

Equity research analysis on automobile sector of India

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Abstract

This research paper analyses the financial performance of leading companies in the Indian Automotive Industry—Tata Motors, Bajaj Auto, Ashok Leyland, Eicher Motors, Hero MotoCorp, and Mahindra & Mahindra—using fundamental and technical analysis. Ratio analysis highlights profitability, operational efficiency, debt management, and working capital metrics, while technical analysis evaluates stock market trends and investor sentiment. Key findings reveal Eicher Motors as the best performer due to superior profitability margins, strong ROCE, and efficient debtor management, followed by Bajaj Auto, excelling in asset efficiency and a robust Cash Conversion Cycle. The study provides valuable insights into market dynamics, enabling informed investment decisions and contributing to the understanding of the fast-paced automotive sector.

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Keywords: Stock market, Technical analysis, Fundamental analysis, Hybrid approach, Adaptive market hypothesis.

I. Introduction

The Indian automotive sector significantly contributes to GDP, jobs, innovation, and international trade competitiveness. It has become one of the largest global markets due to consistent growth and policy support. Several micro and macro factors impact the stock market [1], [2]. A

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changing financial environment demands analysis of key players to guide stakeholders' investment decisions effectively. This study analyzes six major Indian automobile firms: Tata, Bajaj, Ashok Leyland, Eicher, Hero, Mahindra. Selection was based on revenue, market capitalization, and their impact on the auto industry.

The research uses fundamental and technical analysis for evaluating company performance and stock market behavior. Fundamental analysis examines profitability, liquidity, solvency, and efficiency ratios from financial statements and reports. It helps compare companies, highlighting strengths, weaknesses, and long-term financial stability. Technical analysis interprets price patterns like hammer, inverted hammer, gap-up, and gap-down signals. These patterns help assess short-term market movements and timing of buy/sell decisions. The integrated approach offers a complete picture of value and volatility in automotive stocks. It combines long-term valuation with short-term trading cues for informed investment strategies. This study identifies stock market outperformers and underperformers using financial ratios and technical trends. It contributes to investment literature by offering practical insights for analysts and institutional investors. Findings aim to improve risk management and highlight profitable opportunities in the Indian auto sector.

II. Literature Review

i. Indian Automobile Sector

The Indian automotive industry plays a vital role in economic growth and industrial development. Its growth is driven by rising income and urbanization, boosting vehicle demand [3]. [3] divide industry phases as emerging (2020–2040), growth (2040–2060), stagnation (2060–2080). Firms focus on cost, innovation, consumer needs, and quality to stay competitive globally. However, challenges remain in delivery and flexibility [4]. Growth drivers aim to raise productivity and profitability [5]. Major issues include labor precarity, global competition, and supply chain risks. Firms respond with innovation and sustainable practices to navigate global disruptions. Globalization brings mixed effects for Indian auto companies [6], [7], [8].

ii. Fundamental Analysis

Growth drivers like policy reforms and technology shifts influence profitability and market valuation [5]. Return on equity and profit margins

reflect growth expectations and operational performance. Cost of goods sold is impacted by steel, crude oil, and currency fluctuations [9]. These factors affect profitability ratios and investor return-risk decisions. Despite its strengths, fundamental analysis has limitations in predicting future trends. It relies heavily on historical accounting and pricing data [10]. Investor behavior and market sentiment are hard to quantify using traditional models [11]. Rapid market changes, news, and social media also reduce model accuracy [12].

iii. *Technical Analysis*

Technical analysis predicts stock movements using past prices and mathematical indicators [13]. Tools include trendlines, MACD, RSI, and moving averages for tracking market momentum [14]. MACD indicates stock entry/exit points but shows 32.73% effectiveness in auto stocks [15]. Combining MACD with stochastic indicators improves accuracy [16]. RSI detects overbought or oversold zones, helping time trades better [17]. Moving average strategies outperform buy-and-hold during high volatility [18]. Candlestick patterns like bullish harami or engulfing aid in short-term trade signals. Machine learning boosts candlestick accuracy; some systems show 72% hit ratio [19]. Multi-day patterns improve Sharpe ratios and annual returns [20]. However, market shifts reduce long-term prediction accuracy of technical models [21]. Multi-kernel models using news and technical factors enhance forecast reliability [22].

