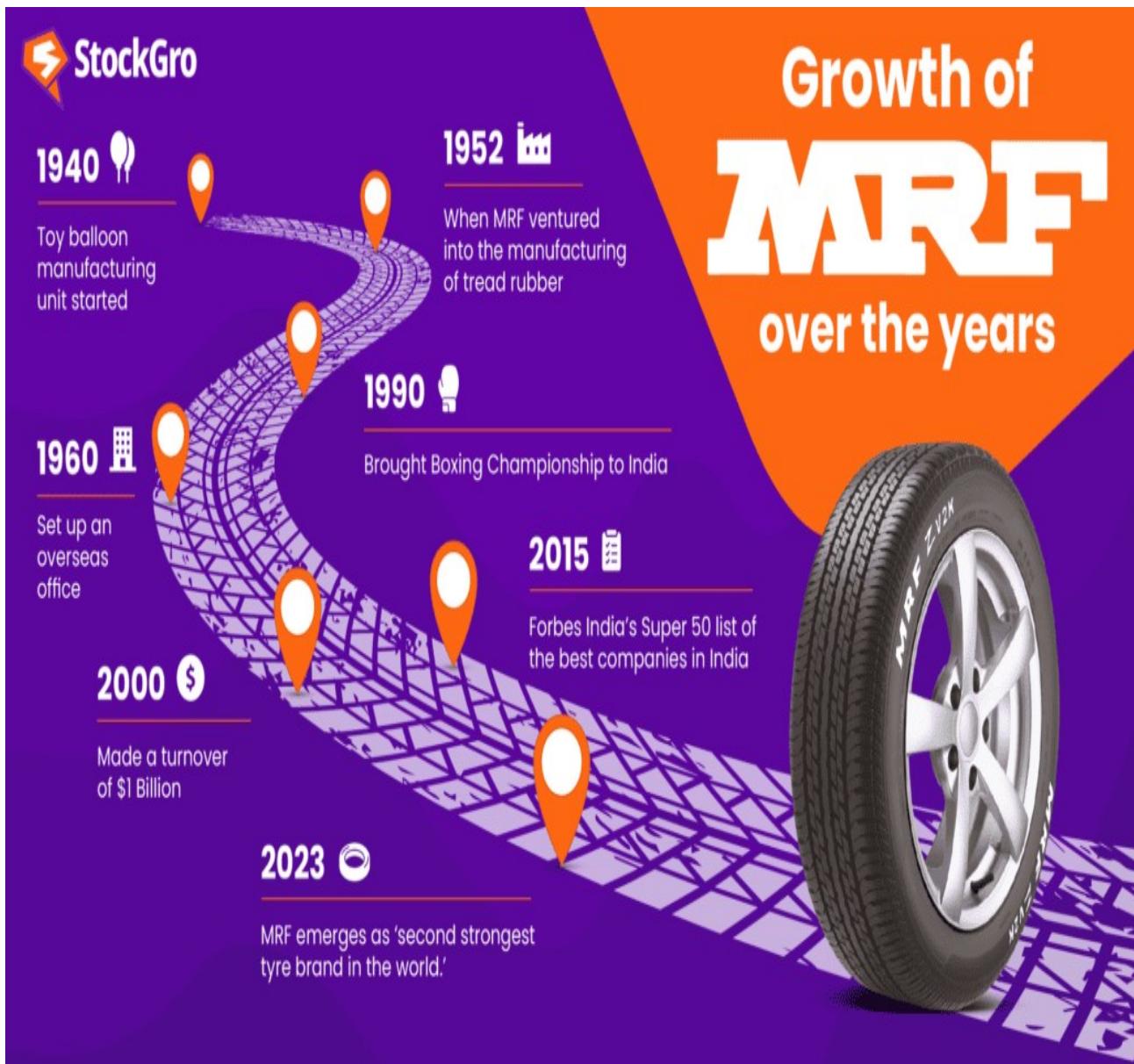




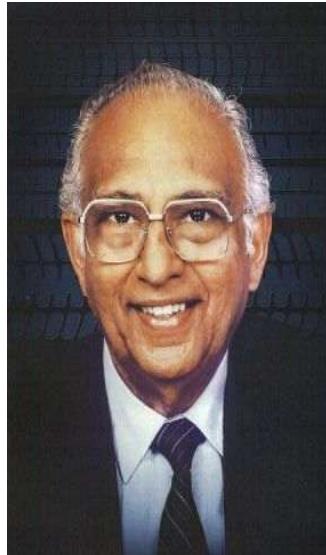
# Financial Modelling and Valuation Report

This report has been prepared solely for information purpose to demonstrate my financial modelling and valuation skills. It is not intended as an investment advice, and I shall not be held responsible for any decision made based on the information presented herein.



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**'Every problem is  
an opportunity  
in disguise'**

**KM Mammen Mappillai  
Founder of MRF**

#SuccessStories





# MRF

## MRF Case Study: From Balloons to Billion-Dollar Tyres — How MRF Earned the Highest Share Price in Indian Markets

### Company Overview

MRF (Madras Rubber Factory) is India's largest tyre manufacturer and a global exporter with operations in over 65 countries. Founded by K.M. Mammen Mappillai, the company began as a small balloon-selling venture and evolved into a multinational tyre and rubber product conglomerate. MRF is recognized today not only for its industrial dominance but also for holding the highest share price on the Indian stock exchange, currently exceeding ₹100,000 per share.

### Business Evolution & Market Expansion

MRF's growth story is rooted in strategic diversification, vertical integration, and relentless product innovation. Starting in 1946 with balloon manufacturing, the company pivoted to retread rubber by 1952, and full tyre production by 1956. Through technical collaborations with international players like Mansfield Tire & Rubber and later B.F. Goodrich, MRF developed in-house R&D capabilities, leading to the establishment of its own Rubber Research Centre in 1963.

MRF quickly expanded beyond commercial vehicle tyres into passenger cars, motorcycles, SUVs, and defence aviation (e.g., Sukhoi-30 tyres). The 2000s saw further diversification into industrial paints, conveyor belts, and toy manufacturing through partnerships with global brands such as Hasbro and Italian industrial firms.

### Financial Growth & Share Price Performance

MRF's financial trajectory is a textbook example of value creation through long-term strategy, conservative financial management, and disciplined capital allocation. Notably:

**Share price growth:** From ₹11 at IPO in April 1961 to ₹148,240 in 2025, delivering a ~13,476x return since listing.

**Bonus history:** Only two bonus issues ever (1970, 1975), with no stock splits since inception—leading to the highest per-share valuation in Indian markets.

