Profitability Analysis of Tyre Industry

*Arun Kumar Gupta

Abstract

Profit is the primary motivation force for economic activity. Profit is the report card of the past, the inventive gold star for future, it is a very important aspect of business. Most business enterprises exist with the object of earning profit that drives business enterprises. It is indeed a magic eye that mirrors all aspects of entire business operations including the quality of output. The task of management is maximization of profit. The efficiency of business is measured by the amount of profit earned, greater the profit the more efficient the business is considered to be. Profit is the soul of the business, without it, business is lifeless. Modern management is engaged in the task of maximizing the profits.

Introduction

Profitability is the result of financial as well as operational efficiency. It is the outcome of all business activities. Measurement of profitability is a multi-stage concept. Here profitability based on sales has been analysed by calculating gross profit, net profit and operating ratios for the tyre companies under study namely: MRF Tyres, Apollo Tyres and JK Tyres.

Gross Profit Ratio

Table 1 showing gross profit ratio of the tyre companies under study for the period from 2010-11 to 2017-18.

Table 1 **Gross Profit Ratio of Tyre Companies under Study** (2010-11 to 2017-18)

(Ratio in Percentage)

| Year | MRF Tyres | Apollo Tyres | JK Tyres |
|----------|-----------|--------------|----------|
| 2010-11 | 16.82 | 14.65 | 17.94 |
| 2011-12 | 24.00 | 22.11 | 23.13 |
| 2012-13 | 21.46 | 15.35 | 18.46 |
| 2013-14 | 12.60 | 8.92 | 12.98 |
| 2014-15 | 9.11 | 42.48 | 7.31 |
| 2015-16 | 3.02 | 0.02 | 7.05 |
| 2016-17 | 2.26 | 0.65 | 9.04 |
| 2017-18 | (0.25) | (4.45) | 7.98 |
| Average | 11.13 | 12.47 | 12.99 |
| S.D. | 8.55 | 14.14 | 5.76 |
| C.V. (%) | 76.82 | 118.42 | 44.35 |

Source: Computed from Annual Reports and Accounts of the tyre companies under study for the period from 2010-11 to 2017-18.

Profitability Analysis of Tyre Industry

It can be visualized from the Table 1 that the gross profit ratio in MRF Tyres showed or decreasing trend throughout the period under study and varied within the range of 24.00 percent to (0.25%). The decreasing trend shows that the company was not able to manage the cost of goods sold as a result, cost of goods sold kept on increasing while the sales remained almost similar during this period. The gross profit ratio of the company cannot be regarded satisfactory because in such a case, the company cannot recover its operating expenses. The management of the company should try to control the cost of goods sold by reducing and controlling the various components of cost of production.

In the case of Apollo Tyres the gross profit ratio registered a decreasing trend throughout the period under study except for the year 2014-15. During the year 2010-11, the gross profit ratio was 14.65 percent which increased to 22.11 percent in 2011-12 but decreased to 15.35 percent in 2012-13 which came down further to 8.92 percent in 2013-14. After that, the gross profit ratio of Apollo Tyres sharply increased to 42.48 percent during the year 2014-15 but came down to 0.02 percent in 2015-16 which increased very slightly to 0.65 percent in 2016-17 but converted to loss i.e. -4.45 percent in the final year 2017-18. The average gross profit ratio in Apollo Tyres is found to be 12.47 percent for the period under study which can be regarded satisfactory provided that the other expenses are kept under control. It can be noted that Apollo Tyres failed to maintain the average rate of gross profit in the later years of study. Hence, it can be said that the gross profit ratio during the earlier years of study was satisfactory but it was highly unfavorable in the later years of study. The management should come forward to control the cost of production and efforts should be made to increase the rate of gross profit.

In the case of JK Tyres, the gross profit margin ratio though showed a decreasing trend but remained satisfactory in comparison to MRF Tyres and Apollo Tyres. The gross profit margin ratio fluctuated within the range of 23.13 percent (highest) in 2011-12 to 7.31 percent (lowest) in 2014-15. The gross profit ratio was 17.94 percent in 2010-11 which increased to 23.13 percent in 2011-12 but continuously decreased to 7.05 percent in 2015-16. However, the rate of gross profit again increased to 9.04 percent in 2016-17 denoting control over cost of production and favoring managerial efficiency but again the rate of gross profit marginally decreased to 7.98 percent in 2017-18. As a whole, the gross profit margin position of JK Tyres can be regarded highly satisfactory against the gross profit margin position of MRF Tyres and Apollo Tyres.

Comparing the variability of gross profit margin position of the companies under study, it is evident from the Table 1 that the gross profit ratio in Apollo Tyres was highly fluctuating as coefficient of variation was 118.42 percent for its ratio which is denoting an unfavorable position and a slight decrease in sales may adversely affect the profitability of the company. The variations in the gross profit ratio of JK Tyres can be regarded consistent as the coefficient of variation of gross profit ratio was 44.35 percent while the variation in gross profit ratio in MRF Tyres was also high at 76.82 percent.