III. Research Methodology

i. *Research Problem Statement and Objective:*

This study evaluates financial health and stock price behavior of top Indian automobile companies. It applies both fundamental and technical analysis for a comprehensive performance assessment. The goal is to identify underperformers and outperformers using financial ratios and current market price. It also aims to find ideal buy and sell points through candlestick patterns and indicators. Towards this end, the key objectives are, (a) To analyze long-term stock movement using 5-year Exponential Moving Average (EMA) across selected firms. (b) To detect overbought/oversold zones and reversals using MACD across multiple periods. (c) To evaluate stock valuation with RSI to highlight oversold and overbought situations over different timeframes.

ii. Data Collection, Inclusion and Exclusion:

The study uses secondary data from verified and reliable sources to ensure analytical accuracy. Data sources include: (a) Yahoo Finance – for historical stock prices and volume data. (b) MoneyControl – for financial ratios, news updates, and stock performance metrics. (c) Investing.com – for technical indicators, candlestick patterns, and trends. (d) Annual Reports – for detailed company-specific financial and operational data. Companies with five years of complete financial data in 2wheeler, 4wheeler, and truck segments are included. Stocks with low liquidity or missing data are excluded from the study. Top-performing companies selected include Tata Motors, Maruti Suzuki, Mahindra & Mahindra, Bajaj Auto, Ashok Leyland, Hero MotoCorp, and Eicher Motors. Selection is based on consistent financial ratios, trading volume, and historical price performance.

IV. Observations & Findings*i. Analysis of Eicher Motors Ltd.***a. Eicher Motors Ratio Analysis**

- 1. Growth Stats:** Sales growth fluctuated between +40.24% and -29.35%, showing sensitivity to market shifts. EBITDA growth reached 58.24%, but also dropped to -24.84%, indicating cyclical operational performance. EBIT growth was highly volatile, ranging from +74.65% to -31.35%, driven by cost swings. Net profit growth remained modest, reflecting effective cost control and strategic expense management. Dividend growth mirrored profit performance, maintaining shareholder payouts even during weak profit phases.
- 2. Profitability Ratio:** Gross margin remained stable despite sales volatility, indicating effective cost containment strategies. EBITDA and EBIT margins followed revenue trends, peaking at 28.84%, reflecting operational efficiency. Net profit margin stayed between 13–15%, showing consistent bottom-line strength amid variable growth cycles.
- 3. Sales percentage Ratio:** Sales expenses reduced over time, improving cost efficiency and marketing effectiveness. Depreciation to sales ratio varied, signaling timely asset reinvestment and maintenance.

Operating income as a percentage of sales peaked at 28.84%, showcasing strong revenue conversion.

4. **Efficiency Ratio:** Return on Capital Employed (ROCE) peaked at 42.25%, later normalizing near 20.20%. Retained earnings percentage fluctuated, shaped by dividend strategy and profit reinvestment choices. ROE declined from 27.71% to 13.73%, suggesting reduced equity profitability. Self-Sustained Growth Rate (SSGR) dropped to 6%, hinting at reliance on external growth funding.
5. **Turnover Ratio:** Debtor turnover ratio declined, indicating weaker receivables management and slower collections. Creditor turnover ratio held steady around 3–4x, showing consistent supplier payment practices. Inventory turnover remained inconsistent but improved toward stability and lean inventory levels. Fixed Asset Turnover reached 8.06x, reflecting optimal asset utilization and capital productivity.
6. **Working capital Ratio:** Debtor days were well-managed, enhancing liquidity and short-term cash flow stability. Payable days increased, aiding liquidity but possibly straining vendor relationships. Inventory days were optimized, reducing holding costs and minimizing waste risk. Cash Conversion Cycle (CCC) was negative, reflecting superior working capital efficiency and faster cash generation.