**Export revenue:** Generates ₹2,321 crore (~\$280 million) in export revenue in FY 2024–25, marking a 23% YoY increase, with exports to 65+ countries.

**Market share:** Holds an estimated ~25% share in India's ₹1.4 trillion tyre market; ranks 2nd in domestic tyre sales with ₹23,500–24,000 crore in FY 2024–25 revenue.

**Valuation:** Share price exceeding ₹1.48 lakh places MRF's market capitalization above ₹3 lakh crore, reinforcing its brand strength and pricing power despite low trading volumes.

### Strategic Pillars of Growth

MRF's strategic framework in 2025 continues to reflect long-term vision and operational focus across key domains:

**Product-Market Fit:** Developed tyres specifically suited to Indian terrain and road conditions, with 2025 product extensions into EV-compatible and off-highway tyres addressing new-age mobility needs.

**Branding & Marketing:** Maintains iconic brand presence through long-term associations with Sachin Tendulkar and Virat Kohli; reinforced in 2025 through the "Muscle in Motion" campaign and engagement in motorsports and mobility expos.

**Export Leadership:** First Indian tyre company to export to the US (since 1967); by FY 2024–25, exports reached ₹2,321 crore across 65+ countries, with 23% YoY growth.

**R&D & Quality:** Pioneered nylon tyres in India; continuous innovation through its in-house Rubber Research Centre, now focused on EV tyres, advanced treads, and lightweight performance compounds.

**Diversification:** Reduced dependency on tyres by expanding into industrial paints, conveyor belts, and toys via international collaborations, adding product-level resilience and revenue diversification.

### Conclusion

MRF's ascent from a modest balloon business to a ₹3 lakh crore industrial powerhouse is driven by visionary leadership, disciplined financial management, strategic diversification, and global market expansion. Its distinctive no-split, no-bonus pricing strategy has preserved long-term share value, positioning MRF as the highest-priced stock in India. With FY 2024–25 revenues exceeding ₹28,500 crore and exports contributing ₹2,321 crore, MRF demonstrates how consistent financial prudence, product innovation, and brand credibility converge to deliver sustainable shareholder value in 2025.



**MRF**

All figures are in INR in crores unless stated otherwise

Historical Financial Statement - MRF LTD

Years	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	LTM
<b># Income Statement</b>						
Sales	₹ 16,162.49	₹ 19,316.65	₹ 23,008.33	₹ 25,168.73	₹ 28,152.50	₹ 28,153.18
Sales Growth	(0.46%)	19.52%	19.11%	9.39%	11.86%	
COGS	₹ 12,116.63	₹ 15,930.16	₹ 19,129.34	₹ 19,094.58	₹ 22,239.88	₹ 24,068.71
COGS % Sales	74.97%	82.47%	83.14%	75.87%	79.00%	85.49%
Gross Profit	₹ 4,045.86	₹ 3,386.49	₹ 3,878.99	₹ 6,074.15	₹ 5,912.62	₹ 4,084.47
Gross Margin	25.03%	17.53%	16.86%	24.13%	21.00%	14.51%
S & G Expenses	₹ 1,091.64	₹ 1,325.50	₹ 1,474.80	₹ 1,801.89	₹ 1,817.97	
S&G Expences %Sales	6.75%	6.86%	6.41%	7.16%	6.46%	0.00%
EBITDA	₹ 2,954.22	₹ 2,060.99	₹ 2,404.19	₹ 4,272.26	₹ 4,094.65	₹ 4,084.47
EBITDA Margin	18.28%	10.67%	10.45%	16.97%	14.54%	
Interest	₹ 281.64	₹ 262.80	₹ 326.45	₹ 361.03	₹ 367.77	₹ 360.03
Interest %Sales	1.74%	1.36%	1.42%	1.43%	1.31%	1.28%
Depreciation	₹ 1,140.77	₹ 1,205.05	₹ 1,253.04	₹ 1,429.97	₹ 1,653.55	₹ 1,653.55
Depreciation %Sales	7.06%	6.24%	5.45%	5.68%	5.87%	5.87%
EBT	₹ 1,531.81	₹ 593.14	₹ 824.70	₹ 2,481.26	₹ 2,073.33	₹ 2,479.00
EBT %Sales	9.48%	3.07%	3.58%	9.86%	7.36%	8.81%
Tax	₹ 459.77	₹ 238.69	₹ 300.78	₹ 706.19	₹ 609.71	₹ 609.71
Effective Tax Rate	30.01%	40.24%	36.47%	28.46%	29.41%	24.59%
Net Profit	₹ 1,277.06	₹ 669.23	₹ 768.93	₹ 2,081.22	₹ 1,869.28	₹ 1,869.28
Net Margin	7.90%	3.46%	3.34%	8.27%	6.64%	6.64%
No of Equity Shares	0.42	0.42	0.42	0.42	0.42	-
Earning per Share	₹ 3,040.62	₹ 1,593.40	₹ 1,830.79	₹ 4,955.29	₹ 4,450.67	-
EPS Growth %	(10.23%)	(47.60%)	14.90%	170.66%	(10.18%)	-
Dividend per share	₹ 151.43	₹ 176.67	₹ 201.90	₹ 237.24	-	-
Dividend Payout Ratio	36054.42%	42063.49%	48072.56%	56485.26%	0.00%	
Retained Earnings	-35954.42%	-41963.49%	-47972.56%	-56385.26%	100.00%	



