

A Project Report on

EQUITY VALUATION OF HERO MOTOCORP LTD.

Submitted to



School of Innovation and Management (SoIM)

Approved by All India Council for Technical Education (AICTE)

Shaikpet, Hyderabad, India -500 008

PGDM (2023 – 2025)

Submitted by

I.SRAVYA (PGFS23003)

To

Dr. Narsimhulu Siddula
Associate Professor
School of Innovation and Management

TABLE OF CONTENTS

Chapter	Title	Page No
1	COMPANY INFORMATION	3
2	ECONOMY ANALYSIS	6
	2.1 GLOBAL ECONOMY ANALYSIS	6
	2.2 INDIAN ECONOMY ANALYSIS	7
3	INDUSTRY ANALYSIS	8
4	COMPANY ANALYSIS	11
5	FINANCIAL PROJECTIONS	19
6	EQUITY VALUATION USING ABSOLUTE VALUATION	20
	MODELS	
	6.1 DIVIDEND DISCOUNT MODEL	20
	6.2 FREE CASHFLOW MODEL	21
7	EQUITY VALUATION USING RELATIVE VALUATION	24
	MODELS	
	7.1 P/B RATIO MODEL	24
	7.2 P/E RATIO MODEL	25
8	CONCLUSION	28
9	REFERENCES	28
		I

1. **COMPANY INFORMATION**

Hero MotoCorp General Information

Hero MotoCorp Ltd. is an Indian originated multinational company established by Brijmohan Lall Munjal who manufacture motorcycles, scooter and other spare parts. With a overall market share of 48% in motorcycle and 32% exclusively in two-wheeler market, this company is the major player in the Indian two-wheeler market. The company is targeting to increase its market share to 40% by 2025. The company is also heavily investing in the new technologies such as electric vehicles. While the company has its major revenue from India, Hero has its operations in Latin America, South Asia, Africa and the Middle East but mainly manufactures and assembles domestically. As of October 8, 2023, the market capitalization of Hero MotoCorp Ltd. is ₹60,711.89 crores. This makes Hero MotoCorp the 8th most valuable company in the Indian automobile sector by market capitalization.

History

Hero started its operations from the year 1984 as a joint venture between Hero Group and Honda of Japan named as Hero Honda Motors. Honda and Munjal both had 26% stake in the company. By December 2011, Hero terminated the joint venture by buying 26% stake of Honda. Honda also exited the joint venture after a series of off-market transactions. The rivalry arose between the two firms as Honda not openly sharing the technology related knowledge to Hero openly, restrictions on export to some countries like Nepal, Bangladesh, Sri Lanka as well as other partner's uneasiness of royal payouts to Japanese company Honda.

Formation of new company

The name of the company was changed from Hero Honda Motors Limited to Hero MotoCorp Ltd. on 29th July, 2011. Now Hero can export to other countries like Bangladesh, Nepal. Hero proposed on a joint venture with Niloy Motors in the next five years to set up manufacturing plant in Bangladesh. Niloy motors own 45% of the manufacturing plant and the rest owned by Niloy Motors. It possesses a total of 8 production facilities, with 6 situated in India, and one each located in Colombia and Bangladesh, a significant increase from just 3 units in FY12. In FY22, these facilities collectively have the capability to manufacture approximately 9.5 million units, a substantial growth from the 8.1 million units they could produce in FY16.

Formation of new EV brand 'Vida'

Hero MotoCorp Ltd. started a new EV brand 'Vida' has made investments of 420 crores that raised their investment in Ather Energy to 38% which they had partnered to increase EV space since 2016.

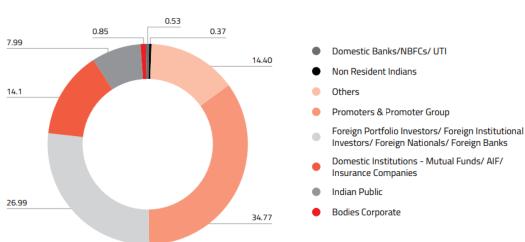
Company's new identity "Hero MotoCorp Ltd." is truly reflective of its vision to strengthen focus on mobility and technology and creating global footprint.

Sources of Finance used by Hero MotoCorp

Hero MotoCorp, the world's largest two-wheeler manufacturer, utilizes a diversified approach to fund its operations.

Equity:

- Hero MotoCorp primarily raises equity capital through common stock issued on the Indian stock exchanges.
- As of March 31, 2023, the company had a promoter holding of 34.77%.



Category wise shareholding as on March 31, 2023

Debt:

Hero MotoCorp taps into debt financing through various instruments, including:

• Term loans and other loans: Obtained from financial institutions at negotiated interest rates, providing readily available funds for specific projects or working capital needs.

• Debentures: Long-term bonds issued to investors, offering fixed or variable interest payments.

21. Borrowings

Particulars	As at	As at	
raiticulais	March 31, 2023	March 31, 2022	
NON-CURRENT			
Unsecured - at amortised cost			
Term loan from Banks	19.89	36.17	
Secured - at amortised cost			
Term loan from Banks	0.20	-	
	20.09	36.17	
CURRENT			
Unsecured - at amortised cost			
Other loans from banks	266.48	296.53	
Term loan from Banks	26.60	20.66	
Secured - at amortised cost			
Term loan from Banks	0.07	0.12	
	293.15	317.31	

Preference shares

Hero MotoCorp has not issued any preference share capital as of March 31, 2023 and March 31, 2022. The table shows an authorized amount of 4,00,000 cumulative convertible preference shares and 4,00,000 cumulative redeemable preference shares, both with a face value of ₹100 each.

(b) Preference share capital

Particulars	As at March 31, 2023	As at March 31, 2022
Authorised Preference shares capital		
4,00,000 (as at March 31, 2022 - 4,00,000) Cumulative convertible preference shares of ₹ 100 each	4.00	4.00
4,00,000 (as at March 31, 2022 - 4,00,000) Cumulative redeemable preference shares of ₹ 100 each	4.00	4.00
Total	8.00	8.00

Note: The Company has not issued preference share capital.

