The term analysis means simplification of financial data by methodical classification given in the financial statements. Interpretation means explaining the meaning and significance of the data. It is the collective name for the tools and techniques to assess its financial health and future prospects that are intended to provide relevant information to the decision makers. It also helps in understanding the going concern of the company by comparing for the same company over the period of time and comparisons of different companies either in the same industry or in different industries. We can say it is useful for forecasting as well benchmarking for effective planning and decision-making. One can make decisions regarding the operations of the company and strategy of enhancing their operating synergy and in turn financial synergy also to meet its objective. Analysis of financial statements will help business owners and other interested people to analyze the data in financial statements to provide them with better information about such key decision making and ultimate business survival.

Analysis of Financial Statement is the process of analyzing overall health of an organization as well as to evaluate financial performance and business value. Internal constituents use it as a monitoring tool for managing the finances. Statements of a firm require an understanding of three key areas; structure of the financial statements, economic characteristics of the industry in which the firm operates and strategies the firm pursues to differentiate itself from its competitors. The chain of activities is involved in the creation, manufacture and distribution of the firm's products and/or services. Techniques such as Porter's Five Forces or analysis of economic attributes are typically used in this step to determine a value chain analysis for the industry. The nature and attributes of the product/service offered by the firm illustrates the uniqueness of product, level of profit margins, creation of brand loyalty and control of costs. Additionally, factors such as supply chain integration, geographic diversification and industry diversification have direct impact on company's strategies of expansion and diversification and hence it should not be ignored. Therefore, review of the key financial statements within the context of the relevant accounting standards is crucial as it provides valuation information about firm's economic performance position and managerial decisions of implications within the arena of the operations can be finalized for better financial performance. When evaluating the income statement, the main point is to properly assess the quality of earnings as a complete evaluation of the statement in understanding the impact of the firm's position from its operations, investments and financial activities in essence over the period. It is also important to learn how to disaggregate return measures of primary impact factors on two broad questions to be asked: firstly, how profitable are earned by the operations of the firm relative to its assets ratios in relation to those from earlier periods or relative to other firms or industry averages; secondly, with respect to profitability— independent of how the firm finances those assets. It is critical to analyze any financial statement ratios in a

comparative manner, looking at the current scenario to add value in the evaluation of the firm. Although often challenging, financial professionals must make reasonable assumptions about the future of the firm (and its industry) and determine how these assumptions will impact both the cash flows and the funding. This often takes the form of pro-forma financial statements, based on techniques such as the percent of sales approach. Valuation approaches like Discounted cash flow methodology, Relative valuation, Contingency claim method etc. used to project the frequency of cash flows or capital adequacy or level of market share earned on enterprise basis, measure the economies of scale, financial performance, and value of the firm.

The statements depicting the financial position and profitability of an enterprise for the distinct time frame in a Comparative Form gives a notion that signifies the direction and financial position based upon operating outcomes. This type of analysis is also referred to as Horizontal analyses for 2 or more periods. Trend Analysis is a method of analyzing the operational outcomes and financial position over a period of time. Utilizing the previous years' data of a business firm, trend analysis can be done to notice the percentage changes over the time specified for analysis. Common size statements are the statements which allow an analyst to compare the financing and operating attributes of 2 enterprises of distinct sizes in a similar industry. This analysis is also referred to as 'Vertical analysis. Cash Flow Analysis refers to the analysis of the actual flow of cash into and out of an establishment that compiles the reasons for the changes in the cash position of a trading concern during the financial year. Ratio Analysis characterizes the vital association which exists between several items of a B/S (balance sheet) and a statement of P&L of an enterprise. As a method of financial analysis, accounting ratios compute the comparative importance of the single items of the position and income statements. It is feasible to evaluate the solvency, efficiency, and profitability of an enterprise via the method of ratio analysis. Critical Analysis of Financial Statement is the systematic numerical representation of the relationship of one financial fact with the other to measure the profitability, operational efficiency, solvency and the growth potential of the business in longer terms”.