**MRF**

All figures are in INR in crores unless stated otherwise

Historical Financial Statement - MRF LTD

Years	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	LTM
<b># Balance Sheet</b>						
Equity Share Capital	₹ 4.24	₹ 4.24	₹ 4.24	₹ 4.24	₹ 4.24	
Reserves	₹ 13,409.43	₹ 14,027.51	₹ 14,703.42	₹ 16,698.75	₹ 18,484.22	
Borrowings	₹ 2,388.23	₹ 3,228.95	₹ 3,013.61	₹ 2,821.50	₹ 3,771.16	
Other Liabilities	₹ 6,779.96	₹ 5,799.04	₹ 6,648.14	₹ 7,324.94	₹ 7,307.37	
<b>Total Liabilities</b>	<b>₹ 22,581.86</b>	<b>₹ 23,059.74</b>	<b>₹ 24,369.41</b>	<b>₹ 26,849.43</b>	<b>₹ 29,566.99</b>	
Fixed Assets Net Block	₹ 9,440.75	₹ 9,521.82	₹ 10,117.97	₹ 12,046.22	₹ 13,220.78	
Capital Work in Progress	₹ 1,002.23	₹ 1,233.07	₹ 3,045.86	₹ 2,384.53	₹ 1,168.63	
Investments	₹ 5,874.02	₹ 3,656.46	₹ 3,085.11	₹ 3,382.97	₹ 4,548.24	
Other Assets	₹ 1,010.70	₹ 1,929.91	₹ 1,217.66	₹ 1,309.79	₹ 1,257.82	
<b>Total Non Current Assets</b>	<b>₹ 17,327.70</b>	<b>₹ 16,341.26</b>	<b>₹ 17,466.60</b>	<b>₹ 19,123.51</b>	<b>₹ 20,195.47</b>	
Receivables	₹ 2,145.96	₹ 2,332.68	₹ 2,503.27	₹ 2,911.96	₹ 3,370.25	
Inventory	₹ 2,938.81	₹ 4,129.67	₹ 4,141.05	₹ 4,468.58	₹ 5,624.78	
Cash & Bank	₹ 169.39	₹ 256.13	₹ 258.49	₹ 345.38	₹ 376.49	
<b>Total Current Assets</b>	<b>₹ 5,254.16</b>	<b>₹ 6,718.48</b>	<b>₹ 6,902.81</b>	<b>₹ 7,725.92</b>	<b>₹ 9,371.52</b>	
<b>Total Assets</b>	<b>₹ 22,581.86</b>	<b>₹ 23,059.74</b>	<b>₹ 24,369.41</b>	<b>₹ 26,849.43</b>	<b>₹ 29,566.99</b>	
Check	TRUE	TRUE	TRUE	TRUE	TRUE	
<b># Cash Flow Statements</b>						
<b>Operating Activities</b>						
Profit from operations	₹ 3,019.00	₹ 2,144.00	₹ 2,447.00	₹ 4,351.00	₹ 4,171.00	
Receivables	₹ 35.00	₹ (188.00)	₹ (172.00)	₹ (409.00)	₹ (463.00)	
Inventory	₹ (34.00)	₹ (1,191.00)	₹ (11.00)	₹ (328.00)	₹ (1,156.00)	
Payables	₹ 1,608.00	₹ (1,250.00)	₹ 380.00	₹ 216.00	₹ 174.00	
Loans Advances	-	-	-	-	-	
Other WC items	₹ 212.00	₹ 120.00	₹ 439.00	₹ 195.00	₹ (265.00)	
Direct taxes	₹ (517.00)	₹ (213.00)	₹ (328.00)	₹ (722.00)	₹ (592.00)	
<b>Cash From Operating Activities</b>	<b>₹ 4,323.00</b>	<b>₹ (578.00)</b>	<b>₹ 2,755.00</b>	<b>₹ 3,303.00</b>	<b>₹ 1,869.00</b>	
<b>Investing Activities</b>						
Fixed assets purchased	₹ (853.00)	₹ (1,707.00)	₹ (3,291.00)	₹ (2,164.00)	₹ (1,308.00)	
Fixed assets sold	₹ 1.00	₹ 2.00	₹ 1.00	₹ 1.00	₹ 14.00	
Investments purchased	₹ (6,218.00)	₹ (650.00)	₹ (136.00)	₹ (446.00)	₹ (2,888.00)	
Investments sold	₹ 1,884.00	₹ 3,033.00	₹ 787.00	₹ 316.00	₹ 1,962.00	
Interest received	₹ 87.00	₹ 88.00	₹ 116.00	₹ 98.00	₹ 104.00	
Dividends received	-	-	-	-	-	
Other investing items	₹ 11.00	₹ (598.00)	₹ 601.00	₹ (187.00)	₹ 34.00	
<b>Cash From Investing Activities</b>	<b>₹ (5,088.00)</b>	<b>₹ 168.00</b>	<b>₹ (1,922.00)</b>	<b>₹ (2,382.00)</b>	<b>₹ (2,082.00)</b>	
<b>Financial Activities</b>						
Proceeds from debentures	-	-	₹ 150.00	-	-	
Redemption of debentures	₹ (160.00)	₹ (180.00)	-	-	-	
Proceeds from borrowings	₹ 484.00	₹ 1,086.00	₹ 8.00	-	₹ 920.00	
Repayment of borrowings	₹ (182.00)	₹ (87.00)	₹ (544.00)	₹ (353.00)	₹ (101.00)	
Interest paid fin	₹ (254.00)	₹ (236.00)	₹ (270.00)	₹ (290.00)	₹ (273.00)	
Dividends paid	₹ (42.00)	₹ (64.00)	₹ (64.00)	₹ (74.00)	₹ (85.00)	
Financial liabilities	₹ (98.00)	₹ (97.00)	₹ (121.00)	₹ (152.00)	₹ (181.00)	
Other financing items	₹ 2.00	₹ 1.00	₹ 1.00	₹ 2.00	₹ 2.00	
<b>Cash From Financial Activities</b>	<b>₹ (250.00)</b>	<b>₹ 423.00</b>	<b>₹ (840.00)</b>	<b>₹ (867.00)</b>	<b>₹ 282.00</b>	
<b>Net CashFlow</b>	<b>₹ (1,015.00)</b>	<b>₹ 13.00</b>	<b>₹ (7.00)</b>	<b>₹ 54.00</b>	<b>₹ 69.00</b>	

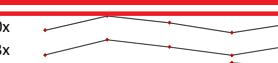
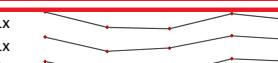
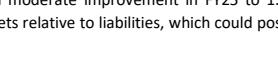
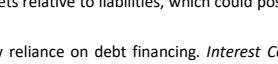
## Common size Statements - MRF Ltd