2. ECONOMY ANALYSIS

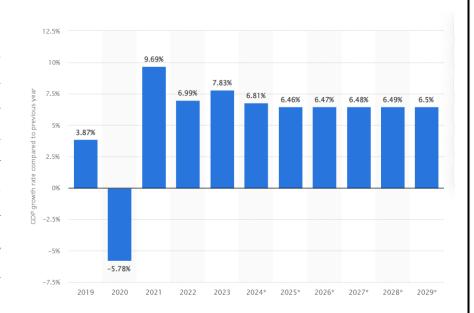
2.1. Global Economy Analysis

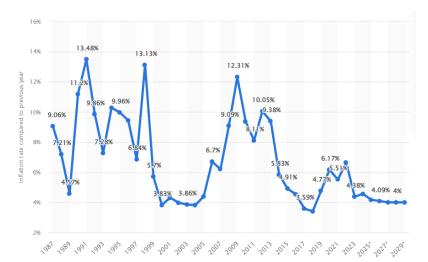
The global economy faced numerous challenges in 2022, grappling with high inflation, supply chain disruptions, volatile energy prices, and the Russia-Ukraine conflict. Central banks worldwide responded by raising interest rates to tackle inflationary pressures, leading to a moderation in demand and a slowdown in growth to 3.2% in 2022. Despite a resilient start in 2023, with a slight decrease in inflation projections to 7.0%, global recovery remains sluggish. Factors such as manufacturing weakness, diminished demand, heightened geopolitical tensions in the Middle East, and concerns over the spillover effects of China's property sector crisis contribute to subdued growth. Forecasts indicate a further slowdown, with global economic growth expected to decline from 3.5% in 2022 to 3.0% in 2023 and 2.9% in 2024. Advanced economies are anticipated to decelerate from 2.6% in 2022 to 1.5% in 2023 and 1.4% in 2024, while emerging and developing economies are expected to experience modest declines from 4.1% in 2022 to 4.0% in 2023 and 2024. Despite projections of declining global headline inflation from 8.7% in 2022 to 6.9% in 2023 and 5.4% in 2024, achieving the inflation target is unlikely until 2025. Overall, growth prospects appear strongest in emerging Asian countries, while the outlook for the US and Europe is less optimistic.



2.2. Indian Economy Analysis

India emerged as the world's fifth-largest economy in 2022, surpassing the UK, and remains among the fastest-growing major economies in FY 22-23. The Indian economy demonstrates resilience to external shocks, supported by government initiatives fostering higher growth than advanced economies.





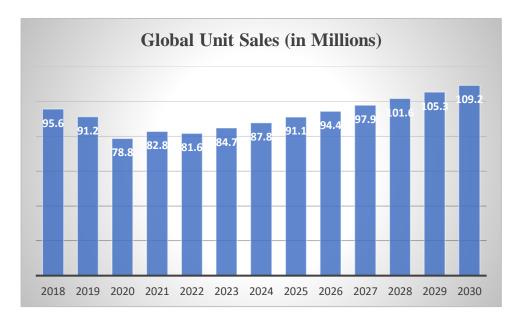
However, in FY22-23, CPI inflation remained elevated at 5.6% in March 2023, prompting a 250 bps interest rate hike. Despite challenges such as geopolitical tensions and global financial market volatility, India's economic fundamentals remain robust. Strong demand, significant

infrastructure investment, digitalization, and rising consumer disposable income drive growth. The Indian economy outperformed expectations in 2024, with GDP growth reaching 7.6%, surpassing forecasts driven by investment and government consumption. Projected GDP growth rates stand at 7.0% for FY 23-24, 6.7% in 2025, and 6.5% and 6.4% in 2025 and 3Q25, respectively. CPI inflation is projected to decline to 5.4% in FY23-24, following a decrease from 7.4% to 4.9% in Q2 23-24. Favourable indicators include increased household discretionary demand, robust investment activity, and positive export demand, despite global market volatility. According to S&P research, India's economic growth momentum is expected to continue at 6-7.1% during fiscal years 2024 to 2026.

3. INDUSTRY ANALYSIS

Global Automotive Industry

 The global automotive industry, valued at \$2.9 trillion in 2022, demonstrated a growth of 3.1% CAGR and is ranked first among all global manufacturing sectors by market size.

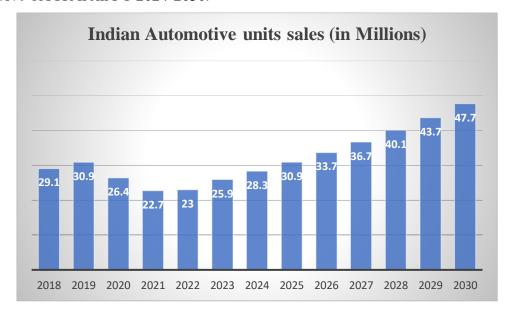


- Impact of the COVID-19 pandemic led to a consistent decline in growth from 2017 to 2022, with a slow recovery in the first half of 2022 due to semiconductor shortages, persistent inflation, and geopolitical tensions.
- A rebound in sales occurred in the second half of 2022 with the reopening of key markets such as the US, Europe, and China.
- Projected growth of the industry stands at 3.71% CAGR from 2020 to 2030, with Asia
 Pacific leading in market share due to technology adoption, followed by Europe and
 North America showing significant growth through the adoption of electric vehicles
 (EVs).
- Trends include the rise of EVs and autonomous vehicles, although high production costs may impede market growth.
- The global EV market, valued at \$452.36 billion in 2022, is projected to witness a 15.9% CAGR between 2023-2035, with China leading in sales, followed by APAC, Europe, and the Americas.



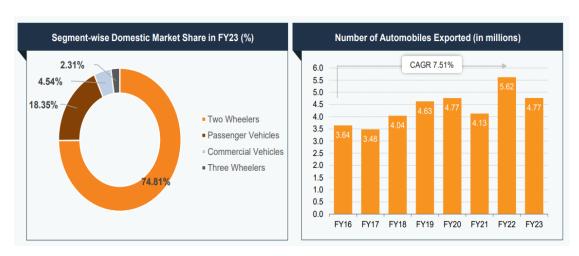
Indian Automotive Industry

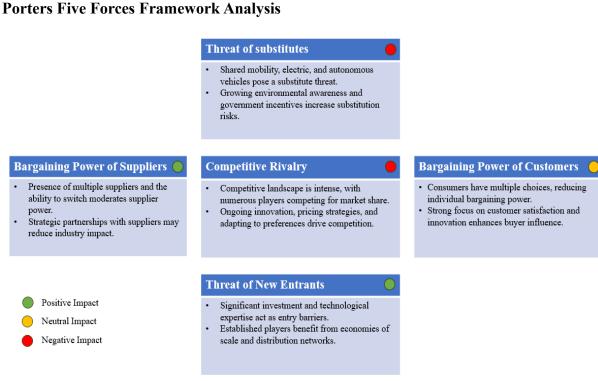
• India ranks as the fourth-largest automobile manufacturer globally, expected to grow at a 9.1% CAGR from FY 2024-2030.



- The sector contributes 7.1% to GDP and approximately 35% to India's manufacturing GDP, employing 19 million people directly and indirectly, with notable contributions to global R&D and exports.
- Revenue generation in FY23 reached 8.7 lakh crores, targeting a doubling to 15 lakh crores by 2024 and reaching 16-18 lakh crores by 2026.