Significance of Critical Analysis of Financial Statement:

There are different users of financial statement analysis. These can be classified into internal and external users. Internal users refer to the management of the company who analyzes financial statements in order to make decisions related to the operations of the company and also for benchmarking for improving the internal discrepancies. External users do not necessarily belong to the company but still hold some sort of financial interest. These include investors, creditors, government, employees, customers, and the general public. The managers of the company use their financial statement analysis to make intelligent decisions about their performance. For instance, they may gauge cost per unit for production and distribution channel, or how much cash is needed for futuristic investment. Not only Small business owners but giant business too need financial information in making decisions like whether to continue operating the business, whether to opt for mergers or acquisition for expansion or diversification business strategies or whether to give up on the business altogether. Investors use financial statement analysis as the evaluation process of company's

performance to determine the quantum of shares to be purchased. Creditors too are interested in knowing if a company will be able to pay its debts or loans as they become due. The creditors use cash flow analysis to measure the company's liquidity and its ability to make short term payments. Governing and regulating bodies of the state look at financial statement analysis to determine how the economy is performing in general so they can plan their financial and industrial policies. Tax authorities also analyze a company's statements to calculate the tax burden that the company has to pay. Customers need to know about the company's heightened stability of operations, its market share and the brand value in next stage.

Capital is a costly resource so business should invest in a project which can provide an adequate return that can accommodate the capital charges. Returns calculate the profitability of the company by measuring the earnings related to the amount of capital invested. This is crucial as profitability is not only required for operations but also wealth maximization for sustainability of business. Economic Value Added (EVA) is a value based performance measure that gives importance on value creation by the management for the owners. The methodology used is a type of theoretical mining of logics resulting into step-by-step process required to yield good result and comprehend the incremental difference in the rate of return over a company's cost of capital. If a company's EVA is negative it means the company is not generating value from the funds invested into the business and needs to conversely produce positive earnings. Net operating profit after tax (NOPAT) is a financial measure that shows a more accurate look at operating efficiency net of taxes through its core operations, for leveraged companies. NOPAT does not include the tax savings many companies get because of existing debt. The weighted average cost of capital (WACC) is a calculation of a firm's cost capital in which each category of capital is proportionately weighted. Return on capital employed or ROCE is a profitability ratio that measures how efficiently a company can generate profits from its capital employed by comparing net operating profit to capital employed. In other words, return on capital employed shows investors how many dollars in profits each dollar of capital employed generates.

The Altman Z Score model, defined as a financial model to predict the likelihood of bankruptcy in a company, was created by Edward I. Altman for analyzing the financial performance. His aim at predicting bankruptcy began around the time of the great depression, in response to a sharp rise in the incidence of default. In context to issue of time, weighting system combined with a set of four or five financial ratios was used to predict a company's probability of failure. Altman created three different Z Score Models that each serves unique purposes. Different models have different variables, weighting and overall predictability scoring systems for working capital, retained earnings, sales, market capitalization, etc. The ratio of a company's working capital / total assets determines its short-term financial health. A positive working capital means that a company can meet its short-term financial obligations, and still make funds available to invest and grow. The retained earnings/total assets ratio shows the amount of retained earnings or losses in a company. If a company reports plunged retained earnings to total assets ratio, it means that the company is financing its expenditure using borrowed funds rather than funds from its retained earnings. It increases the probability of a company going bankrupt.

The EBIT / Total Assets ratio demonstrates a company's ability to generate enough revenues to stay profitable to facilitate fund for ongoing operations and make payments to reduce the tax liability. To enhance the value of the asset, the descended liability is required and for this purpose high market value or brand value is required. The market value, also known as market capitalization, is the value of a company's equity that is obtained by multiplying the number of outstanding shares by the current price of stocks. The market value of the equity / total liabilities ratio shows the degree to which a company's market value would decline when it declares bankruptcy before the value of liabilities exceeds the value of assets in the balance sheet. A high market value of equity to total liabilities ratio can be interpreted to mean high investor confidence in the company's financial strength. Liabilities would be manageable when assets are utilized well. The sales to total assets ratio shows how efficiently the management uses assets to generate revenues vis-à-vis the competition. A high sale is translated into total assets that mean the management requires a small investment on daily basis is required to generate sales, which increases the overall profitability of the company.

Altman's Standard Z-Score Model is one of the reputed, for measuring performance more accurately as a firm nears bankruptcy. As a general rule, a score below 1.81 is dangerous while a score above 2.99 is comfortable. Such interpretation in assessing the financial performance of the company and evaluating their performance for the future, would definitely help to apply the resources of the company more appropriately for the overall growth of the company. The present study attempts to use ROI, ROE, EVA and Altman's Z Score Model as the predictive model for forecasting the overall performance of the company for their future. Financial statement analysis through the use of ROI, ROE, EVA, and Altman's Z score Model helps us to understand and interpret information contained in financial statements. The study helps to know the Net Income, Shareholders Equity, Working capital position of the company. Such interpretations when critically evaluated would judge the required equations for the future performance of the company and overcome the main constrain of insufficiency on operations by altering the ways.