Years	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
<b>Income Statement</b>					
Sales	100.00%	100.00%	100.00%	100.00%	100.00%
Raw Material Cost	55.49%	69.56%	68.61%	60.65%	65.77%
Change in Inventory	(2.19%)	4.43%	1.51%	0.73%	2.10%
Power and Fuel	4.05%	4.82%	4.94%	4.56%	4.32%
Other Mfr. Exp	4.48%	4.74%	4.16%	4.24%	4.31%
Employee Cost	8.76%	7.78%	6.94%	7.15%	6.70%
Selling and admin	5.36%	5.76%	5.39%	6.16%	5.61%
Other Expenses	1.39%	1.10%	1.02%	0.99%	0.85%
Other Income	1.27%	1.63%	1.06%	1.22%	1.44%
Depreciation	7.06%	6.24%	5.45%	5.68%	5.87%
Interest	1.74%	1.36%	1.42%	1.43%	1.31%
Profit before tax	10.75%	4.70%	4.65%	11.07%	8.81%
Tax	2.84%	1.24%	1.31%	2.81%	2.17%
Net profit	7.90%	3.46%	3.34%	8.27%	6.64%
Dividend Amount	0.39%	0.33%	0.32%	0.34%	0.35%
<b>Balance Sheet</b>					
Equity Capital	0.02%	0.02%	0.02%	0.01%	0.01%
Reserves	59.38%	60.83%	60.33%	62.20%	62.52%
Total Equity	59.40%	60.85%	60.35%	62.21%	62.53%
Long term Borrowings	3.60%	3.54%	3.38%	2.70%	1.26%
Short term Borrowings	5.35%	8.68%	6.59%	5.03%	8.56%
Lease Liabilities	1.63%	1.78%	2.40%	2.78%	2.93%
Total non-current Liabilities	10.57%	14.00%	12.37%	10.51%	12.75%
Trade Payables	14.64%	8.92%	10.00%	9.88%	9.54%
Other liability items	15.38%	16.23%	17.28%	17.40%	15.17%
Total Current Liabilities	30.02%	25.15%	27.28%	27.28%	24.71%
Total Liabilities	40.60%	39.15%	39.65%	37.79%	37.47%
Total Liabilities and Equity	100.00%	100.00%	100.00%	100.00%	100.00%
Land	3.00%	2.94%	2.81%	2.63%	2.41%
Building	15.39%	16.07%	17.61%	19.02%	19.18%
Plant Machinery	37.29%	39.96%	41.47%	45.45%	47.60%
Equipments	3.31%	3.77%	3.99%	4.32%	4.39%
Computers	0.24%	0.25%	0.27%	0.30%	0.31%
Furniture n fittings	0.15%	0.16%	0.16%	0.16%	0.17%
Vehicles	0.72%	0.78%	0.88%	0.86%	0.82%
Other fixed assets	2.25%	2.38%	2.45%	2.59%	2.65%
CWIP	4.44%	5.35%	12.50%	8.88%	3.95%
Investments	26.01%	15.85%	12.66%	12.60%	15.38%
Total Non-Current Assets	41.81%	41.29%	41.52%	44.87%	44.72%
Inventories	13.01%	17.91%	16.99%	16.64%	19.02%
Trade receivables	9.50%	10.12%	10.27%	10.85%	11.40%
Cash Equivalents	0.75%	1.11%	1.06%	1.28%	1.27%
Loans n Advances	0.31%	0.33%	0.33%	0.37%	0.38%
Other asset items	4.16%	8.04%	4.67%	4.51%	3.88%
Total Current Assets	27.74%	37.50%	33.32%	33.65%	35.95%
Total Assets	100.00%	100.00%	100.00%	100.00%	100.00%

# Ratio Analysis - MRF Ltd



	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	Graph	Mean	Median
<b>Liquidity Ratios</b>								
Current Ratio	0.77x	1.16x	1.04x	1.05x	1.28x		1.06x	1.05x
Quick Ratio	0.34x	0.45x	0.42x	0.44x	0.51x		0.43x	0.44x
Cash Ratio	0.02x	0.04x	0.04x	0.05x	0.05x		0.04x	0.04x
Operating Cashflow	0.64x	(0.10x)	0.41x	0.45x	0.26x		0.33x	0.41x
<b>Solvency Ratios</b>								
Debt to Equity Ratio	0.18x	0.23x	0.20x	0.17x	0.20x		0.20x	0.20x
Debt Ratio	0.11x	0.14x	0.12x	0.11x	0.13x		0.12x	0.12x
Interest Coverage Ratio	6.44x	3.26x	3.53x	7.87x	6.64x		5.55x	6.44x
Equity Ratio	0.59x	0.61x	0.60x	0.62x	0.63x		0.61x	0.61x
Debt to Capital Ratio	0.15x	0.19x	0.17x	0.14x	0.17x		0.16x	0.17x
<b>Profitability Ratios</b>								
Gross Profit Margin	0.25x	0.18x	0.17x	0.24x	0.21x		0.21x	0.21x
Operating Margin	0.45x	0.25x	0.30x	0.47x	0.41x		0.38x	0.41x
Net Profit Margin	0.32x	0.20x	0.20x	0.34x	0.32x		0.27x	0.32x
Return on Assets	0.06x	0.03x	0.03x	0.08x	0.07x		0.05x	0.06x
Return on Equity	0.02x	0.01x	0.01x	0.03x	0.03x		0.02x	0.02x
Return on Capital Employed	0.11x	0.05x	0.06x	0.15x	0.11x		0.10x	0.11x
<b>Efficiency Ratios</b>								
Inventory Turnover Ratio	4.15x	4.51x	4.63x	4.44x	4.41x		4.42x	4.44x
Receivables Turnover Ratio	7.53x	8.28x	9.19x	8.64x	8.35x		8.40x	8.35x
Payables Turnover Ratio	4.89x	9.39x	9.45x	9.49x	9.98x		8.64x	9.45x
Asset Turnover Ratio	0.77x	0.85x	0.97x	0.98x	1.00x		0.91x	0.97x
Working Capital Turnover	(10.59x)	21.01x	90.35x	62.77x	13.64x		35.43x	21.01x
<b>Market Value Ratios</b>								
Earnings per Share	0.03%	0.01%	0.01%	0.04%	0.04%		0.03%	0.03%
Price to Earnings (in cr)	30.99	55.99	62.86	30.68	25.57		41.22	30.99
Dividend Yield	0.18%	0.27%	0.24%	0.18%	0.00%		0.17%	0.18%

Over the five-year period, MRF Ltd. has shown stable liquidity with the *Current Ratio* averaging 1.06x and a moderate improvement in FY25 to 1.28x, indicating better short-term solvency. However, the *Quick Ratio* (0.43x average) and *Cash Ratio* (0.04x) suggest limited immediate liquid assets relative to liabilities, which could pose working capital pressure if cash inflows slow down.

