Financial Performance Analysis of the selected Tyre Manufacturing Companies: An Analytical Study

Subhashini . S[1], Palaniappan Gurusamy[2], Iyyapaswamy . T[3]

[1]Assistant Professor, Department of Management Studies Annapoorana Engineering College, Salem

[2] Associate Professor, Department of Management Studies, Vinayaka Mission's Kirupananda Variyar Engineering College, Salem

[3]Assistant Professor, Department of Management Studies Annapoorana Engineering College, Salem

[1]subhashine81@gmail.com, [2]palaniappan@vmkvec.edu.in, [3]iyapps25gmail.com

Abstract

The main objective of asset management companies is on maximizing the value added of the company, thereby increasing shareholder assets. The wealth creation to shareholders, investment analysis is interlinked with the financial performance of the companies. The study has been conducted for major five firms of tyre manufacturing companies with the use of ratio analysis. The study has conducted financial performance analysis through the aspects of profitability, market based ratios, activity ratios, and leverage aspects. The study has sample of six companies wisely, Apollo Tyres, CEAT, Goodyear India, JK Tyres, MRF and TVS. The study has found that the tyre company's financial performance was good in during 2010-11 and 2014-15 and afterwards has started a sharp decline of their profitability performance. Higher variability market based ration has been gained by TVS, Apollo tyres and MRF. Return on Total Assets, Earnings per share and size of the company has positive association as well as the strongest power of influencing factor to determining the economic value additions of the automobile industry.

Keywords: *Profitability Analysis, Liquidity Position, Price Earning Ratio, Financial Statement Analysis.*

1. Introduction

The financial analysis describes the firm's economic strengths and weaknesses by identifying the relationship between the financial balance sheet and the income statement. In the balance sheet analysis, key figures are used as a central financial indicator to measure the net assets, financial position and results of a company's operations. The main objective of asset management companies is to maximize the value additions of the company, thereby increasing shareholder assets. In this respect, financial management tasks fall into three categories: investment decisions, financing and share allocation. Financing decisions, which ultimately determine the financial structure or structure of the company, are very important because they result in the company's optimal capital structure. If management is able to blend debt and capital optimally, it can minimize capital costs and maximize share prices, maximizing value for shareholders and then society. Financial managers should consider the internal characteristics of companies to create an appropriate financial structure to maximize business value.

2. Review of Literature

Agricultural societies reviewed by Katchova and Enlow (2013) provide a basic link to connect farmers to retailers and consumers. However, only a few studies have been done to analyze the historical financial performance of these food processors. They also perform an interim analysis to compare the return on capital between farm businesses and all businesses. The

Du Pont analysis shows that the higher return on capital of agricultural enterprises is mainly due to higher turnover rates, indicating increased operational efficiency of the agri-food industries. The food industry's strong financial performance makes them valuable in an investment portfolio. The authors' findings show that the agri-food industry outperforms all businesses in terms of key financial indicators. Suvvari, A., S., R. and Goyari, P. (2019), Traditional statistical methods to examine the financial performance of an industry face many obstacles and limitations in the statistical distribution of financial reasons, especially consider your positive values. The purpose of this paper is to estimate the financial performance of 24 Indian life insurance companies for the 2013-2016 period using Deng's proposed gray relational analysis (1982), which takes into account negative values of the analysis. The financial performance of 24 Indian life insurance companies for 2013-2014 to 2015-2016 will be assessed using 14 indicators of capital adequacy, liquidity indices, operational indices and market index. profitability. This study has significant practical implications in two ways: first, they need to focus more on public relations so that the life insurance industry in India improves their financial health and second, they must ignore value indices. González, Idrobo and Taborda (2019) wish to carry out a meta-regression of the literature dealing with relations between the family business and financial performance. Overall, there was a positive correlation among family involvement and financial performance. Several ROA (Earnings Before Interest, Taxes, Depreciation and Amortization) (EBITDA) results in positive publication bias due to family definition and negative publication bias when using MLS. Mbona and Yusheng (2019) analyzed the fact that China's telecommunications sector has grown rapidly over the years since 2001. A principal component analysis was performed to obtain variables with a significance value greater than 0.5 for each component. The use of PCA provides unbiased proportions that are more important for performance evaluation.