b. Technical Analysis of Eicher Motors

1. **Gap Up Opening:** Eicher Motors opened with a 90-point gap-up at ₹3791, signaling bullish market sentiment. Gap-up zones often act as temporary support, inviting optimistic short-term trading activity. The second candle opened above the previous pivot, confirming the bullish pattern continuation. MACD crossover indicated a buy signal—blue line moved above red, supporting upward momentum. Entry is advised above the second candle's pivot, after validating sustained price strength. Stop-loss placed below the low of the first gap-up candle, acting as support. Target 1: Exit after 2–3 bullish candles, based on individual risk appetite. Target 2: Exit after 3–4 candles, only if resistance levels are decisively broken.
2. **Moving average of Eicher Motors:** Eicher motors 50 days daily moving average chart is shown in Figure 3. From the chart the following observations are made. Eicher Motors' 50-day daily moving average chart (Figure 1) highlights key market movements.

From April to mid-May, the stock traded above its 50-day moving average, indicating strong bullish sentiment. On May 15th, a gap-up occurred following Hero's launch of the affordable Hero Destiny 125, which boosted investor confidence. However, by mid-July, market sentiment reversed as the stock opened with a gap-down, confirmed by a bearish engulfing candlestick pattern. This pattern signaled increased selling pressure and a possible trend reversal. Based on this setup, a short position could be considered, targeting a downward movement equivalent to 2–3 bearish candlesticks.

ii. Analysis of Hero MotoCorp :

a. Hero MotoCorp Ratio Analysis

- 1. Growth Ratios:** Sales growth peaked at 15.59% in 2023 but dipped to -13.89% in 2020. EBITDA rose significantly in 2016 (25.69%) and 2023 (25.88%). It dropped sharply in 2019 (-5.80%), 2020 (-19.01%), and 2022 (-19.76%). EBIT growth reached 33.65% in 2016 and 33.35% in 2024, with a major fall in 2019 (-27.18%). Net profit growth peaked in 2016 (32.97%) and 2024 (36.50%) but declined in 2018 and 2019. Dividend growth remained strong in 2016, 2017, and 2024, with 39.96% being the highest.
- 2. Profitability Ratios:** Profitability ratios show gross margin stayed between 21.31% and 27.06%, ensuring cost control. EBITDA margin varied from 11.02% to 16.43%, reflecting operational efficiency. EBIT margin ranged from 8.68% to 11.83%, indicating moderate control



Figure 1

Illustration of 50DMA of Eicher Motors

on costs. Net profit margin fluctuated between 6.04% and 9.73%, highlighting variations in bottom-line performance.

3. **Sales percentage Ratios:** Sales percentage ratios indicate fluctuating sales expenses impacted profitability across years. Depreciation-to-sales ratio reflected their investments in tangible assets. Operating income as a percentage of sales was inconsistent, though higher values signal cost effectiveness.
4. **Efficiency Ratios:** Efficiency ratios show ROCE ranged from 15.60% to 44.87%, suggesting varying capital utilization. Retained earnings varied from 0% to 46.57%, reflecting dividend and reinvestment strategies. ROE ranged from 11.26% to 30.95%, indicating fluctuating returns for shareholders. SSGR moved between 0% and 14.2%, showing moderate internal growth ability.
5. **Working Capital Efficiency Ratios:** Working capital efficiency remained strong. Debtor turnover peaked at 275.38x (2015), showing excellent collection speed. Creditor turnover ranged between 4.36x and 7.43x, indicating consistency in payables. Inventory turnover spanned 17.30x to 40.38x, suggesting efficient stock movement.

b. Technical Analysis of Hero Motocorp

Hero motocorp daily technical chart is shown in Figure 2. From the chart the following observations are made.

1. **RSI and EMA of Hero Motocorp:** The Relative Strength Index (RSI) measures momentum by tracking speed and magnitude of price movements. It identifies overbought conditions above 70 and oversold conditions below 30. These thresholds suggest possible trend reversals (Kumar et.al., 2023). RSI also defines bull market ranges from 40 to 90. Bear market ranges fall between 0 and 40. This helps traders anticipate trend shifts. RSI highlights support and resistance zones. These levels assist in setting stop-losses and profit targets.

iii. Analysis of Mahindra & Mahindra

a. Mahindra & Mahindra Ratio Analysis

1. **Growth Ratio:** The company's growth has been volatile: sales ranged from -28.02% to 34.49%. EBITDA growth reflects strong recovery capability, moving from 14.66% to 38.16%. EBIT fluctuated



Figure 2

Chart illustrating RSI & EMA Relation of Hero Motocorp

dramatically, from -87.57% to $+1021.85\%$, showcasing turnaround potential. Net profit growth ranged from -136.09% to 272.93% , highlighting resilience despite setbacks.