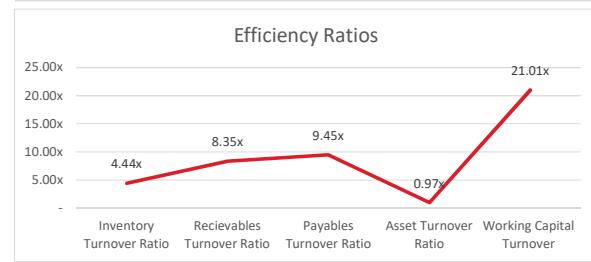
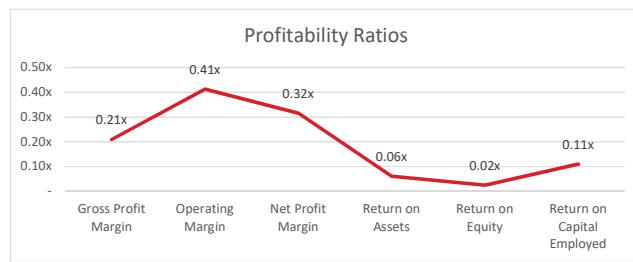
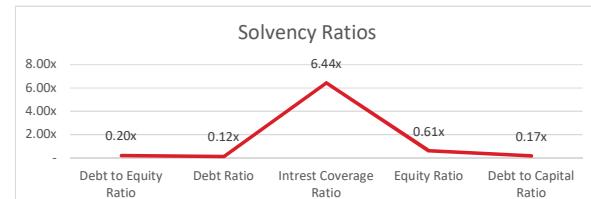
On the solvency side, the *Debt-to-Equity Ratio* remained conservative at an average of 0.20x, reflecting a low reliance on debt financing. *Interest Coverage* improved significantly in FY24–25 (7.87x and 6.64x), pointing to comfortable debt-servicing capacity. The *Equity Ratio* at ~0.61x further supports strong capitalization.

Profitability margins have been resilient. The *Net Profit Margin* averaged 27%, peaking at 34% in FY24 and FY25, while *Operating Margins* averaged 38%. *Return on Assets* (0.05x) and *Return on Equity* (0.02x) remain modest, suggesting scope for better asset utilization and shareholder returns.

Efficiency ratios depict stable operations with *Inventory Turnover* around 4.4x and *Receivables Turnover* ~8.4x. *Asset Turnover* improved from 0.77x in FY21 to 1.00x in FY25, signaling better revenue generation per asset unit.

From a market perspective, *Price-to-Earnings* (in ₹ crores) showed volatility, peaking at 62.86 in FY23 before easing to 25.57 in FY25, possibly reflecting improved earnings or moderated investor expectations. *Dividend Yield* stayed modest (0.17% average), aligning with a reinvestment-focused approach.

Overall, MRF has maintained strong solvency and operational efficiency, with improved liquidity in FY25. The steady profitability and prudent leverage position the company for sustainable growth, though returns on equity could be enhanced through improved asset productivity and strategic capital allocation.



## Relative Valuation - MRF Ltd



Company	Market Data					Financials			Valuation		
	Share Price	Shares Outstanding	Equity Value	Net Debt	Enterprise Value	Revenue	EBIDTA	Net Income	EV/Revenue	EV/EBITDA	P/E
in cr											
MRF Ltd	148060	0.42	62794.36	3771.16	66189.03	28152.5	4499.22	1869.29	2.35 x	14.71 x	33.61 x
Balkrishna industries Ltd	2745.3	19.33	53071.37	3267.45	56252.57	10446.95	2815.62	1654.96	5.38 x	19.98 x	34.96 x
Apollo Tyres	455.15	63.51	28906.62	4410.43	32419.55	26123.42	3671.04	1121.32	1.24 x	8.83 x	23.42 x
CEAT	3827.3	4.05	15481.46	2136.38	17564.6	13554.46	1511.29	429.49	1.30 x	11.62 x	33.75 x
JK Tyre & Industries Ltd	369.4	27.4	10122.3	4911.15	14322.07	14692.92	1677.21	509.31	0.97 x	8.54 x	19.59 x
TVS Srichakra	3187.1	0.77	2441.32	886.02	3310.13	3253.83	230.8	20.52	1.02 x	14.34 x	90.65 x
Good Year India	1012.45	2.31	2335.72	29.15	2170.72	2608.05	134.11	55.12	0.83 x	16.19 x	42.38 x
High									5.38 x	19.98 x	90.65 x
75th Percentile									1.82 x	15.45 x	38.67 x
Average									1.87 x	13.46 x	39.77 x
Median									1.24 x	14.34 x	33.75 x
25th Percentile									1.00 x	10.23 x	28.52 x
Low									0.83 x	8.54 x	19.59 x

MRF Ltd Comparable Valuation	EV/Revenue	EV/EBITDA	P/E
Implied Enterprise Value	34937.67	64527.74	66859.70
Net Debt	3771.16	3771.16	3771.16
Implied Market Value	31166.51	60756.58	63088.54
Shares Outstanding	0.42	0.42	0.42
<b>Implied Value Per Share</b>	<b>74205.97</b>	<b>144658.53</b>	<b>150210.80</b>
Data Source: Screener	Over Valued	Over Valued	Under Valued

# WACC of MRF Ltd



All figures are in INR in crores unless stated otherwise

Peer Comps								
Name	Country	Total Debt	Total Equity	Tax Rate	Debt / Equity	Debt / Capital	Levered Beta <sup>2</sup>	UnLevered Beta <sup>3</sup>
MRF LTD	India	3771.16	62794.36	25%	20.00%	5.67%	1.31	1.46
Balkrishna Industries LTD	India	3267.45	53071.37	22%	31.00%	5.80%	0.934	1.18
Appollo Tyres	India	4410.43	28906.62	28%	30.00%	13.24%	1.5	1.72
CEAT	India	2136.38	15481.46	25%	49.00%	12.13%	1.76	2.13
JK Tyre and Industries LTD	India	4911.15	10122.3	25%	101.00%	32.67%	1.66	2.42
		Average		24.90%	46.20%	13.90%	1.43	1.78
		Median		25.00%	31.00%	12.13%	1.50	1.72

Cost Of Debt	
Pre Tax Cost of Debt	9.75%
Tax Rate	25.00%
<b>After Tax Cost of Debt</b>	<b>7.31%</b>

Cost of Equity	
Risk Free Rate	6.31%
Equity Risk Premium	10.31%
Levered Beta <sup>4</sup>	1.57
<b>Cost of Equity</b>	<b>22.48%</b>

Capital Structure		
	Current	Target
Total Debt	3771.16	6.01% 12.13%
Market Capitalisation	62794.36	100.00% 87.87%
Total Capitalisation	66565.52	100% 100%
<b>Debt/Equity</b>	<b>6.01%</b>	<b>13.80%</b>

Levered Beta	
Comps Median Unlevered Beta	1.72
Target Debt/Equity	12.13%
Tax Rate	25.00%
<b>Levered Beta</b>	<b>1.57</b>

Weighted Average Cost of Capital	
Cost of Equity	22.48%
Equity Weight	87.87%
Cost of Debt	7.31%
Debt Weight	12.13%
<b>WACC</b>	<b>20.64%</b>

## Note:

1. The Risk Free Rate used in this valuation is 6.31% based on the yield of 10 year India Treasury Bill as of Mid July 2025

2. The figures for Company Total Debt, Total Equity, Levered Beta, and Marginal tax Rate are sourced from Screener, Top Stock Research and Google.