Kazan and Tansel (2006) must use their resources efficiently and productively to survive in an increasingly competitive globalized economy. A total of 200 manufacturing companies registered at the Gebze Chamber of Commerce in Turkey were selected and their managers interviewed. According to the analysis of the size of the company, the end result is that the impact of quality and cost flexibility on financial performance is greater for large companies compared to SMEs. Chan and Abdul-Aziz (2017), studies to characterize the financial performance and identify the operational strategies of real estate development companies in Malaysia during the 2008 global financial crisis. A detailed review of financial and annual reports of 35 real estate development companies listed on the Kuala Lumpur Stock Exchange is included in the study method. The financial statements are analyzed to determine the financial performance of these businesses and to assess the extent of the revenue and earnings effect of GFC. The study presented in this paper is the first to analyze the financial performance of listed real estate development companies in Malaysia during the GFC 2008 and to link their financial performance with their operational strategies.

Rushinek, A. and Rushinek, S. (1995) presented a case study demonstrating the analysis of the relationship between financial statements (FSNA). It also illustrates a FSRA software based on a microcomputer that accelerates, facilitates and supports the achievement of set goals. FSRA software uses sector financial databases, calculates financial indices and generates forecasting models. Hofmann, E. and Lampe, K. (2013). Despite the importance of financial information for providers of logistics services, recent research pays little attention to the logistics service providers ' financial analysis. The intention of this paper is to examine the pay structure of language service providers to determine if there are differences between individual providers or groups (groups) of defined language service providers. Financial analysis provides information for strategic decisions such as internal growth, outsourcing, mergers and acquisitions or collaboration between LSP. This paper contributes to other performance reviews of language service providers by providing a comprehensive pay analysis with potential benefits for logistics managers, analysts and researchers.

3. Need for the study

Transport sector play a crucial role in the development of an economy. The development role it undertakes determines the pace of development of the economy. The Indian Tyre Industry is an integral part of the Auto Sector and its fortunes depend on those of the players in the Automobile. The industry has knocked a turnover of around Rs. 47,000 Cr for the year 2013-14. Of which 90-95% came from the domestic market. While there are around 40tyre manufacturers in India, the top 10 tyre players account for around 90-95Percent of the total tyre production in India. Increasing passenger vehicle and commercial vehicle sales in developing countries and a strong demand for replacement tyres, mean that players in the automotive tyre industry have huge opportunities. It has emerged as one of the world's most competitive markets, and with the emergence of new technologies, state-of - the-art production facilities, and raw material accessibility, the industry is poised to expand further.

4. Statement of Problem

The financial performance analysis expected through the traditional financial ratios can forecast firms ' financial performance, and many subsequent studies have attempted to show the predictive value of different approaches to estimate actual business performance. In an attempt to validate the use of financial ratios to predict a company's financial performance, many research projects were undertaken. Literature reviewed and found the literature describing the methods and hypotheses for assessing and forecasting financial performance and revealed that while methods have become increasingly complex, few researchers have adequately addressed the problems associated with the sample used. Many researchers argued that the only way to assess future financial performance is through the inclusion of subjective measures. Lasher (2005) debt ratios show how effectively the organization uses other people's money and whether it is using a lot of borrowed money. Ross et al. (2007) expressed the concern that most researchers divide financial ratios into four groups, i.e., profitability, solvency, liquidity and activity ratios. Lermack (2003) showed the benefits of financial ratios analysis. He showed that financial ratios are an important and well-established technique of financial analysis. As for the benefits of financial ratios analysis, Brigham and Ehrhardr (2010) stated that financial ratios are designed to help evaluate financial statements. Financial ratios are used as a planning and control tool, and financial ratios analysis is used to evaluatethe performance of an organization. The study seeks to answer the research question:

- What are the norms, industry figures, and peculiarities in the IT sector of the Indian market?
- How effectively using liquidity, activity, leverage, profitability, and market value ratios for financial performance analysis?
- Is it possible to conduct the study for inter and intra firm comparison of tyre manufacturing firms in India.

5. Methodology

Research methods are the specific procedures or techniques used to identify, select, process, and analyze information about a specific area of the study. The DuPont system helps the analyst to see how the firm's decisions and activities over the course of an accounting period interact to produce an overall return to firm's shareholders, the ROE. Moreover, according to Brigham and Houston (2009), it is a formula that shows that the rate of return on equity can be found as the product of profit margin, total assets turnover, and the equity multiplier. It shows the relationships among activity, leverage and profitability ratios.

5.1. Objectives

To analyse the liquidity and profitability analysis of selected tyre manufacturing firms. To analyse the financial position and operating efficiency of selected tyre manufacturing firms.