- FDI inflow totalled \$35.4 billion from April 2000 to September 2023, with government initiatives like Make in India and the Automotive Mission Plan expected to drive sector revenue.
- India's cost advantages in operation compared to Europe and Latin America are projected to fuel growth, with transformations anticipated over the next decade including increased demand from developing nations, a shift toward EVs, and emphasis on economies of scale and cost-efficient manufacturing.
- India aims to lead in shared mobility by 2030, targeting 30% of new vehicle sales to be electric, with the EV sector projected to grow at a 49% CAGR from 2022 to 2030, supported by consumer awareness and technological advancements.





4. COMPANY ANALYSIS

Introduction:

Hero MotoCorp is a leading player in the Indian two-wheeler market, holding a significant share of both motorcycle and scooter segments. With a diverse product portfolio catering from entry-level to premium motorcycles and non-geared scooters, the company has established itself as a dominant force in the industry.

Market Share and Product Segments:

As of FY 2023, Hero MotoCorp commands a robust 33% share of the domestic two-wheeler market. Motorcycles form the bulk of the company's revenue, contributing 93% to the volume, with the deluxe segment being a standout performer, representing 77% of total motorcycle volume. The entry-level segment, which constitutes a substantial portion of the market, remains a stronghold for Hero MotoCorp, with brands like HF Deluxe, Splendor, Passion, and Glamour commanding around 60% market share. The premium segment, while currently representing only 2% of the product portfolio, is an area of strategic focus for future growth.

Scooter Segment and Electric Mobility:

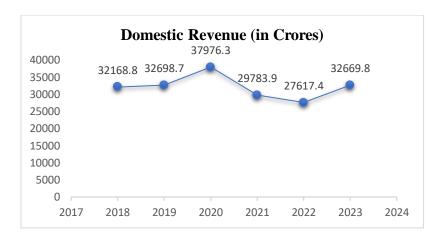
Despite contributing only 7% to the product portfolio, the scooter segment has shown promising growth, with sales increasing by 16.3% YoY. Hero MotoCorp has also ventured into electric mobility with the launch of its EV scooter brand, VIDA, aiming for expansion both domestically and globally.

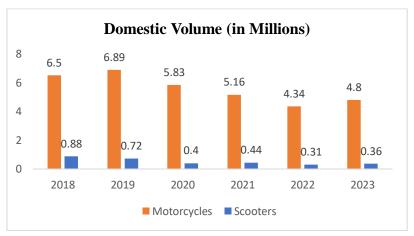
Parts, Accessories & Merchandise (PAM) Business:

The PAM business constitutes around 15% of total revenue, experiencing a robust growth of 23% YoY. The company is strategically expanding its distribution network to enhance product availability and drive revenue growth.

Domestic and Global Presence:

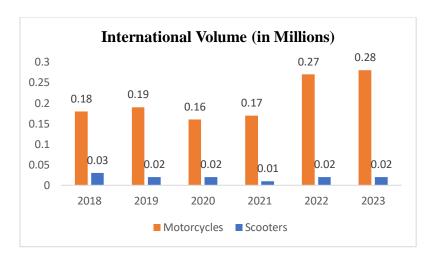
Hero MotoCorp is predominantly focused on the domestic market, deriving 97% of its volumes from India. The company boasts a strong distribution network with 7400+ touchpoints and is rapidly expanding its premium store network.





In global markets, Hero MotoCorp faces challenges due to declining exports, particularly in regions like Africa and Latin America. However, expansion plans into the UK and European countries with electric vehicles signify a strategic move towards global growth.





Key Growth Drivers and Future Strategies:

- Rural market demand remains a key driver, with Hero MotoCorp's strong secondary network effectively catering to this segment.
- The surge in premium segment demand, driven by urban youth and middle/upper-income groups, presents significant growth opportunities.
- Embracing e-commerce and achieving high retail finance penetration reflect the company's adaptability to changing market dynamics.
- Project Gold initiative aims at developing localized two-wheelers tailored to specific countries' needs, enhancing the company's global competitiveness.

Corporate Governance Analysis

Board Composition:

Hero MotoCorp's Board of Directors exhibits a well-diversified composition, comprising 5 Non-Independent and Non-Executive Directors, 8 Non-Executive Directors, and 3 Women Directors. The Board members possess diverse experience and subject-matter expertise, contributing to effective decision-making and oversight.

Leadership Team:

• Dr. Pawan Munjal, the Chairman and whole-time director, has been serving as MD and CEO since 2001. Under his leadership, Hero MotoCorp achieved and maintained the title of the world's largest manufacturer of motorcycles for 22 consecutive years. However, recent allegations of money laundering against Dr. Munjal have raised concerns. Despite ongoing investigations, the Delhi High Court's stay on further proceedings indicates a level of legal protection.

• Niranjan Gupta, appointed as CEO in March 2023, brings a financial background and expertise in M&A advisory. His proactive approach towards company growth is evident through the presentation of ideas and strategies aimed at further expansion.

Corporate Governance Challenges:

The allegations of money laundering against Dr. Pawan Munjal have brought scrutiny to the company's governance practices. While the legal proceedings are ongoing, the situation underscores the importance of transparency and accountability at the highest levels of leadership.

Key Governance Indicators:

- Board Independence: The presence of Independent Directors ensures a degree of objectivity in decision-making, contributing to effective oversight.
- Gender Diversity: With 3 Women Directors, Hero MotoCorp demonstrates a commitment to gender diversity in its leadership.
- Leadership Succession: The appointment of Niranjan Gupta as CEO signals a proactive approach towards leadership succession planning, ensuring continuity and stability.

Future Outlook:

- Despite the governance challenges, Hero MotoCorp's proactive measures in leadership succession and strategic planning under Niranjan Gupta's guidance suggest a commitment to navigating through turbulent times and achieving sustainable growth.
- Continued focus on transparency, ethical conduct, and regulatory compliance will be essential for rebuilding trust and safeguarding the company's reputation.

Financial Statement Analysis

Hero MotoCorp had a strong financial performance in 2023. They achieved their highest ever total revenue of Rs 34,371 crore, reflecting a 15.3% growth year-on-year. Sales volume also grew by 7.8% to 53 lakh units, driven by strong domestic demand in the deluxe motorcycle and scooter segments. Profit after tax (PAT) increased by 17.7% to Rs 2,911 crore. However, exports declined by 42.5% and return on average equity (ROAE) saw a slight decline of 12.24% compared to the previous year. Overall, 2023 was a positive year financially for Hero MotoCorp, despite some weakness in the export market.