# Intrensic Growth of MRF Ltd



All figures are in INR in crores unless stated otherwise

Calculation of ROIC	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
<b>Current Assets</b>					
Inventories	2,939	4,130	4,141	4,469	5,625
Trade Receivables	2,146	2,333	2,503	2,912	3,370
Loans & Advances	70	75	80	98	111
Other Asset Items	940	1,855	1,138	1,212	1,146
<b>Total Current Assets</b>	<b>6,095</b>	<b>8,393</b>	<b>7,862</b>	<b>8,691</b>	<b>10,252</b>
<b>Current Liabilities</b>					
Trade Payables	3,306	2,057	2,436	2,653	2,822
Advance from Customers	0	0	0	0	0
Other Liability Items	3,474	3,742	4,212	4,672	4,485
<b>Total Current Liabilities</b>	<b>6,780</b>	<b>5,799</b>	<b>6,648</b>	<b>7,325</b>	<b>7,307</b>
<b>Net Working Capital</b>	<b>-685</b>	<b>2,594</b>	<b>1,214</b>	<b>1,366</b>	<b>2,945</b>
<b>Non Current Assets</b>					
Land	677	678	684	707	713
Building	3,476	3,705	4,292	5,106	5,672
Plant and Machinery	8,421	9,214	10,105	12,204	14,075
Equipments	747	869	973	1161	1299
Furniture and Fittings	34	37	39	42	49
Computers	54	57	67	80	91
Vehicles	163	180	214	231	241
Other Fixed Assets	507	548	598	696	783
<b>Gross Block</b>	<b>14,079</b>	<b>15,287</b>	<b>16,973</b>	<b>20,227</b>	<b>22,923</b>
Accumulated Depreciation	4,638	5,766	6,855	8,181	9,702
<b>Non Net Current Assets</b>	<b>9,441</b>	<b>9,521</b>	<b>10,118</b>	<b>12,046</b>	<b>13,221</b>
<b>Invested Capital</b>	<b>8,756</b>	<b>12,115</b>	<b>11,332</b>	<b>13,412</b>	<b>16,166</b>
<b>EBIT</b>	<b>1813.45</b>	<b>855.94</b>	<b>1151.15</b>	<b>2842.29</b>	<b>2441.1</b>
<b>ROIC</b>	<b>20.71%</b>	<b>7.07%</b>	<b>10.16%</b>	<b>21.19%</b>	<b>15.10%</b>

Calculation of Reinvestment Rate	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Net Capex	-852	-1705	-3290	-2163	-1294
Change in Working Capital		3,279	-1,380	152	1,579
EBIT	1813.45	855.94	1151.15	2842.29	2441.1
Marginal tax Rate	30%	25%	25%	25%	25%
EBIT(1-Tax)	1269.415	641.955	863.3625	2131.7175	1830.825
Reinvestment		1,574.00	(4,670.00)	(2,011.00)	285.00
<b>Reinvestment Rate</b>	<b>245.19%</b>	<b>-540.91%</b>	<b>-94.34%</b>	<b>15.57%</b>	

4 Years Average	-93.62%
4 Years Median	-39.39%

Calculation of Growth Rate	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Reinvestment Rate	0.00%	245.19%	-540.91%	-94.34%	15.57%
ROIC	20.71%	7.07%	10.16%	21.19%	15.10%
<b>Intrinsic Growth</b>	<b>17.32%</b>	<b>-54.95%</b>	<b>-19.99%</b>	<b>2.35%</b>	

4 Years Average	-13.82%
4 Years Median	-8.82%

# DCF - Valuation of MRF Ltd



All figures are in INR in crores unless stated otherwise

Calculation of Present Value of FCFF	Mar-25	Mar-26	Mar-27	Mar-28	Mar-29	Mar-30
EBIT	2441.1	2225.777	2029.448	1850.436	1687.214	1538.39
Tax Rate	25%	25%	25%	25%	25%	25%
EBIT(1-T)	1830.825	1669.333	1522.086	1387.827	1265.411	1153.792
Less: Reinvestment Rate	15.57%	-39.39%	-39.39%	-39.39%	-39.39%	-39.39%
<b>Free Cash Flow to Firm</b>	<b>1545.825</b>	<b>2326.803</b>	<b>2121.562</b>	<b>1934.425</b>	<b>1763.795</b>	<b>1608.215</b>
Discounting Factor	1	0.910428	0.754636	0.625503	0.518467	0.429746
<b>PV of FCFF</b>	<b>1545.825</b>	<b>2118.387</b>	<b>1601.007</b>	<b>1209.988</b>	<b>914.4685</b>	<b>691.1249</b>

Expected GrowthRate	<b>-8.82%</b>
Terminal Growth	<b>6.50%</b>

Calculation of Terminal Value	
FCFF (n+1)	1466.359338
WACC	20.64%
Terminal Growth Rate	6.50%
<b>Terminal Value</b>	<b>10366.82153</b>

## Sensitivity Analysis (Enterprise value)

	12%	14%	16%	18%	20%
2%	14663.59	12219.66	10474	9164.746	8146.441
4%	18329.49	14663.59	12219.66	10474	9164.746
6%	24439.32	18329.49	14663.59	12219.66	10474
8%	36658.98	24439.32	18329.49	14663.59	12219.66
10%	73317.97	36658.98	24439.32	18329.49	14663.59

## Sensitivity Analysis (Value of Share)

	12%	14%	16%	18%	20%
2%	14663.59	12219.66	10474	9164.746	8146.441
4%	18329.49	14663.59	12219.66	10474	9164.746
6%	24439.32	18329.49	14663.59	12219.66	10474
8%	36658.98	24439.32	18329.49	14663.59	12219.66
10%	73317.97	36658.98	24439.32	18329.49	14663.59

Calculation of Enterprise Value	
PV of FCFF	6534.975303
PV of Terminal Value	4455.105109
<b>Value of Operating Asset</b>	<b>10990.08041</b>
ADD: CASH	376
Less: Debt	3,771
<b>Value of Equity</b>	<b>7,595</b>
No Of Share	0.42
<b>Value per Share</b>	<b>17,908.88</b>