Literature Reviews:

“Rakhi Motwani” reveals in his study Financial statement & Profitability Analysis of Tata Motors that company has created significant wealth for its stakeholders and provided hand sum Return on investment . companies profit margins have fluctuations. Return on net worth has been bello 10% in 2years. Any way inner strength of the company is remarkable. Company can further improve its profitability through optimum capital gearing and reduction in administration and financial expenses.

“Denial Moses Joshua” stated in his study “financial Status of Tata Motors Ltd” 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 efficiency.

“Patel Vivek indicate his study on “financial performance of Tata Motors” that the company has issued equity capital rather than going for performance share which means the company’s dividend will not be fixed but the company has provided good amount of dividend to shareholders. Despite of having large reserves, company has operating income which shows that the company has a sustainable growth.

“Nissim and Penman (2003)” stated that the financial statement analysis distinguishes leverage in financing activities from leverage in operations.

Financial statements analysis of Tata Motors was carried out by Rakhi, Daniel, &Patel up to the Financial Year 2009-10. The methodology adapt by each other is different. Here in this study, analysis was carried out from the financial analysis from 2016 to 2020.

Objectives of Study:

- Assess current financial position of the company.
- Analyze the financial Forecasting based over a period of five year.
- Evaluate the possibility of sustaining by conforming with the scare/limited available resources.

Research Methodology:

Secondary data are the prime source of information for such analysis. All the data like balance sheet, Profit and Loss A/c of 5 years were collected from the Annual Reports of Tata Motors Limited. Interpretation about the value of ROI, ROE, EVA, and Altman’s Z-score for Financial Statement Analysis is are descriptive in nature and comprehensive enough for the predictions that focuses on changing the Financial strategy for achieving better financial performance.

Formulas used for Data Analysis And Interpretation analysis :

1) Return on Investment = $EBIT / \text{Capital Employed}$

Where, Capital Employed = Total Assets -Current Liability

2) $EVA = NOPAT - WACC (\text{Total Assets} - \text{Current Liability})$ Or

$EVA = (ROIC - WACC)(\text{Total Assets} - \text{Current Liability})$ Or

$EVA = NOPAT - (WACC * \text{Investment})$

3) Return on Equity = Net Income available for the equity shareholders / Number of Equity shareholders.

4) Altman’s Standard Z-Score Model:

$Z = 1.2(X1) + 1.4(X2) + 3.3(X3) + 0.6(X4) + 1.0(X5)$

Where:

- **X1=Working Capital /Total Assets**
- **X1:** Working capital is the difference between the current assets of a company and its current liabilities.
 - **X2=Retained Earnings /Total Assets**
- **X2:** The retained earnings/total assets ratio shows the amount of retained earnings or losses in a company.
 - **X3=EBIT/Total Assets**
- **X3:** EBIT measures company’s profitability that refers its ability to fund the minimum fixed costs and generate profits to stand still firmly in the market.
 - **X4=Market Capitalization/Total Liability**
- **X4:** The ratio of market value of the equity/total liabilities shows the degree of company’s financial strength.
 - **X5=Sales/Total Assets**
- **X5:** The sales to total assets ratio shows how efficiently the management uses assets to generate revenues vis-à-vis the competition.

ANALYSIS & INTERPRETATION:

Table No.1 showing RETURN ON INVESTMENT of FY 2016 to 2020					
Financial years:	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Total Assets(A)	37516.76	40007.22	36426.76	39700.05	39285.52
Current Liabilities(B)	19159.21	18871.06	22785.54	21209.58	23304.35
Capital Employed(A-B)	18357.58	21136.16	13641.22	18490.47	15981.17
EBIT	2019.65	-445.55	764.17	4395.57	-2643.42
Capital Employed	18357.58	21136.16	13641.22	18490.47	15981.17
ROI	0.11	-0.021	0.13	0.24	-0.17