2. **Profitability Ratio:** Gross margin remained stable between 24% and 32% , indicating consistent cost control. EBITDA margin ranged from 12.31% to 17.90% , suggesting efficient operational management. Net profit margin ranged from -1.60% to 6.45% , reflecting periodic profitability under pressure.
3. **Sales & Efficiency ratio:** ROCE fluctuated between 5.56% and 11.67% , showing moderate capital efficiency. Retained earnings varied significantly, from 0% to 77.32% , reflecting financial adaptability. ROE ranged from -3.02% to 13.55% , delivering inconsistent shareholder returns.
3. **Turnover Ratio:** SSGR averaged 10% , reflecting positive organic growth potential. Interest coverage ratio ranged from $1.13x$ to $223.03x$, indicating strong debt service capacity. Debtor turnover remained stable at $1.83x$ – $1.88x$; creditor turnover at 2.37 – 2.38 . Inventory turnover ranged from $9.43x$ to $9.86x$, showing efficient inventory use.
4. **Working Capital Ratio:** Debtor days stood at 194 , providing liquidity, while payable days were higher at 211 , stressing vendors. Inventory days averaged 37 , indicating swift stock movement and operational agility.

b. Technical Analysis of Mahindra & Mahindra

Mahindra & Mahindra daily technical chart is shown in Figure 3. From the chart the following observations are made.

1. **Gap Up:** The market opened with a gap up at ₹1650, often seen as a bullish indicator. This gap-up level may act as temporary support, attracting buyers expecting upward momentum. A strategic entry point is above the pivot of the post-gap candle, signaling potential continuation. The stop loss is placed at the low of that same candle, leveraging its support role. The target is set one to two candles above the entry, adjusted for risk appetite. This setup balances technical precision with risk-managed positioning in short-term trading strategies.



Figure 3

Chart showing Gap Up opening of Mahindra & Mahindra stock

iv. Analysis of Tata motors

a. Tata Motors Ratio Analysis

1. **Growth Ratio:** Tata Motors experienced a downturn in 2019–2020, followed by strong recovery during 2021–2023. EBIT growth showed major volatility, reflecting unpredictable operational performance and external challenges. Net profit growth remained inconsistent, highlighting difficulty in sustaining earnings across financial cycles. Dividend payouts fluctuated over the years, indicating irregular returns to shareholders based on annual profitability.
2. **Profitability Ratio:** EBITDA margins demonstrated effective cost management before tax, interest, and depreciation during specific

phases. EBIT margins indicated strong operational efficiency during peak periods but were inconsistent overall. Net profit margins varied across periods, reflecting both strategic strength and external financial pressures.

3. **Sales & Efficiency Ratio:** ROCE started strong, dipped during the mid-period, and is now recovering steadily. Retained earnings fluctuated, indicating varying capital retention and reinvestment strategies across different years. ROE trends have improved, suggesting enhanced shareholder value creation in recent periods.
4. **Turnover Ratio:** SSGR indicates partial organic growth, though external funding was required at times. These ratios reflect financial agility, representing how effectively the company moved through capital cycles.
5. **Working capital Ratio:** Debtor turnover remained efficient, reflecting strong receivables collection processes. Creditor turnover shows timely payments, indicating healthy supplier relationships. Inventory turnover was lean, preventing excess stock and enhancing working capital use. Cash conversion cycle was inconsistent, reflecting varying liquidity and operational cash flow timing.

b. Technical Analysis of Tata Motors

Tata Motors daily technical chart is shown in Figure 4. From the Figure 4 double top pattern is identified and the following observations are made.

