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# A Study on Profitability Analysis of MRF Tyres

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***Abstract:*** *The need for financial ratio analysis in the context of India's tyre industry is critical due to the sector's unique challenges and competitive landscape. As the industry grapples with fluctuating raw material prices, regulatory changes, and increasing consumer demand, understanding financial health through ratios provides insights into operational efficiency, profitability, and risk management. Additionally, given the growing focus on sustainability and innovation, financial ratio analysis aids stakeholders in assessing the impact of strategic initiatives on overall performance. This analysis not only supports informed decision-making for investors and management but also enhances transparency and accountability within the rapidly evolving tyre market. This research paper, investigates the financial performance of MRF Company over a five-year period from 2019 to 2024, focusing on key profitability ratios. Utilizing metrics such as PBT Margin, Net Profit Margin, Return on Net Worth, Return on Capital Employed, Return on Assets, and Total Debt to Equity, the analysis reveals significant insights into the company's operational efficiency and financial stability. Overall, this study underscores MRF's commitment to enhancing profitability and optimizing resource utilization, while also highlighting the need for strategic adaptability in response to market dynamics. The insights derived from this analysis provide valuable information for stakeholders regarding the company's financial health and future growth potential.*

***Key Words:*** *Profitability Analysis, Financial Ratios, Tyre Industry, MRF Tyres.*

## 1. INTRODUCTION:

With a history spanning more than 70 years, MRF Tyres, formally known as Madras Rubber Factory, is one of India's top tyre manufacturers. Established in 1946 by K. M. Mammen Mappillai. Company located in Madras (now Chennai), started out making rubber balloons before switching to the production of tyres in the 1960s. This tactical change paved the way for MRF to diversify into a wide range of automotive goods. MRF has expanded tremendously over time and is now recognized as a leader in innovation and quality in the tyre sector. Since launching its initial tyre line in 1961, the company has expanded to produce tyres for two-wheelers, cars, and commercial vehicles. MRF has made significant investments in R&D, allowing it to implement cutting-edge technologies that improve the functionality and safety of its products. MRF increased its presence in the 1970s and 1980s by opening factories all over India and broadening its range of products. In addition to becoming popular in India, MRF was also making headway internationally by the 1990s. The brand won multiple awards for its dedication to quality, including the coveted Deming Prize for quality management. Currently, MRF is a major player in the global tyre market thanks to its extensive distribution network and multiple manufacturing facilities spread throughout India. The business is firmly established as a reliable name in the industry by maintaining its emphasis on innovation and sustainability.

## 2. RESEARCH METHODOLOGY:

This research study is carried out for determination and comparison of profitability of MRF tyres for the period of 2019-20 to 2023-24 by using financial ratios. For carrying out this research, researcher has used secondary sources of data like books, journals, research papers, research articles, reports and websites for collection of secondary data. This study is limited to the period of five years and limited to the profitability ratios considered for the study.

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## 3. OBJECTIVES OF THE STUDY:

- To determine profitability ratios of MRF tyre.
- To analyze and interpret profitability of MRF tyres.

## 4. DATA ANALYSIS AND INTERPRETATION:

**Table No. 4.1 Profitability Ratios of MRF Tyres from 2019-20 to 2023-24.**

| Ratios | 2019-20 (%) | 2020-21 (%) | 2021-22 (%) | 2022-23 (%) | 2023-24 (%) | Mean (%) | Standard Deviation (%) | % Change (2023-24 vs. 2019-20) |
|---|---|---|---|---|---|---|---|---|
| PBT Margin | 8.75 | 10.67 | 4.62 | 4.95 | 11.10 | 8.42 | 2.20 | 26.67% |
| Net Profit Margin | 8.72 | 7.84 | 3.40 | 3.61 | 8.27 | 6.17 | 2.14 | -5.15% |
| Return on Net Worth / Equity | 11.62 | 9.47 | 4.69 | 5.62 | 12.41 | 8.74 | 2.87 | 6.78% |
| Return on Capital Employed | 11.97 | 13.03 | 7.10 | 8.01 | 16.18 | 11.86 | 2.84 | 35.77% |
| Return on Assets | 7.28 | 5.61 | 2.85 | 3.39 | 7.72 | 5.61 | 1.55 | 5.50% |
| Total Debt/Equity | 0.09 | 0.06 | 0.15 | 0.14 | 0.10 | 0.10 | 0.03 | 11.11% |

### Trend Interpretation and Analysis

### 4.1. PBT Margin (%)

- **Trend**: The PBT margin has fluctuated, peaking at 11.10% in 2023-24, which shows a significant recovery from 4.62% in 2021-22.
- **Percentage Change**: Increased by 26.67% compared to 2019-20.
- **Interpretation**: The consistent growth in this margin over the last two years indicates improved operational efficiency and stronger profitability from core operations.
- **Mean**: **8.42%**
  - **Interpretation**: The mean PBT margin indicates that, on average, MRF retains about 8.42% of its revenue as profit before tax over the five-year period. This reflects the company's ability to manage its expenses and generate profit.
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- **Standard Deviation**: **2.20%**
  - **Interpretation**: A standard deviation of 2.20% suggests moderate variability in the PBT margin across the years. The fluctuations imply that while MRF is generally profitable, there are years with significant operational challenges or market conditions impacting profitability (notably the drop in 2021-22).