5.2. Sample Design

In order to identify the sample among the tyre producing companies, using stratified sampling techniques has been adopted. Initially, to identify the population of 32 companies which are listed in Bombay Stock Exchange in automotive tyre producing companies were selected. Then after screening the companies audited annual reports having the incomplete data and insufficient information available were not included in the sample and finally six firms were selected. For the purpose of the study has met the criterion of market capitalization represents more than Rs. 5000 crores were selected and included in the sample.

5.3. Tools for Analysis

Ratio analysis widely utilized techniques for measuring their financial performance aspects or financial statement analysis. The ratio is a numerical or quantitative relationship between two items or variables. All financial ratios based on cost structure or cost as a percentage re-presented to the net sales. The respective financial ratios in addition to work out simple percentage and descriptive statistics for further calculation of the variables.

6. Scope of the study

Each and every study has its own scope. This study intends to study the liquidity, profitability, market based ratios, activity and leverage ratios of selected tyreproducing firms in India. The study has presented the financial performance in the overall aspects financial indicators through ratio techniques of selected automobile companies. The study was taken up to analyze the overall trends in selected financial indicators and its performances of selected automotive tyre producing by linking up the relevant aspects of financial ratio techniques. The scope is to extend embraces on various aspects of industry's performance covering a period of ten years from 2008-09 to 2017-18.

7. Data Analysis and Interpretation

The ratio based on sales is important indicator of the operational efficiency of a manufacturing enterprise. A low ratio is favorable. A high ratio indicates that only a relatively small percentage share of sales is available for meeting financial liabilities.

7.1. Liquidity Position

The current ratio measure is a measure of liquidity and efficiency that measures a company's ability to pay its current liabilities with its short-term assets. The current measure is an important measure of liquidity, with short-term debt maturing in the next year. Current assets, such as cash, cash equivalents and securities issued, become easily cash in the short term. This meant that companies were gaining in terms of terms easily and easily. The short-term relationship is the result of the division of short-term assets into short-term liabilities.

Table 1. Current Ratio

Company	AppoloTyres	CEAT	Goodyear India	JK Tyres	MRF	TVS	Average
2008-09	0.99	0.78	0.96	0.84	1.62	1.50	1.12
2009-10	1.00	0.95	1.07	0.83	1.58	1.20	1.11
2010-11	1.06	1.14	1.13	0.78	1.43	1.16	1.12
2011-12	0.99	1.16	1.19	0.78	1.52	1.12	1.13

2012-13	0.76	0.89	1.22	0.81	1.75	1.08	1.09
2013-14	0.72	0.75	1.26	0.84	1.48	1.07	1.02
2014-15	0.78	0.74	1.33	0.85	1.43	1.05	1.03
2015-16	0.79	0.79	1.41	0.85	1.50	1.01	1.06
2016-17	0.77	0.87	1.54	0.84	1.52	0.98	1.09
2017-18	0.81	0.97	1.81	0.82	1.41	0.99	1.14
Average	**0.87**	**0.90**	**1.29**	**0.82**	**1.52**	**1.12**	**1.09**
SD	**0.13**	**0.15**	**0.25**	**0.03**	**0.10**	**0.15**	**0.04**
CV	**14.61**	**16.82**	**19.09**	**3.20**	**6.80**	**13.68**	**3.68**
Max	**1.06**	**1.16**	**1.81**	**0.85**	**1.75**	**1.50**	**1.14**
Min	**0.72**	**0.74**	**0.96**	**0.78**	**1.41**	**0.98**	**1.02**

The current ratio of tyre manufacturing companies in India is shown in Table 4.1.The industry average current ratio of selected tyre manufacturing companies was 1.09 times. The standard deviation and coefficient of variation of industry average were 0.04 and 3.68 per cent. It shows that the moderate fluctuation found during the period of study. The industry average current ratio is found to be maximum of 1.14 times during the year 2017-18 and the minimum of 1.02 times during the year 2013-14.

Among the selected tyre manufacturing companies current ratio shows a fluctuating trend during the study period. The average current ratio among the selected tyre manufacturing companies shows the maximum of 1.52 times in MRF followed by 1.29 times in Goodyear India, 1.12 times in TVS, 0.90 times in CEAT, 0.87 times in AppoloTyres, 0.82 times in JK Tyres. The standard deviation of 0.25 per cent in Goodyear India shows the high fluctuation of selected tyre manufacturing companies under study. The coefficient of variation is found to be the maximum of 19.09 per cent in Goodyear India and minimum of 3.20 per cent in JK Tyres.