Sales Volumes (In lakh)

53 lakh



Sales volume grew by 7.8% during FY 2022-23, deluxe segment increased by 15.9% and scooter segment increased by 16.3% while exports declined by 42.5%

Total Income (₹ in crore)

₹ 34,371 crore

FY 2022-23	34,371
FY 2021-22	29,802
FY 2020-21	31,380
FY 2019-20	29,614
FY 2018-19	34,342

Highest ever revenue, with 15.3% growth in Total income in comparison to the previous year

EBITDA (₹ in crore)

₹ 3,986 crore



EBITDA growth in comparison to the previous year was 18.3%

PAT (* in crore)

₹ **2,911** crore

FY 2022-23	2,911
FY 2021-22	2,473
FY 2020-21	2,964
FY 2019-20	3,633
FY 2018-19	3,385

PAT growth in comparison to the previous year was 17.7%

Earnings Per Share (₹)

₹ 146

FY 2022-23	146
FY 2021-22	124
FY 2020-21	148
FY 2019-20	182
FY 2018-19	169

EPS growth in comparison to the previous year was 17.7%

Return on Average Equity (%)

17.92%



RoAE growth in comparison to the previous year was 12.24%

DuPont Analysis

ROE (Return on Equity) increased from 14.76% in 2022 to 17.09% in 2023. The increase in ROE from 2022 to 2023 for Hero MotoCorp is primarily driven by improvements in ROA, efficiency of total assets, and net income margin. Better control of material expenses and more efficient utilization of assets played a significant role in this increase.

	DuPont Analysis - Drivers o	f Profitabil	lity (ROE)				
Sl. No.	Particulars	Unit of	March	March	March	March	March
31. NO.	rarticulars	Measure	31, 2023	31, 2022	31, 2021	31, 2020	31, 2019
1	ROE	%	17.09%	14.76%	19.50%	26.34%	26.19%
	Drivers of ROE						
2	ROA	%	12.07%	10.22%	13.73%	19.17%	18.73%
3	Leverage	Times	1.43	1.41	1.48	1.35	1.40
	Drivers of ROA						
4	Efficiency of Total Assets	Times	1.47	1.30	1.45	1.53	1.84
5	Net Income Margin	%	8.20%	7.88%	9.48%	12.51%	10.20%
	Drivers of Net Income						
6	Material Expense (% Revenue from Operations)	%	70.10	70.79	70.23	67.79	69.01
7	Labour Expense (% Revenue from Operations)	%	6.59	6.75	6.30	6.46	5.23
8	Depreciation and Amortization (% Revenue from Operations	%	2.04	2.33	2.31	2.89	1.84
9	Other Expenses (% Revenue from Operations)	%	11.33	10.80	10.22	11.87	10.98
10	Finance Expense (% Revenue from Operations)	%	0.31	0.18	0.15	0.16	0.11
11	Tax Expense (% Revenue from Operations)	%	3.11	2.47	2.95	3.25	4.82
	Drivers of Efficiency of Total Assets						
12	Efficiency of Current Assets	Times	3.41	2.69	3.09	3.43	4.04
13	Efficiency of Non-current Assets	Times	2.59	2.50	2.72	2.77	3.37
	Drivers of Efficiency of Non-current Assets						
14	PPE (Net Sales/PPE)	Times	6.62	5.52	5.58	5.06	7.09
15	Intangible Assets (Net Sales/Intangible Assets)	Times	65.88	91.97	97.21	174.24	212.51
	Drivers of Efficiency of Current Assets						
16	Inventory	Times	21.16	18.12	20.16	23.11	27.19
17	Accounts Recevables (A/R)	Times	14.01	13.33	16.35	13.74	12.38
18	Inventory-Holding Days	Days	17	20	18	16	13
19	Accounts Recevables (A/R) Collection Days	Days	26	27	22	27	29

Ratio Analysis

Profitability Analysis:

- Net Income Margin declined from 12.51% in 2020 to 8.20% in 2023, showing lower profitability. However, EBIT Margin remained fairly stable.
- Return on Assets (ROA) decreased from 19.17% in 2020 to 12.07% in 2023, indicating less efficient use of assets.
- Return on Equity (ROE) decreased from 26.34% in 2020 to 17.09% in 2023, suggesting lower returns for shareholders.

Efficiency Analysis:

- Efficiency ratios like Efficiency of Total Assets and Efficiency of Non-current Assets improved over five years, indicating better utilization.
- Efficiency of Current Assets increased from 3.09 in 2021 to 3.41 in 2023, implying better use of current assets.

Liquidity Analysis:

- Current Ratio declined from 2.02 in 2020 to 1.57 in 2023, suggesting slightly lower liquidity.
- Quick Ratio also decreased slightly but remained above 1, indicating good short-term liquidity.

Solvency Analysis:

- The Debt-to-Equity Ratio remained stable over five years, suggesting a consistent debt structure.
- The Interest Coverage Ratio improved, indicating better capacity to cover interest expenses.

Valuation Analysis:

- Price to Earnings (P/E) declined from 20.24 in 2021 to 16.69 in 2023, making the stock relatively cheaper.
- Price to Sales (P/S) ratio also decreased.

Overall, the company's profitability declined due to lower net income margins and ROA, but efficiency and liquidity improved. The stock became more attractively valued with a lower P/E ratio. Solvency remained consistent over the years.