### 4.2. Net Profit Margin (%)

- **Trend**: The net profit margin showed a dip in 2021-22 but rebounded to 8.27% in 2023-24.
- **Percentage Change**: Decreased by 5.15% compared to 2019-20.
- **Interpretation**: Despite the rebound, the slight decrease from the initial year suggests that while the company is recovering, there may be external pressures affecting net profitability.
- **Mean**: **6.17%**
  - **Interpretation**: The mean net profit margin of 6.17% indicates that MRF earns approximately 6.17% of its revenue as net profit after all expenses. This is a decent figure that reflects overall profitability.
- **Standard Deviation**: **2.14%**
  - **Interpretation**: The standard deviation of 2.14% indicates some fluctuations in net profitability. This variability suggests that MRF may have experienced inconsistent net income due to factors like higher operational costs or exceptional expenses, particularly evident in the years of lower margins (2021-22).

### 4.3. Return on Net Worth / Equity (%)

- **Trend**: This ratio increased significantly from 5.62% in 2022-23 to 12.41% in 2023-24, indicating a strong return for shareholders.
- **Percentage Change**: Increased by 6.78% compared to 2019-20.
- **Interpretation**: The overall positive trend in return on equity reflects effective management of shareholder funds, translating to better profitability.
- **Mean**: **8.74%**
    - **Interpretation**: An average return on equity of 8.74% shows that MRF provides a reasonable return to its shareholders, indicating effective use of equity capital.
- **Standard Deviation**: **2.87%**
    - **Interpretation**: The relatively high standard deviation signifies a considerable variation in returns to shareholders. The peaks and troughs suggest that while MRF can deliver strong returns in some years, other years may fall short due to varying profitability levels and external factors affecting earnings.

### 4.4. Return on Capital Employed (%)

- **Trend**: This ratio shows significant growth, particularly in 2023-24, reaching 16.18%, indicating effective utilization of capital.
- **Percentage Change**: Increased by 35.77% compared to 2019-20.
- **Interpretation**: The sharp rise in return on capital employed is a strong indicator of operational efficiency and strategic investment, suggesting the company is generating more returns per unit of capital.
- **Mean**: **11.86%**
    - **Interpretation**: With a mean return on capital employed of 11.86%, MRF demonstrates effective use of capital to generate profits. This is an encouraging indicator of operational efficiency and strategic investment choices.
- **Standard Deviation**: **2.84%**
    - **Interpretation**: The standard deviation indicates variability in the effectiveness of capital utilization. The consistent rise in recent years points to improved management practices, but past fluctuations suggest that external factors or changes in operational strategy impacted performance at times.

### 4.5. Return on Assets (%)

- **Trend**: A steady increase in this ratio indicates improved asset utilization over time, reaching 7.72% in 2023-24.
- **Percentage Change**: Increased by 5.50% compared to 2019-20.
- **Interpretation**: This trend suggests that MRF is efficiently using its assets to generate profits, highlighting good operational management.
- **Mean**: **5.61%**
    - **Interpretation**: The average return on assets of 5.61% signifies how effectively MRF is using its assets to generate profits. This is a modest return, indicating that asset management is generally efficient.
- **Standard Deviation**: **1.55%**
- **Interpretation**: A lower standard deviation suggests stability in asset utilization, meaning that MRF's ability to generate returns from its assets has been relatively consistent. This consistency can instill confidence in investors regarding asset management practices.

### 4.6. Total Debt/Equity (X)

- **Trend**: The ratio shows slight fluctuations, but it remains low, indicating prudent financial management.
- **Percentage Change**: Increased by 11.11% compared to 2019-20.
- **Interpretation**: A low debt-to-equity ratio reflects a conservative approach to financing, suggesting lower financial risk and a stable capital structure.

- **Mean**: **0.10**
  - **Interpretation**: The mean ratio of 0.10 reflects a conservative capital structure, indicating that MRF is not heavily reliant on debt to finance its operations, which generally implies lower financial risk.
- **Standard Deviation**: **0.03**
  - **Interpretation**: The very low standard deviation indicates that this ratio has remained stable over the years. MRF's consistent approach to financing with minimal fluctuations suggests sound financial management and strategic planning in maintaining a low debt level relative to equity.

## 5. CONCLUSION:

Overall, MRF Company's financial ratios display a positive trend, with significant improvements in profitability and efficiency by 2023-24. The increasing returns on equity and capital employed indicate effective resource utilization, while the prudent debt management reflects stability. The slight fluctuations in net profit margin and other ratios suggest that while the company is generally on an upward trajectory, external market factors may still influence performance. The mean values across the ratios generally indicate positive financial health, suggesting that MRF has been successful in maintaining profitability, efficient capital use, and a stable capital structure. The standard deviations provide insight into the risk and variability associated with each ratio. Higher standard deviations (e.g., in PBT margin and return on equity) suggest periods of volatility, indicating that while MRF can achieve strong performance, it may also face challenges that affect consistency. In contrast, lower standard deviations (like those for total debt/equity and return on assets) point to more stable performance metrics, reinforcing confidence in the company's operational strategies. In summary, while MRF demonstrates robust financial performance, the variability highlighted by standard deviations indicates the need for continued vigilance and adaptability in responding to market conditions and operational challenges. The mean values reflect a generally positive trend, suggesting effective management practices that can sustain future growth and profitability.

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