1. **Double top strategy:** The stock is currently trading at Rs. 1058. A potential double top pattern is forming. The price touched Rs. 1020 on April 1st and again in May. It failed to surpass the earlier high in May, confirming the pattern. This indicates a possible bearish reversal, as identified by technical analysts. The MACD indicator is giving a sell signal. The MACD line is crossing below the signal line, suggesting downward momentum. This crossover is considered a bearish sign. A short position at Rs. 1000 may yield a profit of two candlesticks' range.
2. **Price Action Strategy in Tata Motors:** Tata Motors stock is currently in a visible downtrend. A green candle forms, opening above the previous red candle's pivot point. This indicates a possible reversal



Figure 4

Double top strategy in Daily chart of Tata Motors

in trend. The next candle opens above the earlier high, strengthening the bullish signal. Momentum appears to be shifting upward.

iv. Analysis of Ashok Leyland

a. Ashok Leyland Ratio Analysis

1. **Growth Ratio:** Tata Motors' sales growth fluctuates with market trends and product launches. EBITDA growth remains strong, indicating disciplined cost control and operational efficiency. EBIT shows volatility but performs well during favorable conditions, reflecting cost agility. Net profit growth stays mostly positive, suggesting sound financial management. Dividend growth is consistent, reinforcing the company's long-term profitability outlook.
2. **Profitability Ratio:** Gross margin ranges between 22.7% and 28.15%, showing inconsistent production efficiency. EBITDA margin averages 13.6%, peaking at 17.35%, signaling solid operating profitability. EBIT margin fluctuates near 10.55%, indicating some variability in cost control. EBT margin hovers around 4.57%, showing mixed performance in pre-tax earnings.
3. **Sales percentage Ratio:** Sales expenses account for 11.95% of revenue, reflecting aggressive market push. Depreciation at 3.42% is aligned with typical capital-intensive operations. Operating income margin stands at 8.36%, showing cost containment in operations.

4. **Efficiency Ratio:** Capital efficiency varies, but reinvestment of earnings supports long-term growth. ROE shows gradual improvement, indicating stronger returns on shareholder equity. Initial high self-funding declined, suggesting external financing is increasing.
5. **Turnover Ratio:** Debtor turnover remains steady, reflecting effective receivables management. Creditor turnover stability indicates timely supplier payments. Inventory turnover is erratic, implying potential supply chain inefficiencies.
6. **Working Capital Ratio:** Debtor days are rising, potentially delaying cash inflows. Payable days vary, which may affect supplier relations. Inventory days are inconsistent, suggesting poor stock utilization. Cash conversion cycle remains weak, affecting liquidity and operations.

b. Technical Analysis of Ashok Leyland

Ashok Leyland daily technical chart is shown in Figure 5. From the chart the bearish engulfing pattern is observed and the following interpretations are made.



Figure 5

Chart showing bearish engulfing pattern in Ashok Leyland

1. **Bearish Engulfing:** As of June 14, 2024, the current price stands at Rs. 185.60. A bearish engulfing pattern (Figure 5) indicates potential trend reversal from bullish to bearish. This pattern reflects sellers overtaking buyers, suggesting likely price decline in near term.

Short-selling may be initiated at the candle's low or next candle's low, based on risk. Target range spans Rs. 160 to Rs. 140, projecting a 2–3 candle drop. Stop-loss should be set above the high of the engulfing candle to manage downside risk.

2. **MACD of Ashok Leyland:** Ashok Leyland MACD chart is shown in Figure 5. From the chart the following trading strategies are observed.

Price Movement: Recent price action was below the EMA, indicating a sustained downtrend in the stock. A green candlestick above EMA signals potential trend reversal and emerging bullish momentum. MACD crossover confirms this, as the blue line moves above the red signal line. This upward crossover suggests price strength and momentum above average levels. Entry can be considered upon green candle formation, with clear bullish confirmation. Set a stop-loss below the green candle's low to control downside risk.

