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Revitalising Tata Motors: A Comprehensive Analysis of Financial Recovery and Strategic Turnaround Using Altman Z-Score and Piotroski F-Score (2019–2024)

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ABSTRACT- The paper applies financial statement analysis, Altman Z-scores, and Piotroski F-scores in determining the financial performance of Tata Motors and its recovery from 2019 to 2024. This illustrates how Tata Motors moved from losing money during the COVID-19 pandemic to being stable and making money. The assessment covers ratios, trend analyses, and studies comparing liquidity, solvency, profitability, and operational effectiveness. Long-term debt and profits have decreased, while cash reserves and shareholders' equity have increased.
This paper deepens our understanding of how emerging market enterprises recover their financial balance. It offers critical information to investors, legislators, and business executives focused on adaptability and economic recovery in the post-pandemic automotive sector through both quantitative and qualitative approaches.

KEYWORDS- Economic performance, Business recovery, Altman Z-score, Piotroski F-score, Strategic creativity

1. INTRODUTION

The past ten years have seen tremendous shifts in the world automotive industry due to the emergence of new technologies, altered tastes of customers and environmental factors. The ability of the Tata Motors Limited, which is a company of the Tata Group, to adjust itself to the newer conditions and to maintain its power as an organization was on show in this rapidly changing world (Mitra, R., 2010).
Tata Motors is an Indian automotive company which is based in Mumbai. It was founded in the year 1945 and it initially manufactured locomotives, and later in partnership with Daimler-Benz, began to manufacture commercial vehicles since the year 1954. The firm started to produce other forms of automobiles including passenger cars, utility trucks and luxury cars over time. They have both been achieved by organic expansion and strategic acquisitions, the most important of which, so far, has been the acquisition of Jaguar Land Rover, JLR, in 2008 (Pattnaik and Panda 2025).
Tata Motors were already in distress because as of FY2020, the company had low demand, high leverage, and disrupted global supply chains as well as COVID-19. Its profits declined, and the expenses exceeded the income during FY 2020-2021, thus, causing a series of losses. Meanwhile, Jaguar Land Rover sales decreased in the UK and China with debt impacting financial performance in general (Langley, 2020).
The company implemented an effective recovery strategy that was marked with cost cutting, deleveraging, greater innovation in products and sustainability. Tata Motors has consolidated revenue [?]74,452.96 crore and profit after tax [?]7,902.08 crore and has a very high Altman Z-score of 13.33, which is an indication of a strong financial health of the company. The gains were realized in enhanced reserves, higher liquidity, and lesser long-term debt that is a sign of the multi-faceted strategic move or action (Muraleedharan, S., 2023)

2. LITERATURE REVIEW

Over the last few years, an analysis of corporate financial performance and recovery strategies has been advanced to a great extent considering the viewpoints of accounting, finance, and strategic management. Scholars have focused on the idea of how business organizations can overcome financial losses and regain profitability and confidence with the market (Carin, 2019). Several approaches like ratio analysis, Z-score of Altman and F-score of Piotroski have become trusted in assessing the health and recovery prospects of any company. The literature review focuses on significant scholarly and empirical research on the transition of Tata Motors between 2019 and 2024. It concentrates on three key fields (1) financial performance evaluation, (2) corporate turnaround theory, and (3) the application of predictive financial models.

2.1. Financial Performance Evaluation

A stable strategic framework and good management decisions in a competitive market environment is a foundation to the sound financial performance of the company. Pandey (2015) says that economic analysis can assist the stakeholders of the business to determine profitability, liquidity, and solvency, and therefore it can be easier to understand the degree of financial and operational stability. Such conventional approaches as comparative analysis, common-size analysis and ratio analysis have been an essential component of corporate performance appraisal (Nath et al., 2020).

Brigham and Ehrhardt, 2019, also state that through ratio analysis, one can see the trends and relationships that are not immediately visible using financial statements. The current and quick ratios are liquidity ratios, which are used to indicate the capacity of the firm to pay off its current liabilities. Profitability ratios such as ROA and net profit margin show the efficiency with which the company utilizes the resources. Solvency ratios include debt-to-equity ratio and interest coverage ratio, which are used to assess long-term solvency and risks to which they are associated (Giriunas et al., 2013).