Financial Statement Analysis: Ri	atio Analys	is				
Particulars	Unit of Measure	March 31, 2023	March 31, 2022	March 31, 2021	March 31, 2020	March 31, 2019
(A) Profitability Ratios						
Net Income Margin (PAT/Revenue from Operations)	%	8.20%	7.88%	9.48%	12.51%	10.20%
Return on Assets (ROA) or ROI (PAT/Avg. TA)	%	12.07%	10.22%	13.73%	19.17%	18.73%
Return on Networth/Equity (ROE) (PAT/ Avg. Equity)	%	17.09%	14.76%	19.50%	26.34%	26.19%
EBIT Margin (EBIT/Revenue from Operations)	%	9.94%	9.32%	10.93%	10.99%	12.93%
EBITDA Margin (EBITDA/Revenue from Operations)	%	11.98%	11.66%	13.24%	13.88%	14.77%
Return on Capital Employed (ROCE) (EBIT/Avg. CE)	%	19.48%	16.42%	21.16%	21.80%	31.17%
(B) Efficiency Analysis						
Efficiency of Total Assets (Net Sales/Avg. TA)	Times	1.47	1.30	1.45	1.53	1.84
Efficiency of Non-current Assets/Net Fixed Assets (Net Sales/Avg.NFA)	Times	2.59	2.50	2.72	2.77	3.37
Efficiency of Current Assets (Net Sales/Avg. CA)	Times	3.41	2.69	3.09	3.43	4.04
Inventory Efficiency Ratio (Net Sales/Avg. Inventory)	Times	21.16	18.12	20.16	23.11	27.19
Inventory-Holding Days (365/ITR)	Days	17	20	18	16	13
Accounts Recevables (A/R) Efficiency (Net Sales/Avg. TR)	Times	14.01	13.33	16.35	13.74	12.38
Accounts Recevables (A/R) Collection Days (365/DTR)	Days	26	27	22	27	29
Accounts Payables (A/P) Efficiency Ratio	Times	7.50	6.15	7.38	8.91	9.88
Payables Payment Days (365/APTR)	Days	49	59	49	41	37
Cash Conversion Cycle (CCC)	Days	-5	-12	-9	1	6
(CCC = Inventory Holding days + Receivables Collection Days - Payables Pa	yment Da	ys)				
Operating Cycle		43	48	40	42	43
(C) Liquidity Analysis						
Current Ratio (CA/CL)	Times	1.57	1.92	1.75	2.02	1.91
Quick Ratio (QA/CL)	Times	1.28	1.65	1.47	1.72	1.62
(D) Solvency Analysis						
Leverage (TA/SHF) Ratio	Times	1.43	1.41	1.48	1.35	1.40
Debt to Equity Ratio (Total Liabilities/Equity)	Times	0.43	0.41	0.48	0.35	0.40
Debt to Equity Ratio (LT Debt/Equity)	Times	0.07	0.06	0.07	0.06	0.06
Interest Coverage Ratio (EBIT/Finance Cost)	Times	32.38	51.89	72.92	68.94	118.18
Leverage (Avg. TA/Avg. SHF) Ratio	Times	1.42	1.44	1.42	1.37	1.40
(E) Valuation Ratios						
Price Earning (P/E) Ratio	Times	16.69	19.01	20.24	9.12	14.81
Price to Book Value (P/BV) Ratio	Times	2.80	2.75	3.80	2.28	3.85
Price to Sales (P/S) Ratio	Times	1.37	1.49	1.91	1.13	1.50
Dividend Yield (DPS/MPS) Ratio	%	5.99%	5.26%	4.94%	10.96%	6.75%

Conclusion:

Hero MotoCorp's strong market position, diversified product portfolio, and strategic initiatives reflect its resilience and growth potential in the dynamic two-wheeler market. Despite challenges in global exports, the company's focus on domestic expansion, premiumization, and electric mobility bode well for its future trajectory. With a robust foundation and forward-looking strategies, Hero MotoCorp is poised to sustain its leadership position and capture new growth opportunities in the evolving landscape of two-wheeler industry.

5. FINANCIAL PROJECTIONS

Financial Projections are done for 3 years i.e., 2024,2025 and 2026 using the historical financial data from the year 2018. 5-year and 3-year CAGR has been calculated for each line item. The below image shows the financial projections calculated.

					(₹	in crores)									
Particulars	March 31, 2018	March 31, 2019	March 31, 2020	March 31, 2021	March 31, 2022	March 31, 2023	Trailing 12 Months	5 Yr Growth (CAGR)	3 Yr Growth (CAGR)	5 Yr Avg. Growth (Y-o-Y)		March 31, 2023	Exp. March, 2024	Exp. March, 2025	Exp. March, 2026
Net Sales	32,231	32,853	28,238	30,022	28,519	33,300	36,606					33,300	35,631	38,125	40,794
Growth in Net Sales		1.93%	-14.05%	6.32%	-5.01%	16.76%	9.93%	0.65%	5.65%	1.19%					
Revenue from Operations	33,101	33,972	29,255	30,959	29,551	34,158	36,606					34,158	36,208	38,380	40,683
Growth in Revenue from Operations		2.63%	-13.88%	5.82%	-4.55%	15.59%	7.17%	0.63%	5.30%	1.12%					
EBITDA	5422	4930	3958	4019	3369	3986	4,950					3,986	4,345	4,606	4,882
EBITDA Margin	16.38%	14.51%	13.53%	12.98%	11.40%	11.67%	13.52%	-5.97%	0.24%	12.82%					
Depreciation & Amortization (D&A)	574.98	624	846	715	690	697						697	797	844	895
EBIT (Operating profit)	5,334	5,025	4,070	4,058	3,256	4,099	4,951								
EBIT Margin(%)	16.11%	14.79%	13.91%	13.11%	11.02%	12.00%	13.53%	-5.13%	0.24%	12.97%					
D & A as % Net Fixed Assets	11.59%	12.61%	13.07%	11.21%	11.13%	11.32%				11.87%					
Profit before Tax	5292	5,104	4,611	3,849	3,058	3,864	4,926								
Tax	1570	1,638	952	913	729	1,064	1,316								
Effective Tax Rate	29.67%	32.09%	20.64%	23.73%	23.84%	27.53%	26.72%					28%	28%	28%	28%
Net Profit after Tax (PAT)	3,722	3,466	3,659	2,936	2,329	2,800	3,610				28.93%	2,800	2,940	3,087	3,241
Growth in PAT or Net Income		-6.87%	5.57%	-19.77%	-20.67%	20.22%	28.93%	-5.54%	-8.54%	-4.31%					
Net Profit Margin	11.24%	10.20%	12.51%	9.48%	7.88%	8.20%	9.86%	-6.13%	-13.14%	9.65%	-6.74%				
CapEx	821.5	975.39	1287.8	573.84	558.84	561.37		-7.33%	-24.18%	2.53%					
CapEx as % Revenue from Operations	2%	3%	4%	2%	2%	2%									
Net Fixed Assets	4,961	4,952	6,473	6,380	6,194	6,159		4.42%	-1.64%	5.12%		6,159	7,242	7,676	8,137
Growth in Net Fixed Assets		-0.17%	30.70%	-1.43%	-2.93%	-0.55%									
Net Fixed Assets/Revenue from Operations	14.99%	14.58%	22.13%	20.61%	20.96%	18.03%		3.77%	-6.59%	19.26%					
CapEx/Net Fixed Assets	16.56%	19.70%	19.90%	8.99%	9.02%	9.11%		-11.26%	-22.91%	13.34%					
Total Assets	17,397	18,504	19,674	23,096	22,478	23,917									
Growth in Total Assets		6.37%	6.32%	17.39%	-2.67%	6.40%				6.76%					
CapEx/Total Assets	4.72%	5.27%	6.55%	2.48%	2.49%	2.35%		-13.05%	-28.96%	3.83%					
Shareholder Funds	12,065	13,237	14,547	15,560	15,995	16,781									
Total Capital Employed (TA - Loans)		17,969	18,962	22,199	0	0									
Return on Equity (ROE)	30.85%	26.19%	25.16%	18.87%	14.56%	16.69%				20.29%					
EPS	186.3	172.45	182.15	146.07	115.96	140.62	180.87					140.62	147.11	154.47	162.19
Growth in EPS		-7.43%	5.62%	-19.81%	-20.61%	21.27%		-5.47%	-8.26%	-4.19%					
DPS	95	87	90	105	95	100		1.03%	3.57%			100.00	95.62	100.40	105.42
Dividend Payout Ratio	50.99%	50.45%	49.41%	71.88%	81.92%	71.11%				64.96%					
BPS	603.72	662.36	727.93	778.60	800.38	839.70		6.82%	4.88%						
No. of Equity Shares (in crores)	20	20	20	20	20	20									
MPS	3732.25	2,553.15	1,661.20	2,956.10	2,204.15	2,347.35									
MPS at May 10, 2024	4,877														