Net Profit Ratio

Table 2 showing net profit ratio of the tyre companies under study for the period from 2010-11 to 2017-18.

Profitability Analysis of Tyre Industry

Table 2 Net Profit Ratio of Tyre Companies under Study (2010-11 to 2017-18)

(Ratio in Percentage)

| Year | MRF Tyres | Apollo Tyres | JK Tyres |
|----------|-----------|--------------|----------|
| 2010-11 | 2.40 | 2.30 | 1.81 |
| 2011-12 | 2.51 | 1.74 | 2.13 |
| 2012-13 | 5.10 | 2.92 | 2.57 |
| 2013-14 | 6.16 | 3.78 | 3.51 |
| 2014-15 | 3.57 | 2.15 | 1.63 |
| 2015-16 | 2.57 | 0.59 | 0.37 |
| 2016-17 | 4.31 | 1.88 | 1.85 |
| 2017-18 | 3.14 | 1.17 | 1.42 |
| Average | 3.72 | 2.07 | 1.91 |
| S.D. | 1.28 | 0.92 | 0.85 |
| C.V. (%) | 34.39 | 44.71 | 44.35 |

Source: Computed from Annual Reports and Accounts of the tyre companies under study for the period from 2010-11 to 2017-18.

It can be observed from the Table 2 that the net profit ratio in MRF Tyres registered a mixed fluctuating trend through out the period under study and varied within the range of 2.90 percent to 6.16 percent. During 2010-11 the gross profit ratio of MRF Tyres was negative signifying an adverse position but as compared to gross profit ratio, the net profit ratio showed a satisfactory position as the ratio was 2.90 percent which again implies non-operating incomes. The net profit ratio showed an increasing trend up to 2013-14 and reached up to 6.16 percent which can be regarded satisfactory and it can be said that the company kept the operating expenses under control. But after 2013-14 the net profit ratio of MRF Tyres showed a decreasing trend and declined to 2.57 percent in 2015-16 because of the reason of increase in the expenses and the sales could not increase in the same proportion. The ratio again increased to 4.31 percent in 2016-17 because of increase in sales and expenses remaining unchanged. Further in 2017-18 the ratio marginally decreased to 3.14 percent. The average net profit ratio of MRF Tyres had been 3.72 percent, though not satisfactory but adequate when compared to the average net profit ratio of other companies under study. The net profit ratio of MRF Tyres has shown consistency and not much of the variation as the coefficient of variation was found to be 34.39 percent which is the least in comparison to other companies under study.

In Apollo Tyres also, the net profit ratio has shown a mixed fluctuating trend through out the period under study. The net profit ratio in Apollo Tyres in 2010-11 was 2.30 percent which increased to 3.78 percent in 2013-14 but further declined to 0.59 percent in 2015-16. The declining trend of net profit ratio cannot be regarded favourable as the company fails to fulfill the expectations of shareholders.

Profitability Analysis of Tyre Industry

On the other hand, it also signifies under utilization of available capacity resulting into increased expenses. After 2015-16, the company had tried to control the expenses and to increase the sales and as a result the net profit ratio increased to 1.88 percent. Further during 2017-18, the net profit ratio decreased to 1.17 percent which again shows an inefficient management to maintain the required rate of return and a failure to control the expenses. The average of the net profit ratio of Apollo Tyres was 2.07 which is not satisfactory and signifies that the company is not in the position to take advantage of profitable situation. The fluctuation of net profit ratio was also high as shown by coefficient of variation. The variation in net profit ratio of Apollo Tyres were at 44.71 percent.

The net profit ratio in JK Tyres also showed a mixed fluctuating trend i.e., increasing cum decreasing. The net profit ratio in 2010-11 was 1.81 percent which increased to 3.51 percent in 2013-14 but decreased to 0.37 percent in 2014-15. The decreasing trend indicates that effects were not made to boost up the sales while the indirect expenses increased. The ratio increased to 1.85 percent in 2016-17 because of increase in sales revenue but further the ratio decreased to 1.42 percent in 2017-18. The average net profit ratio was 1.91 percent which is not at all satisfactory because in such a situation the company can not face any type of adversity. The variations in net profit ratio of JK Tyres were also high at 44.35 percent which should be controlled by management.

Operating Profit Ratio

Table 3 showing operating profit ratio of the tyre companies under study for the period from 2010-11 to 2017-18.