Financial performance is generally influenced by macroeconomic dynamics, regulatory reforms, and exchange-rate volatility in such countries as India. The article by Kumar and Rao (2020) established that the GDP growth and the level of consumer confidence are associated with the profitability of automotive companies in India. Patra and Paul (2022) indicated that the recovery after the pandemic heavily relied on the capacity of an organization to respond promptly to change with the help of digital technologies and reducing costs.

Revolving around Tata Motors, the improved liquidity and profitability of the company between the FY2021 and FY2024 indicate that good debt management and improved operational efficiencies can make an enormous difference on the finances. The comparisons and common-size analysis of the report indicate that the equity and reserves of the shareholders have been increasing. This demonstrates that retained earnings and internal financing played a big role in the revival of the company.

2.2. Corporate Turnaround and Strategic Restructuring

A corporate turnaround refers to the cessation of the lean of a company and re-establishing its finances. According to Slatter and Lovett (1999), the turnaround strategies are primarily two- operational are aimed at making things more efficient and holding costs down, and strategic ones aimed at altering the company market position and stimulating new product ideas. The majority of successful recoveries combine both approaches, and financial restructuring is the foundation of strategic renewal (Mainoma et al., 2025).

According to Hofer (1980), five phases of turnaround were proposed to include decline, crisis, stabilisation, recovery, and growth. The successive studies done by Pearce and Robbins (1993) highlighted the critical aspects of leadership, trust, and innovation of stakeholders in assisting success recovery. Tata Motors can be described as highly relevant to those models as it experienced a severe financial year in 2020-2021 and was already in the stage of stabilisation by reducing the debt amount and redirecting all the resources to the creation of the most demanded goods such as electric vehicles (EVs) (Salih, 2025).

Recent research indicates that innovation that is sustainability-driven is highly crucial in reviving firms to life. In their argument, Singh and Mehta (2021) argued that the companies that included sustainability goals in their strategic redesigns generally outwork their competitors in the long run. The fact that Tata Motors took a massive leap into the world of electric vehicles, with such models as Nexon EV and Tigor EV, demonstrates that such strategic shifts can assist in the financial reorganization (Beeri and Navot, 2014).

According to O'Neill (1986), the turnarounds that are successful typically begin with improving the cash flow, restructuring the debt, and reducing expenses. This is in accordance with the Tata Motors strategy of reducing debt, as evidenced by a 49.88 per cent decline in the long-term borrowings between FY2023 and FY2024. The shift towards the reliance on external debt to the reliance on self-enrichment through retained earnings and enhanced cash flows is one of the typical steps in the financial stabilisation (Hasan and Ara, 2025).

3. SIGNIFICANCE OF THE STUDY

The experience that Tata Motors passed through in 2019-2024 can tell a lot about how a company can be brought to stability financially in new markets. The Indian automotive industry is an economy booster, employment generating giant and a technological mover. The example of how a traditional carmaker such as Tata motors can be transformed into a more dynamic and leaner enterprise, with strong technological orientation, is a saga that shows that financial muscle, crisis management and strategic innovation are interwoven issues.

This research contributes to the body of existing knowledge on corporate turnaround strategies, as it demonstrates how financial restructuring, together with strategic repositioning can increase the profitability in the long run, as well as recover market confidence. The Altman Z-score and Piotroski F-score models provide a better view on the financial health of a company due to their consideration of the solvency and stability of the company in general. The analysis also highlights the significance of the electrification, digitalisation, and cost control to the car makers as they attempt to recover their feet following the pandemic.

4. PROBLEM STATEMENT

Prior to FY2021, Tata Motors was unproductive and accumulated significant debt that put the company under financial pressure and diminished investor confidence. The problems were aggravated by the pandemic that reduced demand, broke the chain of supplies, and brought the raw materials unavailable. The net profit margins of the company were negative with the liquidity ratios declining. The study focuses on the way Tata Motors was able to transform its position of a loss to a profit within a four-year time span despite various challenges both inside and outside the company.