Projections (Trends)	5 Years	3 Years	Recent	Trailing	Best	Worst
Sales Growth	0.65%	5.65%	16.76%	9.93%	16.76%	0.65%
Revenue from Operations Growth	0.63%	5.30%	15.59%	7.17%	15.59%	0.63%
Assumptions						
Growth in Net Sales	7.00%					
Growth in Revenue from Operations	6.00%					
EBITDA Margin	12.0%					
Net Fixed Assets/Revenue from Operations	20.00%					
D & A as % Net Fixed Assets	11.00%					
Growth in PAT or Net Income	5.00%					
Net Profit Margin	9.50%					
Dividend Payout Ratio	65.00%					
CapEx as % Revenue from Operations	2.00%					
WC as % Revenue from Operations	8.00%					
Finance Cost % Financial Liabilities	8.00%					
Cost of Equity (Ke) (as per industry report)	13.74%	15.80%	11.50%			

6. EQUITY VALUATION USING ABSOLUTE VALUATION MODELS

6.1. Dividend Discount Model

Dividend discount models (DDMs) define cash flow as the dividends to be received by the shareholders. According to the DDM, the value of an equity share is equal to the present value of expected dividends from its ownership plus the present value of the sale price expected when the equity share is sold.

The intrinsic value of hero MotoCorp stock is evaluated based on different values of Cost of Equity (k_e) and Growth rate (g).

In the **worst-case scenario**, where the required rate of return (ke) is estimated at 13.7% (as per industry report) and growth rate at 5% (Recent growth rate in Dividends), the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.1091.83.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 347% overvalued compared to the intrinsic value.

	Ke	13.7%							
	growth rate	5%							
	Current Div		Ex	pected Div	idends				
Particulars	March 31, 2023	March 31, 2024	March 31, 2025	March 31, 2026	March 31, 2027	March 31, 2028		5 year Growth Rate (CAGR)	Recent Growth Rate
DPS	100	101.03	102.07	103.13	104.19	105.26	110.53	1.03%	1.03%
PV of Dividends		88.86	78.96	70.16	62.34	55.40			
PV of Total Dividends for 5 Years	355.71					1270.417423			
Price at the end of 5th Year									
= D5(1+g)/(ke - g)									
PV of P5	736.12								
g= b * r									
Price of equity (PV of Div + PV of P5)	1091.83								
MPS as on 10 May, 2024	Rs 4877				MPS>IV	Overpriced			

In the **average-case scenario**, where the required rate of return (ke) is estimated at 11.5% (as per CAPM model) and growth rate at 8% (GDP growth rate), the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.2242.23.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 118% overvalued compared to the intrinsic value.

Particulars	Ke growth rate Current Div March 31, 2023	11.5% 8% March 31, 2024		pected Divi March 31, 2026	March 31, 2027	March 31, 2028		5 year Growth Rate (CAGR)	Recent Growth Rate
DPS	100.00	101.03	102.07	103.13	104.19	105.26	113.68	1.03%	1.03%
PV of Dividends		90.61	78.96	70.16	62.34	55.40			
PV of Total Dividends for 5 Years	357.46					3248.120301			
Price at the end of 5th Year									
= D5(1+g)/(ke - g)									
PV of P5	1884.77								
g= b * r									
Price of equity (PV of Div + PV of P5)	2242.23								
MPS as on 10 May, 2024	Rs 4877				MPS>IV	Overpriced			

In the **best-case scenario**, where the required rate of return (ke) is estimated at 11.5% (as per CAPM model) and growth rate at 10% (outperformed GDP growth rate), the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.4755.25.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 3% overvalued compared to the intrinsic value.

Particulars	Ke growth rate Current Div March 31, 2023	11.5% 10% March 31, 2024	Ex March 31, 2025	pected Div March 31, 2026	March 31, 2027	March 31, 2028		5 year Growth Rate (CAGR)	Recent Growth Rate
DPS	100.00	101.03	102.07	103.13	104.19	105.26	113.68	1.03%	1.03%
PV of Dividends		90.61	78.96	70.16	62.34	55.40			
PV of Total Dividends for 5 Years	357.46					7578.947368			
Price at the end of 5th Year	337,40					70.0.047000			
= D5(1+g)/(ke - g)									
PV of P5	4397.79								
g= b * r									
Price of equity (PV of Div + PV of P5)	4755.25								
MPS as on 10 May, 2024	Rs 4877				MPS>IV	Overpriced			

6.2. Free Cash Flows Model

The value of a firm's stock is calculated by forecasting Free Cash Flow to the Firm (FCFF) or Free Cash Flow to Equity (FCFE) and discounting these cash flows back to the present at the appropriate required rate of return. FCFF or FCFE are the appropriate models to use when the firm doesn't pay dividends at all or pays out fewer dividends than dictated by its cash flow, free cash flow tracks profitability, or the analyst takes a corporate control perspective.

The intrinsic value of hero MotoCorp stock is evaluated based on different values of Growth in FCFE, Cost of Equity (ke) and Growth rate (g).

In the **worst-case scenario**, where the required rate of return (ke) is estimated at 13.7% (as per industry report), assumed growth rate in FCFE and growth rate at 8% (GDP growth rate), the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.1664.82.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 193% overvalued compared to the intrinsic value.

				/= ' C				
				(₹ in Crore	rs)	_		
	Particulars	March	March	March	Growth	Growth		
	1 di diculais	31, 2021	31, 2022	31, 2023	diowaii	in FCFE		
	FCFE	3,755	1,501	2,013	-26.8%	8%	Ke	13.70%
					(₹ in Crore	es)	g	8.00%
		Actual	Forecas	ts for next	3 Years			
	Particulars	March	March	March	March			
	Particulars	31, 2023	31, 2024	31, 2025	31, 2026			
	FCFE	1,757	1,898	2,050	2,214			
Step 1:	PV of FCFE		1,669	1,586	1,506			
Step 2:	PV of Total FCFE	4,761						
Step 3:	Continuing Value (CV) at 2024				41,944			
Step 4:	PV of CV	28,536						
Step 5:	Value of Equity	33,296						
	No. of Equity Shares (in Crores)	20						
	Value per share (IV)	1664.82						
	MPS (INR) as on 10 May, 2024	4,877.00			MPS>IV	Overprice	<u>.</u>	

In the **average-case scenario**, where the required rate of return (ke) is estimated at 13.7% (as per industry report), projected values are taken for FCFE and growth rate at 4%, the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.2953.03.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 65% overvalued compared to the intrinsic value.