<b>Current Share Price</b>	<b>148060</b>
<b>Traded at Premium</b>	<b>7.27x</b>

## Assumptions

- The reinvestment rate and growth rate are taken from the intrinsic growth report, updated during mid July 2025
- The Terminal Growth Rate is based on India long term GDP growth rate

# Dupont Analysis - MRF Ltd

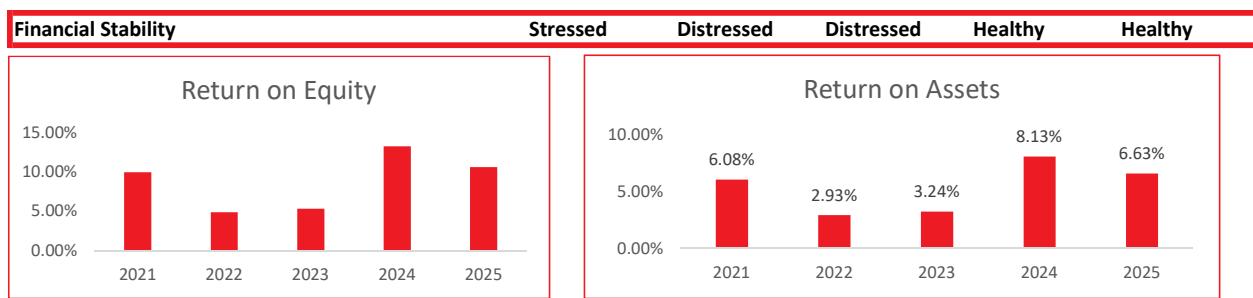


	Return on Equity (ROE)				
	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Net Profit	1277.06	669.23	768.93	2081.22	1869.28
Average Shareholder Equity	12814.19	13722.71	14369.705	15705.325	17595.725
<b>Return on Equity</b>	<b>9.97%</b>	<b>4.88%</b>	<b>5.35%</b>	<b>13.25%</b>	<b>10.62%</b>

	ROE - Dupont Equation				
	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Net Profit	1277.06	669.23	768.93	2081.22	1869.28
Revenue	16162.49	19316.65	23008.33	25168.73	28152.5
<b>Net Profit Margin</b>	<b>7.90%</b>	<b>3.46%</b>	<b>3.34%</b>	<b>8.27%</b>	<b>6.64%</b>
Revenue	16162.49	19316.65	23008.33	25168.73	28152.5
Average Total Asset	21012.1	22820.8	23714.575	25609.42	28208.21
<b>Asset Turnover Ratio</b>	<b>76.92%</b>	<b>84.64%</b>	<b>97.02%</b>	<b>98.28%</b>	<b>99.80%</b>
Average Total Asset	21012.1	22820.8	23714.575	25609.42	28208.21
Average Shareholder Equity	12814.19	13722.71	14369.705	15705.325	17595.725
<b>Equity Multiplier</b>	<b>1.64x</b>	<b>1.66x</b>	<b>1.65x</b>	<b>1.63x</b>	<b>1.60x</b>
<b>Return on Equity</b>	<b>9.97%</b>	<b>4.88%</b>	<b>5.35%</b>	<b>13.25%</b>	<b>10.62%</b>

	Return on Asset (ROA)				
	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Net Profit	1277.06	669.23	768.93	2081.22	1869.28
Average Total Asset	21012.1	22820.8	23714.575	25609.42	28208.21
<b>Return on Asset</b>	<b>6.08%</b>	<b>2.93%</b>	<b>3.24%</b>	<b>8.13%</b>	<b>6.63%</b>

	ROE - Dupont Equation				
	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Net Profit	1277.06	669.23	768.93	2081.22	1869.28
Revenue	16162.49	19316.65	23008.33	25168.73	28152.5
<b>Net Profit Margin</b>	<b>7.90%</b>	<b>3.46%</b>	<b>3.34%</b>	<b>8.27%</b>	<b>6.64%</b>
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<b>Return on Asset</b>	<b>6.08%</b>	<b>2.93%</b>	<b>3.24%</b>	<b>8.13%</b>	<b>6.63%</b>



# Dupont Interpretation - MRF Ltd



## 1. ROE Performance Overview (2021–2025)

MRF's Return on Equity (ROE) showed a dip and recovery trend over the five years. It declined from **9.97% in FY21** to **4.88% in FY22**, slightly improved to **5.35% in FY23**, and rebounded strongly to **13.25% in FY24** before settling at a still-strong **10.62% in FY25**. The turnaround reflects strong post-pandemic recovery and margin expansion in FY24 based on

## 2. DuPont Breakdown of ROE

MRF's ROE was primarily driven by **profit margin fluctuations**, while **asset turnover improved** and **leverage remained low**. In FY21, ROE of 9.97% was backed by a 7.90% margin and 0.77x turnover. Margins dropped below 3.5% in FY22–23, pulling ROE down to around 5%. The strong FY24 recovery was driven by an 8.27% margin and 0.98x turnover, yielding a 13.25% ROE. FY25 maintained efficiency but saw slightly lower margins, with ROE at 10.62%.

## 3. Efficiency and Leverage Effects on ROE

MRF steadily improved **asset turnover** from **0.77x in FY21 to nearly 1.00x by FY25**, indicating stronger operational efficiency. Meanwhile, its **equity multiplier** remained between **1.60x and 1.66x**, reflecting minimal use of debt. This conservative financial structure stabilized risk but limited ROE expansion via financial leverage.

## 4. ROA Growth and Operational Gains

Return on Assets (ROA) followed a similar pattern to ROE. It declined to **2.93% in FY22**, but improved sharply to **8.13% in FY24**, before moderating to **6.63% in FY25**. This growth in ROA was driven by better asset utilization and profit margins, supported by post-pandemic demand recovery and improved cost management.

## 5. Internal Strategies Driving Profitability

MRF's FY24 profit surge was attributed to improved capacity utilization, raw material cost stabilization, and disciplined pricing. The annual report also highlights higher export volumes and a focus on premium product segments as growth drivers. These internal measures significantly enhanced operating leverage and profitability.

## 6. Concerns Regarding Financial Stability

From FY22 to FY23, MRF experienced **financial distress**, with ROE and ROA dropping below acceptable benchmarks. However, the strong recovery in FY24 and FY25 marked a transition to a **healthy** financial position. Stability improved alongside profitability and asset utilization, backed by zero major debt exposure.