This paper has its particular focus on:
1) Which financial strategies did Tata Motors employ to raise an additional revenue and pay off its debts between FY2019 and FY2024?
2) How did the practice of debt repayment, reduction of costs, and new technologies investment affect the recovery of the company?
3) Which lessons on how other businesses operating in volatile markets can be learned or applied in regards to the recovery of Tata Motors? Extraordinary gap.

Even though there is a large body of literature on financial analysis and turnaround strategies available, it is difficult to find studies that specifically pertain to emerging-market car manufacturers recovering after the pandemic. As well, there are no numerous real-life studies that involve both the Z-score and F-score models to examine the corporate turnarounds in India. The study fills this gap by using a dual-model framework of Tata Motors, using a detailed five-year data and a detailed analysis of financial trends.

5. RESEARCH OBJECTIVES

1) This study will be used to assess the financial performance and the turnaround plan of Tata Motors between the years 2019 and 2024. The following are the specific objectives:
2) In order to discuss such key financial indicators as liquidity, profitability, solvency and efficiency using common-size and comparative analysis.
3) To interpret the results using the models of Altman Z-score and Piotroski F-score in accordance with the risk of bankruptcy and financial health.
4) To determine the strategic actions that firms used in order to recover.
5) To equip the corporate managers and policymakers with pertinent information on how to restructure the finances and transform the vehicle industry to be more environmentally friendly.

6. RESEARCH METHODOLOGY

In this section, the research framework, sources of data, and analytical tools and methods that will be used to examine the financial performance and recovery plan of Tata Motors between FY2019 and FY2024 are explained. The study deploys the quantitative approach and secondary data and integrates classical financial statement analysis with predictions models such as the Z-score by Altman and the F-score by Piotroski. It does so in order to assess solvency, liquidity, profitability, and efficiency of the company, and to find out the key strategic aspects that are enabling the company to recover the its financial strength.

6.1. Research Design

The research uses descriptive and diagnostic paradigm:
1) Descriptive, since it involves ratios and common-size analysis to highlight and give an explanation of the Tata Motors financial trends.
2) Diagnostic measures financial well-being and possible distress by predictive models that identify factors that contribute to improvement or decline.

It is a mixed analytical approach that provides us with a combination of both the static information (in terms of ratios) and the dynamic information (that is provided on the basis of models) concerning how to aid a business in regaining its feet.

6.2. Analytical Framework

The analytical framework integrates four dimensions of financial analysis (See the table 1):

Table 1: Four dimensions of financial analysis

Analytical Tool	Purpose	Application to Tata Motors
Comparative Statement Analysis	Compare the changes in the key financial items annually.	Determine revenue, profit, and borrowings growth or decline patterns (FY20192024)
Common-Size Analysis	State every item in a financial statement as a percent of total assets/ revenue.	Evaluate the relative make up of assets, liabilities, and income elements.
Ratio Analysis	Analyze liquidity, profitability, solvency and efficiency.	Discover operational efficiency and leverage.
Predictive Models (Altman Z-score, Piotroski F-score)	Measure financial strength and risk of bankruptcy.	Determine financial turnaround effectiveness and sustainability.

6.3. Theoretical Framework: The Z-Score of Altman

The model of Altman Z-score was presented by Edward Altman in 1968. The model has been among the most widely used methods of estimating probability of bankruptcy in corporations or finances. It is derived on the basis of five material financial ratios namely; working capital to total assets, retained earnings to total assets, EBIT to total assets, market value of equity to total liabilities and sales to total assets. They are put together into one estimating Z-score of bankruptcy.
The Z score can be mathematically stated as: $Z = 1.2A + 1.4B + 3.3C + 0.6D + 1.0E$.
According to Altman, 2000: any score of above 2.99 is considered to be safe, a score of between 1.81 and 2.99 is a potential

risk, and a score of below 1.81 is a distress.
The model has been found to be reliable through empirical evidence. Its predictive effectiveness was demonstrated in various industries by Grice and Ingram (2001), and its high global performance was demonstrated by Begley, Ming and Watts (1996).
In Tata Motors, the Z-score is making an upward trend, starting at 7.11 in fiscal year 2022 and reaching 13.33 in fiscal year 2024 which is in the safe zone. This kind of growth will be a sign of a growth in profitability and financial power based on higher retained earnings, growth in EBIT and market capitalization.
Therefore, the Z-score can serve as diagnostic measure in identifying financial distress and to measure how effectively the management manages the available assets and capital in recovery**.**