				(₹ in Crore	s)			
	Particulars	March	March	March				
	Particulars	31, 2021	31, 2022	31, 2023	Growth			
	FCFE	3,755	1,501	2,013	-26.8%		Ke	13.70%
							g	4.00%
		Actual	Forecas	ts for next	3 Years			
		March	March	March	March			
	Particulars	31, 2023	31, 2024	31, 2025	31, 2026			
	FCFE	2,964	5,541	5,873	6,225			
Step 1:	PV of FCFE		4,873	4,543	4,235			
Step 2:	PV of Total FCFE	13,651						
Step 3:	Continuing Value (CV) at 2024				66,746			
Step 4:	PV of CV	45,409						
Step 5:	Value of Equity	59,061						
	No. of Equity Shares (in Crores)	20						
	Value per share	2953.03						
	MPS (INR) as on 10 May, 2024	4,877.00				MPS>IV	Overpriced	

In the **best-case scenario**, where the required rate of return (ke) is estimated at 11.5% (as per CAPM model), assumed growth rate in FCFE and growth rate at 8% (GDP growth rate), the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.4573.46.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 7% overvalued compared to the intrinsic value.

				/≠ in Crore	no.l			
				(₹ in Crore	:5)			
	Particulars	March	March	March	Growth	Growth		
		31, 2021	31, 2022	31, 2023		in FCFE		
	FCFE	3,755	1,501	2,013	-26.8%	8%	Ke	11.50%
					(₹ in Crore	es)	g = 8%	8.00%
		Actual	Forecas	ts for next	3 Years			
	Particulars	March	March	March	March			
	Particulars	31, 2023	31, 2024	31, 2025	31, 2026			
	FCFE	2,964	3,201	3,458	3,734			
Step 1:	PV of FCFE		2,871	2,781	2,694			
Step 2:	PV of Total FCFE	8,346						
Step 3:	Continuing Value (CV) at 2024				1,15,225			
Step 4:	PV of CV	83,123						
Step 5:	Value of Equity	91,469						
	No. of Equity Shares (in Crores)	20						
	Value per share (IV)	4573.46						
	MPS (INR) as on 10 May, 2024	4,877.00			MPS>IV	Overpriced	j	

Using the above two Discounted Cashflows techniques, the range of intrinsic value of Hero MotoCorp stock is **Rs. 1091.83- Rs. 4755.25**.

7. EQUITY VALUATION USING RELATIVE VALUATION MODELS

7.1. P/B Ratio Model

The rate of return on Book Value referred to as the profitability (ROCE or ROE) is a measure that features strongly in the determination of P/B ratios. Accordingly, the intrinsic P/B Ratio is determined by the expected return on book value (ROCE i.e. Profitability).

Value = Book Value + Present Value of Expected Residual Earnings

In the **worst-case scenario**, where the required rate of return (ke) is estimated at 13.7% (as per industry report), implied growth rate in RE and growth rate at 8% (GDP growth rate), the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.1336.61.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 265% overvalued compared to the intrinsic value.

Hero MotoCorp Ltd.										P	VF	
	March 2022	Exp. March 2023	Exp. March 2024	Exp. March 2025		Ke	g		2023	Exp. 2024	Exp. 2025	Exp. 2026
EPS	140.62	147.11	154.47	162.19		13.70%	8.00%	Time (T)	0	1	2	3
DPS	100.00	95.62	100.40	105.42				PVF	1.000	0.880	0.774	0.680
BPS (BV ₀)	839.70	891.19	945.25	1,002.02								
ROCE (%)		17.52%	17.33%	17.16%								
$RE_{t} = (ROCE_{t} - K_{e}) \times BV_{t-1}$		32.07	32.38	32.69								
Growth Rate (g) in RE (Implied growth)			8.00%	8.00%								
Discount rate		0.880	0.774	0.680								
PV of RE		28.21	25.04	22.24								
Total PVof RE to 2022	75.49											
Continuing Value (CV) @ Implied growth				619.43								
PV of CV	421.41											
Value per share (BV0+PV of RE + PV of CV)	1,336.61											
MPS (INR) as on 10 May, 2024	4,877.00				MPS>IV	Overpriced						

In the **average-case scenario**, where the required rate of return (ke) is estimated at 11% (as per CAPM model), implied growth rate in RE and growth rate at 8% (GDP growth rate), the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.2396.87.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 103% overvalued compared to the intrinsic value.

Hero MotoCorp Ltd.										P	VF	
	March 2022	Exp. March 2023	Exp. March 2024	Exp. March 2025		Ke	g		2023	Exp. 2024	Ехр. 2025	Exp. 2026
EPS	140.62	147.11	154.47	162.19		11.00%	8.00%	Time (T)	0	1	2	3
DPS	100.00	95.62	100.40	105.42				PVF	1.000	0.880	0.774	0.680
BPS (BV ₀)	839.70	891.19	945.25	1,002.02								
ROCE (%)		17.52%	17.33%	17.16%								
RE $RE_t = (ROCE_t - K_e) \times BV_{t-1}$		54.75	56.44	58.21								
Growth Rate (g) in GDP			8.00%	8.00%								
Discount rate		0.880	0.774	0.680								
PV of RE		48.15	43.66	39.60								
Total PVof RE	131.41											
Continuing Value (CV) @ Implied growth				2095.70								
PV of CV	1,425.76											
Value per share (BV0+PV of RE + PV of CV)	2,396.87											
MPS (INR) as on 10 May, 2024	4,877.00				MPS <iv< td=""><td>Overpriced</td><td></td><td></td><td></td><td></td><td></td><td></td></iv<>	Overpriced						

In the **best-case scenario**, where the required rate of return (ke) is estimated at 11% (as per CAPM model), implied growth rate in RE and growth rate at 10% (outperformed GDP growth rate), the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.5327.61.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP < IV, the market value of stock is approximately 8% undervalued compared to the intrinsic value.