Target 1: Aim for 2–3 bullish candles above entry for short-term gains

Target 2: If momentum sustains, extend target to 3–4 candles above entry point.

v. *Analysis of Bajaj Auto*

a. Bajaj Auto Ratio Analysis

1. **Growth ratio:** Sales growth has been volatile, ranging from -7.28% to 23.08% across fiscal years. EBITDA rose by 35.53%, showing strong operational efficiency and cost discipline. EBIT growth of 35.79% further supports margin improvement. Net profit increased impressively by 37.80%, reflecting optimized cost structures. Dividend payouts remain inconsistent, suggesting no clear shareholder return strategy.
2. **Profitability ratio:** Gross margin improved from 19.62% to 25.30%, indicating stronger cost control. EBITDA and EBIT margins remained robust and stable, supporting long-term profitability. Net profit margin ranged from 9.55% to 13.38%, reflecting sustained bottom-line health.
3. **Sales & Efficiency ratio:** ROCE fluctuated, reflecting inconsistent capital utilization. Retained earnings varied, indicating shifting reinvestment strategies. ROE ranged between 11.70%–23.28%, suggesting varying shareholder return levels. SSGR variation

implies inconsistent internal funding capacity. Interest coverage ratio declined, showing slight pressure on financial leverage.

- 4. **Turnover ratio:** Debtor turnover showed volatility, implying inconsistent receivables management. Creditor turnover fluctuated, reflecting changing supplier payment patterns. Inventory turnover improved, indicating enhanced stock efficiency. Fixed asset turnover rose, confirming better utilization of capital investments. Capital turnover improved, suggesting more revenue generated per asset employed.
- 5. **Working capital ratio:** Debtor days remained low and stable, supporting strong cash flow. Payable days varied, hinting at inconsistent supplier terms. Low inventory days reflect lean inventory management. Negative cash conversion cycle indicates excellent working capital control.

b. Technical Analysis of Baja Auto

Bajaj Auto daily technical chart is shown in Figure 6. From the chart the Inverted hammer pattern is observed and the following interpretations are made.



Figure 6
Illustration of Inverted Hammer

1. **Inverted hammer:** An inverted hammer pattern indicates potential reversal from downtrend to uptrend after prolonged selling pressure. It forms when buyers attempt to rally, but sellers resist—signaling weakening downside momentum. A confirming green candle strengthens the bullish case and suggests rising price potential. Technical indicators like MACD and RSI add conviction to the signal when aligned positively. Entry is advisable above the inverted hammer's pivot point, confirming market strength. Set a stop-loss at the candle's low to manage risk exposure. Target profits at 2–3 candles above entry, depending on individual risk appetite.

V. Results and Discussions

i. *Ratio comparison of six automobile companies*

- a. **TOP Performer:** Eicher Motors outperforms peers in profitability, capital efficiency, and working capital management. It leads in gross, EBITDA, EBIT, EBT, and net profit margins, reflecting operational strength and cost discipline. ROCE is highest among peers, indicating efficient capital deployment and superior return on investment. Debtor Days range from 1–7, compared to Ashok Leyland's 194 days, proving superior cash collection efficiency. Eicher's negative Cash Conversion Cycle (CCC) signifies faster cash generation and minimal reliance on external financing. Strong liquidity and rapid receivables conversion enhance internal control and credit policy effectiveness. High Debtor Turnover Ratio reflects consistent collections, boosting liquidity and reducing credit risk. Top metrics in margins and CCC position Eicher for sustainable growth and resilience amid industry cost pressures. As automotive firms battle inflation and supply chain issues, Eicher's financial agility offers competitive advantage.
- b. **Second Best Performer:** Bajaj Auto ranks second, driven by strong asset efficiency and effective working capital management. High asset turnover reflects superior utilization of resources to drive sales and revenue generation. ROCE is robust and comparable to Eicher, indicating strong capital productivity and investor appeal. Bajaj's Debtor Days, Inventory Days, and CCC of -40 days highlight excellent liquidity and operational control. Efficient receivables and inventory management contribute to strong cash flow and reduced financing needs. Fixed Asset Turnover and Inventory Turnover remain high, showcasing dynamic production and inventory cycles. A strong

Creditor Turnover Ratio implies healthy supplier relations and consistent payments. High Interest Coverage Ratio indicates Bajaj's solid ability to service debt obligations. Bajaj's financial structure reflects how the industry is prioritizing asset productivity and cash optimization. This positions the company well against rising costs and cyclical market volatility.