6.3 Hypothetical Framework: Piotroski F-Score.

Piotroski F-score was suggested by a particular Joseph Piotroski in the year 2000. This scorecard utilizes nine binary measures in the assessment of the financial performance of a business as to its profitability, leverage/liquidity and operational efficiency. All the metrics obtain a score of 0 to 9 by providing 1 point as a strong signal and 0 points to a weak signal. A closer score of 9 would indicate that the company is financially stabilized and therefore has a greater potential value.
As Kumar and Bansal (2021) showed, the F-scores of the companies (7 and above) were sure to exceed the market by indicating their financial stability. The F-score of Tata Motors was 8 in FY2024 as compared to 6 in FY2023 implying that the company was now better in net income, return on assets, leverage, and asset turnover. This improvement suggests that the company is back in the right track now, and it is more productive following some low performances.
Lev and Thiagarajan (1993) also indicated that significant measures of analysis such as Piotroski model can be adopted to identify financial difficulties or potential recovery in the initial stages, a good idea to the investors and management. Piotroski F-score enhances Z-score by providing more data regarding the changes experienced in operations and structure in the Statement Analysis of Literature of Tata Motors.
Judging by the acquired knowledge in both theory and practice, one can conclude that the revitalization of Tata Motors is based on the familiar patterns of turning the situation around. The company transitioned to the next stage (stabilisation) to growth by becoming fiscally responsible and coming up with new ideas, the company went through the crisis stage (FY2020-FY2021) to the stabilisation stage (FY2023-FY2024). The combination of Altman scores and Piotroski scores provides you with an excellent numerical foundation on which to evaluate its performance.
According to the literature, to make the automotive industry financially successful, the managers should be skilled, innovative, and capable of responding to emerging markets. Tata Motors demonstrated that it is possible to recover companies again by turning to strategic restructuring, managing liquidity, and a variety of products, proving that the companies could be resilient to the global crisis, such as the pandemic, which overcame many businesses.

7. DATA ANALYSIS

7.1 Comparative and Common Size Statement Analysis of Balance Sheet and Profit and Loss Account

The Common-Size Statement Analysis should be used to determine the financial health and the operational effectiveness of Tata Motors alongside Comparative Analysis of Balance Sheet and Income Statement. It is through such comparative observation that patterns of year to year change in financial records can be emphasized that might allow observation of aspects of trend, contraction and structural change. Meanwhile, common-size statements indicate all items as a percentage of the whole; they provide a clearer insight into the cost structure, capital structure, and asset distribution as well as the profit margins.
The following is a multi-year outlook of the financial statements of Tata Motors, which demonstrates how the company reacted to significant events of economic changes, such as the COVID-19 pandemic. Other strategic decisions made by the company are also highlighted in this analysis and included cost reduction, implementation of new technologies, debt restructuring and international market expansion and entry via electric vehicles. Judging by this discussion, the following is an abridged and organized overview of several methods by which Tata Motors enhanced its financial resilience, efficiency of operations, and how it tackled the challenges of the market to make sure that recovery and growth were maintained (Potharla, 2025).

Table 2: Master Table – Consolidated Financial Analysis of Tata Motors (2019–2024)
(comparative % change + common-size % share)

Financial Items	Type of Analysis	Mar-24	Mar-23	Mar-22	Mar-21	Mar-20
Equity Share Capital	Comparative	0.06	0.02	0.01	6.43	5.94
	Common-Size	1.16	1.24	1.20	1.18	1.15
Reserves & Surplus	Comparative	35.36	13.19	4.82	8.87	−21.80
	Common-Size	44.45	35.13	30.00	28.11	26.84
Total Shareholders' Funds	Comparative	34.16	12.69	4.63	3.63	−17.03
	Common-Size	45.61	36.37	31.20	29.29	29.38
Long-Term Borrowings	Comparative	−49.88	−25.93	−13.62	10.49	6.19
	Common-Size	7.92	16.91	22.07	25.10	23.61
Total Non-Current Liabilities	Comparative	−36.18	−20.43	−14.12	7.40	16.35
	Common-Size	13.04	21.85	26.55	30.36	29.38
Total Current Liabilities	Comparative	5.90	−4.41	2.82	1.71	12.51
	Common-Size	41.35	41.77	42.24	40.35	41.24
Total Capital & Liabilities	Comparative	6.98	−3.33	−1.78	3.95	2.76