Table No.2 showing ECONOMIC VALUE ADDED of FY 2016 to 2020					
Financial years:	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
NOPAT	2494.78	1013.98	2106.82	4543.89	-599.02
WACC	9.32%	10.26%	8.82%	6.56%	6.56%
Investment	16963.32	17295.81	16763.57	16867.37	16616.17
EVA Investment)	-913.79	-760.57	628.28	3437.39	-1689.04

Table No.3 showing RETURN ON EQUITY of FY 2016 to 2020					
Financial years:	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Net Income	4348.87	2591.57	4866.06	7494.21	731.87
Shareholder’s Equity	679.18	679.22	679.22	679.22	719.54
ROE	6.40	3.81	7.16	11.03	1.02

Table No.4 showing Altman’s Standard Z Score Model of FY 2016 to 2020					
Financial years:	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
X1	-0.133	-0.099	-0.145	-0.083	-0.098
X2	0.044	0.016	-0.013	0.037	-0.185
X3	0.053	-0.011	0.048	0.110	-0.067
X4	0.525	0.605	0.479	0.214	0.833
X5	1.26	1.22	1.63	1.74	1.12
Standard Z Score	1.65	1.45	1.02	2.18	1.88

FIGURE 1 : SHOWING THE PROJECTION OF ROI, EVA, ROI

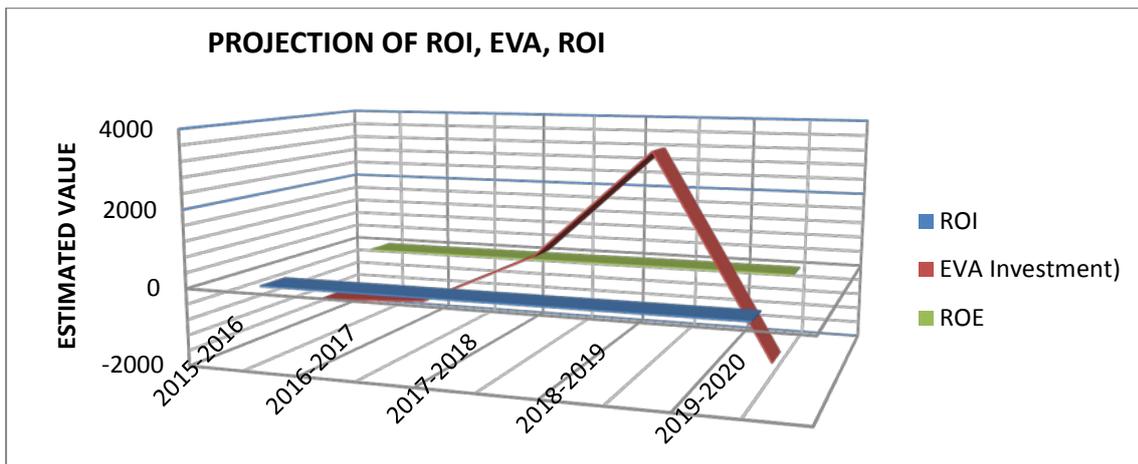
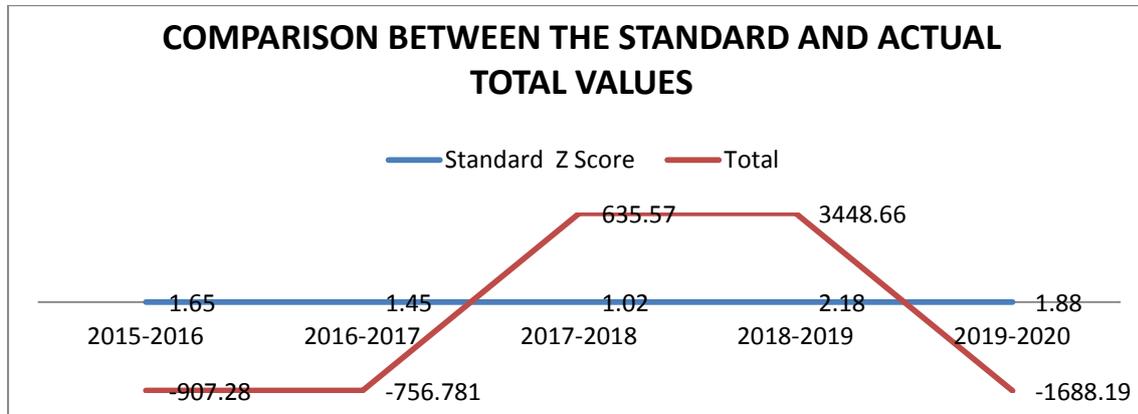