Hero MotoCorp Ltd.										P	VF	
	March 2022	Exp. March 2023	Exp. March 2024	Exp. March 2025		Ке	g		2023	Ехр. 2024	Ехр. 2025	Ехр. 2026
EPS	140.62	147.11	154.47	162.19		11.00%	10.00%	Time (T)	0	1	2	3
DPS	100.00	95.62	100.40	105.42				PVF	1.000	0.880	0.774	0.680
BPS (BVo)	839.70	891.19	945.25	1,002.02								
ROCE (%)		17.52%	17.33%	17.16%								
$RE_{t} = (ROCE_{t} - K_{e}) \times BV_{t-1}$		54.75	56.44	58.21								
Growth Rate (g) in ROE			10.00%	10.00%								
Discount rate		0.880	0.774	0.680								
PV of RE		48.15	43.66	39.60								
Total PVof RE	131.41											
Continuing Value (CV) @ Implied growth				6403.52								
PV of CV	4,356.50											
Value per share (BV0+PV of RE + PV of CV)	5,327.61											
MPS (INR) as on 10 May, 2024	4,877.00				MPS>IV	Underpriced						

7.2. P/E Ratio Model

By anchoring on Earnings, the analyst develops the Price-Earnings (P/E) ratio. The P/E Ratio shows how to anchor valuations on earnings, the bottom line of the income statement.

Value = Capitalized forward earnings growth + Extra value for abnormal cum-dividend earnings growth

In the **worst-case scenario**, where the required rate of return (ke) is estimated at 13.7% (as per industry report), implied growth rate in AEG at 5%, the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.1099.12.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 344% overvalued compared to the intrinsic value.

Hero MotoCorp Ltd.											
	March 2023	Exp. March 2024	Exp. March 2025	Exp. March 2026		Ke		2023	Exp. 2024	Exp. 2025	Exp. 2026
EPS	140.62	147.11	154.47	162.19		13.70%	Time (T)	0	1	2	3
DPS	100.00	95.62	100.40	105.42			PVF	1.000	0.880	0.774	0.680
Reinvested dividend			13.10	13.76							
Cum-dividend earnings (EPSt + Reinvested Dividends)			167.57	175.95							
Normal Earnings (EPSt-1 * (1+Ke))			167.27	175.63							
Abnormal earning growth (AEG)			0.30	0.32							
Growth in AEG				5%							
Discount rate (12.55% = PFIF @12.55%)			0.880	0.774							
PV of AEG			0.265	0.245							
Total PVof AEG to 2021		0.510									
Continuing Value (CV)				3.82							
PV of CV		2.96									
Value per share = (1/Ke)[Earningst+PV of AEG + PV of CV]	1,099.12										
MPS (INR) as on 10 May, 2024	4,877.00				MPS>IV	Overpriced					

In the **average-case scenario**, where the required rate of return (ke) is estimated at 11% (as per CAPM model), growth rate in AEG at 8% (GDP growth rate), the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.1836.20.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 166% overvalued compared to the intrinsic value.

Hero MotoCorp Ltd.									PV	'F	
	March 2023	Exp. March 2024	Exp. March 2025	Exp. March 2026		Ke		2023	Ехр. 2024	Exp. 2025	Exp. 2026
EPS	140.62	147.11	154.47	162.19		11.00%	Time (T)	0	1	2	3
DPS	100.00	95.62	100.40	105.42			PVF	1.000	0.901	0.812	0.731
Reinvested dividend (at 12%)			10.52	11.04							
Cum-dividend earnings (EPSt + Reinvested Dividends)			164.99	173.24							
Normal Earnings (EPSt-1 * (1+Ke))			163.30	171.46							
Abnormal earning growth (AEG)			1.69	1.78							
Growth in AEG @ GDP Growth Rate				8%							
Discount rate			0.901	0.812							
PV of AEG			1.524	1.442							
Total PVof AEG to 2021		2.966									
Continuing Value (CV)				63.95							
PV of CV		51.90									
Value per share = (1/Ke)[Earnings:+PV of AEG + PV of CV]	1,836.20										
MPS (INR) as on 10 May, 2024	4,877.00				MPS>IV	Overpriced					

In the **best-case scenario**, where the required rate of return (ke) is estimated at 11% (as per industry report), growth rate in AEG at 10% (outperformed GDP growth rate), the intrinsic value (IV) of Hero MotoCorp stock is assessed at Rs.2806.10.

The current market price (CMP) as on 10th May, 2024 is Rs.4877. Since CMP > IV, the market value of stock is approximately 74% overvalued compared to the intrinsic value.

Hero MotoCorp Ltd.									P۱	/F	
	March 2023	Exp. March 2024	Exp. March 2025	Exp. March 2026		Ke		2023	Exp. 2024	Exp. 2025	Exp. 2026
EPS	140.62	147.11	154.47	162.19		11.00%	Time (T)	0	1	2	3
DPS	100.00	95.62	100.40	105.42			PVF	1.000	0.901	0.812	0.731
Reinvested dividend (at 12%)			10.52	11.04							
Cum-dividend earnings (EPSt + Reinvested Dividends)			164.99	173.24							
Normal Earnings (EPSt-1 * (1+Ke))			163.30	171.46							
Abnormal earning growth (AEG)			1.69	1.78							
Growth in AEG @ GDP Growth Rate				10%							
Discount rate			0.901	0.812							
PV of AEG			1.524	1.442							
Total PVof AEG to 2021		2.966									
Continuing Value (CV)				195.40							
PV of CV		158.59									
Value per share = (1/Ke)[Earningst+PV of AEG + PV of CV]	2,806.10										
MPS (INR) as on 10 May, 2024	4,877.00				MPS>IV	Overpriced					

Using the above two relative valuation models, the range of intrinsic value of Hero MotoCorp stock is **Rs. 1099.12- Rs. 5327.61**.

8. CONCLUSION

Based on a comprehensive analysis, Hero MotoCorp emerges as a robust player within the Indian two-wheeler industry. Despite encountering challenges like governance issues and global economic uncertainties, the company has demonstrated resilience through proactive leadership and strategic planning. Financially, Hero MotoCorp has demonstrated strong performance, particularly in 2023, where it achieved record revenue and sales volume. This accomplishment underscores the company's resilience and competitive strength within the market. The range of intrinsic value derived from different valuation models indicates varying perspectives, reflecting the inherent uncertainty in stock valuation. However, considering the company's substantial market share, diverse product portfolio, and promising growth prospects in the Indian automotive sector, Hero MotoCorp stands poised for sustainable growth in the long term. The average intrinsic value of Hero MotoCorp stock, considering all valuation models, falls within the range of **Rs. 1746 - Rs. 3314**, reflecting a broad assessment of its potential value. Investors are advised to carefully evaluate these factors and conduct thorough due diligence before making investment decisions.

9. REFERENCES

- https://www.screener.in/company/HEROMOTOCO/consolidated/
- https://www.statista.com/statistics/271322/inflation-rate-in-india/
- https://www.statista.com/statistics/263617/gross-domestic-product-gdp-growth-rate-in-india/
- https://www.ibef.org/industry/india-automobiles
- https://www.bseindia.com/xml-data/corpfiling/AttachHis//b2fab600-70be-4d51-92f8f2cd4118a8af.pdf
- https://www.imf.org/external/datamapper/index.php