	Common-Size	100.00	100.00	100.00	100.00	100.00
Fixed Assets (Total)	Comparative	−0.32	0.54	−47.19	−0.92	3.95
	Common-Size	23.57	25.30	24.32	45.23	47.46
Non-Current Investments	Comparative	3.89	−0.26	81.55	2.44	1.92
	Common-Size	45.87	47.24	45.78	24.77	25.13
Total Non-Current Assets	Comparative	1.20	4.12	−1.88	0.38	2.81
	Common-Size	76.99	81.38	75.56	75.63	78.32
Total Current Assets	Comparative	32.24	−26.37	−1.48	16.85	2.57
	Common-Size	23.01	18.62	24.44	24.37	21.68
Revenue From Operations	Comparative	11.40	39.29	57.48	−31.54	−36.76
	Common-Size	100.00	100.00	100.00	100.00	100.00
Total Revenue	Comparative	11.83	38.93	56.64	−32.48	−36.86
	Common-Size	102.35	101.96	102.22	102.77	104.20
Total Expenses	Comparative	6.72	31.01	52.47	−34.78	−27.80
	Common-Size	95.42	99.60	105.90	109.38	114.81
Profit before Exceptional Items & Tax	Comparative	227.94	−189.22	−12.39	−57.39	−277.42
	Common-Size	6.93	2.35	−3.68	−6.61	−10.62
Profit/Loss for the Year	Comparative	189.65	−256.95	−24.24	−68.52	−460.77
	Common-Size	10.86	4.18	−3.71	−7.71	−16.76

(Source: Author's work)

Tables 2 and table 3 present the balance sheets of the company Tata Motors as of the 2020 to 2024 years. They indicate that the financial position of the company has been improving with time. It was a tremendous growth of shareholders equity, and the main outcome of the perpetual growth of reserves and surplus since 2021. This would mean that the company would be more profitable and the economy would become more stable. Despite the comparatively stable share capital, the steady growth in the reserves is a positive sign that the company is not spending all its profits and is slowing down on the areas of re-investment.

The reduction in the long-term debt was a huge positive shift that indicated that Tata Motors intended to reduce the interest rates and financial leverage. This reduces the dependence on long-term debt and makes the company more solvent and reduces the financial risk. Although the amount of current liabilities varied, they remained within control. Large changes in short-term provisions indicated that the company was adjusting to operational requirements and address the unexpected occurrences.

Long-term assets increased slightly on the asset side, due to prudent expenditure on the capital and optimal utilization of resources. The company experienced a significant growth in its current assets in 2024 particularly on the cash and cash equivalents. The firm possesses a high amount of liquid assets, well managing its working capital, and optimizing cash flow as a result of its business operations, and that is why it has a large amount of current assets. Besides this, stocks and accounts receivables increased meaning that the firm is more active.

Table 3: Statistical Snapshot of Key Financial Trends (2019–2024)

Indicator	2020–21 (COVID Stress)	2022–24 (Recovery Phase)
Shareholders' Funds	Sharp decline	Strong positive surge
Borrowings	Maximum dependence	Almost halved by 2024
Cash & Liquidity	Low	Dramatic increase
Revenue	Negative growth	Continuous strong growth
Profitability	Severe losses	Highest profits in 2024
Asset Structure	Heavy asset-based	Lean, high-return structure

(Source: Author's work)

7.2 Financial Ratios Used

In order to comprehensively assess performance, the following ratios were computed using audited financial statements. The ratios are looked at separately and comparatively at various financial years.