## 7. Liquidity and Capital Structure Considerations

MRF maintained a **strong liquidity position**, with estimated **current ratios above 1.3** and **low debt-to-equity (~0.06x–0.15x)**. The **stable equity multiplier** indicates restrained use of leverage. This conservative capital structure supports resilience but slightly caps return-enhancing opportunities from debt.

## 8. Strategic Recommendations & Long-Term Outlook

To maintain strong ROE, MRF should focus on **sustaining margins**, pushing **asset efficiency**, and cautiously using **moderate leverage** to enhance returns without compromising stability. With strong fundamentals, brand strength, and operational consistency, MRF is positioned for **long-term value creation**.

### Additional Sources

Moneycontrol – MRF Financial Ratios

Screener – MRF Ltd

MRF Annual Report 2024 (PDF)

Equitymaster – MRF Annual Report Analysis 2023–24

# Altmans's Z Score Analysis - MRF Ltd



Working Capital / Total Assets					
	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Working Capital	(515.00)	2,849.00	1,472.00	1,711.00	3,322.00
Total Assets	22,582.00	23,060.00	24,369.00	26,849.00	29,567.00
<b>Working Capital/ Total Assets</b>	<b>(2.28%)</b>	<b>12.35%</b>	<b>6.04%</b>	<b>6.37%</b>	<b>11.24%</b>

Retained Earnings / Total Assets					
	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Retained Earnings	(143.22)	(143.22)	(143.22)	(239.36)	(359.54)
Total Assets	22,582	23,060	24,369	26,849	29,567
<b>Retained Earnings/Total Assets</b>	<b>(0.63%)</b>	<b>(0.62%)</b>	<b>(0.59%)</b>	<b>(0.89%)</b>	<b>(1.22%)</b>

EBIT / Total Assets					
	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
EBIT	1813.45	855.94	1151.15	2842.29	2441.1
Total Assets	22,582	23,060	24,369	26,849	29,567
<b>EBIT/ Total Assets</b>	<b>8.03%</b>	<b>3.71%</b>	<b>4.72%</b>	<b>10.59%</b>	<b>8.26%</b>

Market Cap / Long Term Liabilities					
	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Market Cap	31,084	37561	55008	56068	63561
Longterm Liabilities	2,388	3,229	3,014	2,822	3,771
<b>Market Cap/ Longterm Liabilities</b>	<b>13.02x</b>	<b>11.63x</b>	<b>18.25x</b>	<b>19.87x</b>	<b>16.86x</b>

Sales / Total Assets					
	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Sales	16162.49	19316.65	23008.33	25168.73	28152.5
Total Assets	22,582	23,060	24,369	26,849	29,567
<b>Sales/ Total Assets</b>	<b>71.57%</b>	<b>83.77%</b>	<b>94.42%</b>	<b>93.74%</b>	<b>95.22%</b>

Altman's Z Score					
	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Final Score	8.75	8.07	12.11	13.26	11.45
Financial Stability	Safe	Safe	Safe	Safe	Safe

# Altmans's Z Score Analysis Interpretation - MRF Ltd



## In-depth Analysis of MRF Ltd's Altman's Z-Score Report and Strategic Implications

MRF Ltd has maintained a consistently strong Altman's Z-score above 8 over the last five years, peaking at 13.26 in FY24 before a modest decline to 11.45 in FY25. These values remain well within the "safe zone" (above 2.99), reflecting MRF's solid financial standing, minimal bankruptcy risk, and capacity for strategic expansion. The score affirms its resilience, backed by operational strength and conservative leverage.

### Understanding MRF's Altman's Z-Score Trajectory

MRF's Z-score trajectory shows a positive long-term trend, jumping from 8.07 in FY22 to 13.26 in FY24, primarily due to EBIT growth and asset efficiency. The slight softening to 11.45 in FY25, while still safe, may indicate plateauing profitability or rising liabilities, signaling the need for vigilant financial and operational control.

### How MRF Ltd Compares Within the Industry

Compared to peers like Apollo Tyres and JK Tyre, whose Altman scores generally range between 3–5, MRF's consistently high scores highlight its superior solvency and performance metrics. Its brand equity, strong export presence, and low debt levels place it at the top tier of the Indian tyre industry.

### Detailed Breakdown of MRF Ltd Key Financial Ratios within the Z Score

#### Working Capital / Total Assets

Improved significantly from **-2.28% in FY21 to 11.24% in FY25**, indicating strong improvements in liquidity and short-term financial strength.

#### Retained Earnings / Total Assets

Persistently negative, ranging from **-0.63% in FY21 to -1.22% in FY25**, showing historical dividend outflows or earlier accumulated losses, but offset by strength in other areas.

#### EBIT / Total Assets

Peaked at **10.59% in FY24**, and stood at **8.26% in FY25**, representing robust asset-based profitability and strong operating margins.

#### Market Capitalization / Long-Term Liabilities

Remained high throughout, from **13.02x in FY21 to 16.86x in FY25**, indicating strong investor trust and very low financial leverage.

#### Sales / Total Assets

Reached **95.22% in FY25**, suggesting that MRF has achieved excellent asset utilization and revenue efficiency.

### What MRF Ltd Should Do to Further Improve Its Z Score

MRF should aim to reduce its negative retained earnings and optimize its debt-equity mix. Channeling profits into reserve buildup and reducing dependency on debt-financing will further secure its financial foundation. Improving return metrics and reinvesting in higher-margin areas will also enhance overall scores.

### Focus on Asset Efficiency

With Sales/Total Assets above 95%, MRF showcases elite asset utilization. To maintain this, the company should invest in supply chain automation, better capacity planning, and inventory optimization. Asset-heavy sectors like manufacturing benefit immensely from continued operational fine-tuning.

### Innovation and Strategic Growth

Sustaining leadership requires bold, forward-thinking moves. MRF should invest more aggressively in R&D—especially in areas like EV tyres, sustainable materials, and AI-integrated tyre diagnostics. Strategic alliances and geographic expansion will also hedge against domestic slowdowns and broaden revenue streams.

### Conclusion

MRF Ltd's consistently high Altman's Z-scores signify a financially sound enterprise with ample room to innovate and grow. With solid fundamentals, efficient operations, and low financial risk, the company is positioned not only to sustain its industry dominance but also to explore next-gen opportunities with confidence.

### External Sources Considered

MRF Ltd Peer Comparison – Data from financial market platforms (Screener, Trendlyne, Tickertape).

Altman Z-Score Methodology and Benchmarks – Referenced from standard finance literature and analysis portals.

Industry Insights on Tyre Sector Players (Apollo, CEAT, JK Tyre) – Based on public financial disclosures.