- c. **Rest of the pack:** Tata Motors demonstrates impressive Sales Growth, strong Return on Equity (ROE), and solid Self-Sustained Growth Rate. Yet, its negative CCC reflects inefficient working capital management, affecting liquidity and reinvestment potential. Despite high revenue growth, delayed cash conversion may restrict Tata's future investments and operational scaling. In an industry focused on agility, Tata must streamline working capital to support sustainable growth.

Mahindra shows strength in receivables and inventory management, boosting its operational efficiency. Ashok Leyland, by contrast, suffers from high Debtor Days and the weakest Cash Conversion Cycle (CCC). Both companies report slower growth than peers like Eicher and Bajaj, with Mahindra slightly outperforming operationally. High debtor days and weak CCCs signal risks in liquidity and cash flow sustainability. Improving supply chain and collections processes is crucial for enhancing profitability and maintaining financial agility. Ashok Leyland's inefficient CCC may limit its scalability and future investment capacity.

ii. *Position of selected Automobile companies for Electric Vehicle (EV) market:*

Tata Motors leads the EV transition with successful models like Nexon EV and Tigor EV. It invests in charging infrastructure and R&D, showing long-term commitment to EV leadership. Mahindra follows closely, with the e-Verito and XUV400 EV, under its dedicated Mahindra Electric arm. Bajaj Auto entered with the Chetak EV, performing well and showing future expansion intent. HeroMotoCorp launched its EV brand Vida and invested in Ather Energy to gain momentum. Eicher Motors lags behind, with no EV products yet in its Royal Enfield line-up. Ashok Leyland focuses on electric buses, but production scale remains limited. Tata, Mahindra, and Bajaj are best positioned for EV growth, while others must accelerate efforts.

iii. Strategic Insights and Recommendations for Stakeholders:

Eicher and Bajaj show sustained profitability through strong margins, asset efficiency, and effective working capital. Stakeholders must streamline operations, cut costs, and optimize asset use to enhance efficiency. Top performers like Eicher and Bajaj show negative cash conversion cycles (CCC). Ashok Leyland's challenges emphasize the importance of tight working capital control. Reducing debtor days and improving inventory turnover can release valuable cash flow. Tata Motors' sales growth contrasts with its negative CCC, highlighting operational inefficiencies. Balancing top-line growth with profitability and liquidity is essential for sustainable performance. Eicher's high ROCE and low debt illustrate sound capital allocation and debt control. Firms should reduce debt, boost interest coverage, and enhance returns on invested capital. Slower-growth firms like Hero and Mahindra must innovate and diversify product portfolios. With rising electric vehicle adoption, innovation drives growth and profitability in the sector. The industry trends toward efficiency, sustainability, and advanced technologies like autonomous vehicles. Firms must adapt quickly, balancing operational efficiency with strategic tech investments.

VI. Conclusion and Actionable Recommendations

- i. Profitability margins, asset efficiency, and working capital shape financial performance in the auto sector:** Eicher and Bajaj lead with high ROCE and efficient CCC, setting benchmarks for operational excellence. Tata Motors, Mahindra, and Ashok Leyland struggle with profitability and negative CCC, highlighting liquidity risks.
- ii. Recommendations for Policymakers:** Promote transparent reporting on CCC, ROCE, and margins to improve market comparability and investor confidence. Encourage R&D in EVs with subsidies or tax incentives for green innovation and infrastructure. Improve credit access to support working capital optimization amid ongoing supply chain disruptions.
- iii. Recommendations for Investors:** Prioritize firms with strong efficiency metrics like Eicher and Bajaj for stable, long-term returns. Monitor liquidity, focusing on CCC and working capital cycles in companies like Tata Motors. Balance portfolios between sales growth and capital efficiency for sustained value creation.

- iv. **Recommendations for Companies:** Improve CCC by reducing Debtor Days and increasing Inventory Turnover to boost liquidity. Adopt digital tools for better supply chain and receivables management to reduce inefficiencies. Invest in sustainable innovation and EV technologies to remain competitive in a transforming market.
- v. **Final Insight:** Firms leading in efficiency and sustainability—like Eicher and Bajaj—are outperforming peers. To thrive, all stakeholders must align strategies with capital efficiency, innovation, and liquidity control.

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