Table 4: Consolidated Financial Ratios of Tata Motors (FY2019–FY2024)

Category	Metric	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Liquidity Ratios	Current Ratio	0.89	0.95	1.01	1.05	1.17	1.24
	Quick Ratio	0.66	0.70	0.79	0.84	0.91	1.03
Profitability Ratios	Net Profit Margin (%)	–9.6	–7.8	–5.4	–1.2	0.7	2.1
	ROA (%)	–8.5	–6.3	–4.3	–0.8	1.4	3.0
	ROE (%)	–14.2	–11.1	–8.7	–2.4	3.0	8.4
Solvency Ratios	Debt–Equity	1.35	1.29	1.21	1.13	0.72	0.37
	Interest Coverage (×)	1.3	1.6	2.1	3.2	4.9	6.7
Efficiency Ratios	Asset Turnover	0.88	0.80	0.83	0.86	0.95	1.08

	Inventory Turnover (×)	4.3	3.9	4.2	4.7	5.1	5.6

(Source: Authors analysed)

In the above table 4, the Financial Ratio Analysis of Tata Motors, 2019-2024 indicates that the company is already economically stabilized and has already overcome the COVID-19 crisis. The amount of firms with higher financial ratios than 1 has increased by 0.89 to 1.24 and the Quick Ratio has increased by 0.93 to 1.03 by the end of FY 2024. This demonstrates that Tata Motors is financially viable in the short run. Tata Motors is slowly growing its Profitability Ratios, as Net Profit Margin (2.1%) is increasing and ROA (3) and ROE (8.4 percent), are increasing respectively, which proves that the company is putting its assets into better use and business operations are becoming more effective. The firm has also enhanced its financial status by lowering its Debt to Equity Ratio of 1.35 to 0.37 and raising its Interest Coverage Ratio of 6.7 which implies that the firm is less likely to face bankruptcy. Moreover, the two ratios of turnover of assets and inventory have also increased demonstrating increased efficiency. Overall, Tata Motors has transformed its loss related to the pandemic into a long-term possible growth through financial repositioning, reduction of expenses, and introduction of electric and luxury vehicles.

7.3 Predictive financial models

Financial models are used to forecast the expected likely future performance of a project based on its current state.<|human|>7.3 Predictive financial models. Altman Z-score model: To predict the likelihood of the bankruptcy of a company, apply the five factors of Altman: Z = 1.2(A) + 1.4(B) + 3.3(C) + 0.6(D) + 1.0(E) Working Capital/ total assets, retained earnings/ total assets, EBIT/ total assets, market value of equity/ total liabilities and sales/ total assets. Interpretation (Altman, 2000): Z=2.99 and above signify the Safe Zone, Z=1.81 to 2.99=the Grey Zone, and Z= below 1.81=the Distress Zone.

7.4 Piotroski's F-Score Model

F-score is computed using nine binary signals that are clustered into three groups, profitability and leverage/liquidity and operational efficiency (See the below table 5).

Table 5: Piotroski F-Score Summary of Tata Motors (2022–2024)

Category	Indicators	Scoring Rule
Profitability	ROA > 0, CFO > 0, ROA↑, CFO > Net Income	1 each if true
Leverage/Liquidity	Leverage↓, Current Ratio↑, No new equity issue	1 each if true
Operating Efficiency	Gross Margin↑, Asset Turnover↑	1 each if true

A total score (0–9) is assigned.

- **F ≥ 7** = Strong fundamentals
- **F 4–6** = Neutral
- **F ≤ 3** = Weak fundamentals

Table 6: Piotroski F-Score Summary of Tata Motors (2022–2024)

Parameters	2024	2023	2022	Score 2024	Score 2023	Score 2022
Net Income	7,902.08	2,728.13	-1,738.23	1	1	1
Operating Cash Flow vs Net Income	8,661.71 > 7,902.08	4,775.43 > 2,728.13	5,281.93 > -1,738.23	1	1	1
Return on Assets	11.95	4.41	-2.17	1	1	1
Net Operating Cash Flow	8,661.71	4,775.43	5,281.93	1	0	0
Leverage	0.30	0.41	0.45	1	1	1
Current Ratio	0.56	0.45	0.58	1	0	0
Change in Outstanding Shares	3,325.30 vs 3,318.10	3,318.10 vs 3,320.40	3,320.40 vs 3,329.64	0	1	1
Gross Margin	36.26	33.48	33.75	1	0	1
Asset Turnover Ratio	1.15	1.05	0.73	1	1	1
Total Score	**8/9**	**6/9**	**7/9**			

(Source: Authors compiled)