7.2. Profitability Position

Profitability ratios compare the categories of accounts and accounts to show that a company can generate profits at its size. Profitability measures focus on the company's performance in equities and other assets. These indicators are essentially to what extent companies can generate profits for their business activities. Investors and creditors can use profitability measures to measure a company's capital performance based on their relative levels of resources and assets.

Table 2. Return on Assets Ratio

Company	AppoloTyres	CEAT	Goodyear India	JK Tyres	MRF	TVS	Average
2008-09	17.49	15.07	36.94	7.54	7.40	12.50	16.16
2009-10	23.97	19.97	44.45	14.71	18.39	12.72	22.37
2010-11	13.37	4.46	37.18	9.63	13.25	14.56	15.41
2011-12	28.00	25.82	62.53	22.64	21.23	24.45	30.78

2012-13	12.79	9.67	47.88	10.99	23.54	27.67	22.09
2013-14	12.60	11.45	33.88	7.24	14.83	25.07	17.51
2014-15	17.14	19.72	25.23	12.53	19.29	14.53	18.07
2015-16	21.52	28.70	35.44	14.85	23.86	21.00	24.23
2016-17	25.65	25.79	32.70	16.25	22.40	33.46	26.04
2017-18	29.70	28.87	27.57	19.61	28.02	53.02	31.13
Average	**20.22**	**18.95**	**38.38**	**13.60**	**19.22**	**23.90**	**22.38**
SD	**6.44**	**8.54**	**10.88**	**5.04**	**6.03**	**12.44**	**5.71**
CV	**31.82**	**45.06**	**28.34**	**37.06**	**31.37**	**52.07**	**25.52**
Max	**29.70**	**28.87**	**62.53**	**22.64**	**28.02**	**53.02**	**31.13**
Min	**12.60**	**4.46**	**25.23**	**7.24**	**7.40**	**12.50**	**15.41**

The return on assets ratio of tyre manufacturing companies in India is shown in Table 2.The industry average return on assets ratio of selected tyre manufacturing companies was 22.38 per cent. The standard deviation and coefficient of variation of industry average were 5.71 and 25.52 per cent. It shows that the moderate fluctuation found during the period of study. The industry average return on assets ratio is found to be maximum of 31.13per cent during the year 2011-12 and the minimum of 15.41 per cent during the year 2009-10.

Among the selected tyre manufacturing companies return on assets ratio shows a fluctuating trend during the study period. The average return on assets ratio among the tyre manufacturing companies shows the maximum of 38.38 per cent in Goodyear India followed by 23.90 per cent in TVS, 20.22 per cent in AppoloTyres, 19.22 per cent in MRF, 18.95 per cent in CEAT, 13.60 per cent in JK Tyres. The standard deviation of 12.44 per cent in TVS shows the high fluctuation of selected tyre manufacturing companies under study. The coefficient of variation is found to be the maximum of 52.07 per cent in TVS and minimum of 28.34 per cent in Goodyear India.

7.3 Market Position Ratio

The Market Perspective is used to compare publicly traded stock prices with other financials, such as earnings and dividends. Investors use the market outlook to analyze stock price performance and to determine the current and future market value of a stock. In other words, the market outlook shows investors what to expect from their investment. The price-earnings ratio indicates what the market is willing to pay for a stock based on its current earnings. The risk capital relationship helps investors analyze how much they should pay for a stock based on their current earnings.

Table 3. Price – Earnings Ratio

Company	Appolo Tyres	CEAT	Goodyear India	JK Tyres	MRF	TVS	Average
2008-09	18.90	21.69	26.71	48.22	10.77	32.10	26.40
2009-10	11.72	9.37	36.55	12.74	4.98	30.35	17.62
2010-11	21.75	0.00	46.38	64.59	5.93	31.49	28.36
2011-12	9.25	8.63	22.96	8.92	4.22	26.86	13.47
2012-13	12.98	32.28	22.36	20.77	6.05	25.47	19.99