Table 3
Operating Profit Ratio of Tyre Companies under Study
(2010-11 to 2017-18)

(Ratio in Percentage)

| Year | MRF Tyres | Apollo Tyres | JK Tyres |
|----------|-----------|--------------|----------|
| 2010-11 | 0.93 | 0.52 | 1.97 |
| 2011-12 | 4.90 | 5.25 | 4.46 |
| 2012-13 | 1.26 | (0.82) | 1.05 |
| 2013-14 | 4.10 | 2.10 | 5.45 |
| 2014-15 | 1.65 | 1.45 | (0.98) |
| 2015-16 | (3.41) | (6.08) | (0.70) |
| 2016-17 | (3.71) | (4.73) | 2.73 |
| 2017-18 | (6.23) | (10.12) | 2.12 |
| Average | (0.30) | (1.55) | 2.01 |
| S.D. | 3.70 | 4.71 | 2.11 |
| C.V. (%) | (1233.3) | (303.86) | 104.91 |

Source : Computed from Annual Reports and Accounts of the tyre companies under study for the period from 2010-11 to 2017-18.

Profitability Analysis of Tyre Industry

It is evident from Table 3 that the operating profit ratio of MRF Tyres is highly unsatisfactory. Except for the years from 2011-12 to 2014-15 the operating profit ratio had been negative for the remaining years which shows that the operating cost was higher than the sales revenue. The ratio was highest at 4.90 percent in 2011-12 but lowest (6.23) percent in 2017-18. The average of the operating profit ratio was also negative as it was (0.30) percent. The negative ratio indicates that the cost of production was high and further enhanced by operating expenses. The company did not try to increase the sales. Though the sales also increased but not in the proportion of increase in operating cost. The variation in operating profit was also negative at the highest of 1233.33 percent which denotes a depressing operational efficiency of the company. The management of the company is required to pay attention to it and increase the sales as well as restrict and control the operating expenses.

The operating profit ratio position in Apollo Tyres is rather more worse than that of MRF Tyres. The operating profit ratio in Apollo Tyres was 0.52 percent in 2010-11 which increased to 5.25 present in 2011-12 denoting a favourable position but the ratio became negative at 0.82 percent in 2012-13 which shows that the operating cost was more than the sales revenue. Again in 2013-14 the ratio became positive at 2.1 percent and marginally declined to 1.45 percent in 2014-15. But after 2013-14 the operating cost showed an increasing trend is comparison to sales revenue and the operating profit ratio continuously declined in the form of operating loss and reached up to (10.12) percent in 2017-18 which again indicates mismanagement, improper planning and under utilization of the available resources. The extent of variation in operating profit of Apollo Tyres was negative 303.86% being less than that of MRF Tyres.

A study of operating profit ratio in JK Tyres shows a satisfactory position against the operating profit position of MRF Tyres and Apollo Tyres. Except for 2014-15 and 2015-16 the operating profit ratio had been positive which indicates that the sales revenue was higher than the operating cost. The operating profit ratio in JK Tyres during 2010-11 was 1.97 percent which increased to 4.46 percent in 2011-12 and again to 5.45 percent in 2013-14. The operating profit ratio in IK Tyres was (0.98) and (0.70) in 2014-15 and 2015-16 respectively. Looking at this situation, the management took the corrective steps and increased the sales in proportion to increasing operating cost. By these efforts the operating profit ratio increased to 2.73 percent in 2016-17 which slightly declined to 2.12 percent in 2017-18. The average ratio was 2.01 percent which can be regarded satisfactory when compared with MRF Tyres and Apollo Tyres. However, there are avenues where the operating cost can be controlled.

Conclusion

From this analysis, it can be concluded that the average gross profit ratio was lowest for MRF Tyres whereas average net profit was highest for MRF Tyres which shows that the company managed its liabilities better than other tyre companies under study. On the other hand, average gross profit ratio was highest for JK Tyres whereas average net profit was lowest, which shows that the company not manage its liabilities properly during the period under study.

It can be concluded that the variation in gross profit of MRF Tyres and Apollo Tyres were very high while it was moderate in the case of IK Tyres. As a whole, on the basis of inter company comparison, it can be said that the net profit position of MRF Tyres is satisfactory while the management of Apollo Tyres and JK Tyres should strengthen their efforts to improve the ratio.

Profitability Analysis of Tyre Industry

*Research Scholar **Department of Commerce Sunrise University Alwar**

References

- 1. Beam, T.J. 2018. Mix variance in gross profit analysis. Management Accounting (November):
- 2. Berman, N.D. 2016. Profit analysis practices in an oil refining company. N.A.A. Bulletin (July): 63-68.
- Fordon, J.V. 2018. Profit variations. The Accounting Review (October): 574-576. 3.
- 4. Ostalkiewicz, C.J. 2019. Market mix: The key to profitability. Management Accounting (January): 28-30.
- 5. Siddel, G.F. 2017. Standard gross profit analysis in a multi-product smaller company. N.A.A. Bulletin (November): 85-88.
- Troxel, R.B. 2018. Profit analysis in the grain merchandising industry. Management 6. Accounting (December): 30-32.
- Yurkee, W.H. 2017. Profit analysis by customers and products. N.A.C.A. Bulletin (September): 50-55.