FIGURE 2: SHOWING THE COMPARISON BETWEEN THE STANDARD (ALTMAN Z SCORE) AND ACTUAL TOTAL VALUES



Interpretation :

From the above data the ROI of the Financial Year 2016 is 0.26 which decreased by 0.15% and it gained gear in the FY 2018 by 0.29 and the FY 2019 by 0.44 but again it declined for the FY by 0.04. In the evaluation of the ROI position, the company’s performance is very less the cost of investment indicating the improper utilisation of internal resources and over investment in assets. Similarly, in FY of 2016 the EVA is Rs 913.79 crores, FY 2017 it is loss by Rs – 760.57 crores, and again it is increased for the FY 2018 by Rs 628.28 crore , & FY 2019 by Rs 3437.39 crores, the company’s performance is high , the EVA position of company is again loss by Rs - 1689.04 in the year 2020. In the evaluation for EVA, the company’s first 2 years and as well as current year’s EVA is negative, it means the company is not generating value from the funds invested into the business. The operating profit is less. In terms of the evaluation of ROE after 2016 and during the FY 2017 it is decrease to 3.18 and again it rises in the FY 2018 by 7.16 and further during the FY 2019 by 11.03. Though there is high performance but again there is decline for the next FY by 1.02. From above, the Altman’s Standards Z-Score in the FY 2016 is 1.06, FY 2017 is 1.45, FY 2018 is 1.02 , FY 2019 is 2.18, and FY 2020 is 1.88. A low **ROE**, however, indicates that a company may be mismanaged and could be reinvesting earnings into unproductive assets. **ROE** is more than a measure of profit: It's also a measure of efficiency. A rising **ROE** suggests that a company is increasing its profit generation without needing as much capital. In Altman’s Z-Score model for the 5 year’s performance the beginning 3 years was danger zone, previous year and current year’s score is within safe zone as per the general rules. The negative growth rate in terms of ROE illustrates the similar pattern for ROI and EVA though Altman’s standards shows stability for the last two previous years and the strategy of continuous improvement leads towards escalated growth and sustainability.

RECOMMENDATIONS:

Particulars	Short-term plan	Long-term plan
ROE	Increase the sales and profit level	Expand the Growth stage of Product Life Cycle
ROI	<ol style="list-style-type: none"> 1) Debtor’s & Creditor’s turnover should be low 2) Assets would be adequately utilized and liabilities should be minimal unto the indifference curve. 	<ol style="list-style-type: none"> 1) Investments in productive business 2) Capital and revenue deferred expenditures should be less 3) Strategy of expansion and diversification
EVA	<ol style="list-style-type: none"> 1) Proper utilisation of fund for Shareholders Equity 2) .Retention ratio for capital adequacy 3) Regression analysis of financial and non-financial variables 	<ol style="list-style-type: none"> 1) Strategy for getting source of capital 2) Proportion of Share capital using indifference curve 3) CAMEL model

CONCLUSION:

This study is on critical analysis of the financial statements in assessing the performance of Tata Motors Limited. This study covers the analysis of 5 years financial performance of the company by evaluating their present achievements for the future vision and designing the plan to imply the resources of the company reliably for its development. The estimation of ROI, ROE, and EVA calculations, and Altman’s Z Score Model predicts the growth for sustainability. The study helps to know the Net Income, Shareholders Equity, and working capital position of the company. Interpretation of critical evaluations and equations judges whether the operating profits are less in these 5 years to raise its profitability positions for better overall financial performance.

It is important to analyse the financial statement which helps in improving future performance and in judging the efficiency of the company and is also useful in simplifying accounting figures. Return on equity is showing improvements in the past – year’s but the current year position is low it means the companies EBIT position is low. Return on Investment is very low in this 5 year’s Performance. the cost of Investments is very less . In the evaluation for EVA the company’s first 2 years and as well as current year’s EVA is negative, it means the company is not generating value from the funds invested into the business. In the middle year’s EVA is positive, it shows a company is producing value from the funds invested in it. The operating profit is less. In Altman’s Z-Score model gives the 5 year’s performance the beginning 3 years was danger zone and lost year and current year’s score will be safe zone as per the general rules. Only in the Financial Year 2019 Financial position is high.

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