2013-14	14.22	49.00	26.04	109.97	1.72	27.15	38.02
2014-15	8.18	13.17	30.07	13.94	1.86	16.54	13.96
2015-16	8.67	14.74	22.96	15.65	1.59	27.00	15.10
2016-17	16.37	13.75	23.90	13.81	2.37	26.27	16.08
2017-18	12.24	10.45	23.62	14.56	1.83	24.45	14.53
Average	**13.43**	**17.31**	**28.16**	**32.32**	**4.13**	**26.77**	**20.35**
SD	**4.48**	**14.02**	**7.74**	**32.76**	**2.94**	**4.42**	**8.08**
CV	**33.36**	**81.00**	**27.49**	**101.39**	**71.04**	**16.51**	**39.72**
Max	**21.75**	**49.00**	**46.38**	**109.97**	**10.77**	**32.10**	**38.02**
Min	**8.18**	**0.00**	**22.36**	**8.92**	**1.59**	**16.54**	**13.47**

The price earnings ratio of tyre manufacturing companies in India is shown in Table 3.The industry average price earnings ratio of selected tyre manufacturing companies was 20.87 per cent. The standard deviation and coefficient of variation of industry average were 4.55 and 21.82 per cent. It shows that the moderate fluctuation found during the period of study. The industry average price earnings ratio is found to be maximum of 23.89 per cent during the year 2011-12 and the minimum of 7.97 per cent during the year 2009-10.

Among the selected tyre manufacturing companies price earnings ratio shows a fluctuating trend during the study period. The average price earnings ratio among the selected tyre manufacturing companies shows the maximum of 116.25 per cent in NLC followed by 103.61 per cent in SAIL,8.76 per cent in NFL, 8.16 per cent in RCFL,-0.39 per cent in FCTL, -0.07 per cent in MFL. The standard deviation of 9.59 per cent in MFL shows the high fluctuation of selected tyre manufacturing companies under study. The coefficient of variation is found to be the maximum of 41.40 per cent in NFL and minimum of -12789.81 per cent in MFL.

8. Findings

- The industry average Gross Profit Margin ratio of selected tyre manufacturing companies was 9.46 per cent. The standard deviation and coefficient of variation of industry average were 2.89 and 30.53 per cent. It shows that the moderate fluctuation found during the period of study.
- The industry average net profit margin of selected tyre manufacturing companies was 3.16 per cent. The standard deviation and coefficient of variation of industry average were 2.37 and 75.08 per cent. It shows that the moderate fluctuation found during the period of study.
- The industry average return on assets ratio of selected tyre manufacturing companies was 22.38 per cent. The standard deviation and coefficient of variation of industry average were 5.71 and 25.52 per cent. It shows that the moderate fluctuation found during the period of study.
- The industry average return on net worth ratio of selected tyre manufacturing companies was 17.69 per cent. The standard deviation and coefficient of variation of industry average were 6.16 and 34.83 per cent. It shows that the moderate fluctuation found during the period of study.
- The industry average earning per share of selected tyre manufacturing companies was 20.87 per cent. The standard deviation and coefficient of variation of industry average were 4.55 and 21.82 per cent.
- The industry average price earnings ratio of selected tyre manufacturing companies was 20.87 per cent. The standard deviation and coefficient of variation of industry average were 4.55 and 21.82 per cent.

- The industry average debtors turnover ratio of selected tyre manufacturing companies was 12.94 per cent. The standard deviation and coefficient of variation of industry average were 1.59 and 12.30 per cent.
- The industry average total assets turnover ratio of selected tyre manufacturing companies was 3 per cent. The standard deviation and coefficient of variation of industry average were 0.27 and 9 per cent.
- The industry average inventory turnover ratio of selected tyre manufacturing companies was 9.89 per cent. The standard deviation and coefficient of variation of industry average were 0.43 and 4.35 per cent.
- The industry average working capital ratio of selected tyre manufacturing companies was 3.02 per cent. The standard deviation and coefficient of variation of industry average were 0.24 and 7.90 per cent.
- The industry average debt -equity ratio of selected tyre manufacturing companies was 1.11 per cent. The standard deviation and coefficient of variation of industry average were 0.09 and 8.44 per cent.

9. Conclusion

The study has conducted financial performance analysis through the aspects of profitability, market based ratios, activity ratios, and leverage aspects. The study has sample of six companies wisely, Appolo Tyres, CEAT, Goodyear India, JK Tyres, MRF and TVS. The study has found that the tyre company's financial performance was good in during 2010-11 and 2014-15 and afterwards has started a sharp decline of their profitability performance. Higher variability market based ration has been gained by TVS, Appolo tyres and MRF. Return on Total Assets, Earning per share and size of the company has positive association as well as the strongest power of influencing factor to determining the economic value added of the automobile industry. This study concludes that selected sample companies have to consolidate in order to become strong, vibrant and also they have to concentrate on world class standard products, sustainable meet out the global competitive advantage.

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