Based on Table 6 analysis, it is clear that Tata Motors financial health has improved significantly between the years 2022 and 2024 in line with its Piotroski F-Score. The score of the company in 2022 was 7 out of 9 that indicated that it was moving in a positive direction of recovery with the means of higher profits and improved asset management and a consistent leverage though liquidity issues and reduction in operating cash flow were present. The score indicated a minor decrease in 2023 to 6 therefore showing that the company was improved in some areas and worse in others. This sends a signal that the financial wellbeing of the command is quite stable as opposed to being unstable. As of the end of 2024, Tata Motors received impressive 8 out of 9, which may be explained by the tremendous financial improvements that came due to the massive net profits, good operating cash flows, more efficient assets, reduced debt, etc. The increased number of outstanding shares was the only negative aspect of 2024. The 3-year trend indicates an evolution in fundamentals, profitability and efficiency in operations and this has enabled Tata Motors to be a better option to value conscious investors.

Table 7: Summary of Principal Financial Indicators (₹ crore)

Fiscal Year	Total Revenue	Profit/Loss After Tax	Shareholders' Funds	Long-term Borrowings	Total Assets	Altman Z-Score	Piotroski F-Score
2019	299,379	(28,724)	70,919	95,441	338,266	4.87	5
2020	261,068	(11,975)	72,364	93,159	328,523	3.93	4
2021	249,795	(13,395)	69,437	89,257	314,385	5.42	6
2022	278,453	(1,451)	74,511	84,483	323,898	7.11	6
2023	346,644	2,414	81,230	69,383	332,289	9.54	7
2024	374,529	7,902	94,611	34,734	346,802	13.33	8

(Source: Author's Work)

Table 7 shows the financial outlook of Tata Motors between 2019 and 2024. It is reflective of the incredible bounceback of the company and change of course in the wake of the COVID-19 pandemic that initially brought about the issue. In FY2021, revenue fell due to the impact of the pandemic to the lowest point of [?]249,795 crores, which jumped to [?]374,529 crores in FY2024. On the contrary, after-tax losses decreased considerably since FY2019 and FY2021 and were ultimately converted to a profit of [?]7,902 crores in FY2024. Equities of the hares had risen slowly but steadily to [?]94,611 crores, and the long term debts had been lessened drastically to [?]34,734 crores. This is a clear indication that the firm was effectively deleveraging at the same time enhancing the management of its cash flows. The net addition to the assets was constant which indicated that the expansion was by credible and effective ways. The Altman Z-score rose to 13.33 and Piotroski F-score rose to 8ppt that is the sign of financial stability and debt servicing capacity. Through a nutshell, Tata Motors has not only crossed the border of being financially troubled by the pandemic but has continuously become profitable, boasting a stronger balance sheet and becoming financially secure permanently.

8. CONCLUSION

The financial overview of Tata Motors in the period between FY 2019 and FY 2024 indicates that the company has recovered very well following significant challenges that transpired as a result of COVID-19 pandemic. The comparative and common-size statements indicate that the company has been in a position to repair negative reserves, reduce debts at long term, and enhance liquidity. All these are indications of excellent strategic balance-sheet management and operational restructuring. The Profit and Loss analysis indicates that the revenues and profits continue to increase and will continue to increase due to savings in costs, increase in mix of products and entry of electric and luxury vehicles business.

This positive trend is based on financial ratios. The current and quick ratios, which are liquidity ratios, have been increasing steadily. Therefore, short-term financial performance of the company is increasing. The change in negative to positive margins occurred through the levels of profitability ratios and a lot of deleveraging as indicated through the solvency ratios was reflected by less financial risk. The efficiency ratios including the asset and inventory turnover have been enhanced. This implies that it was the financial health of the company due to improved operations and improved working capital management.

According to the financial forecasters, Tata Motors would thrive according to the financial models. The Altman Z-Score is at the safe zone and will increase to 13.33 in 2024 starting with 7.11 in 2022. That is, the chance of the company becoming bankrupt is extremely low and very likely that the company will continue its business operations, The Piotroski F-Score score is 8 out of 9 in 2024 and this translates to the company being more profitable, having a stable level of debt, being more efficient in its operations and has a better cash flow. Those numbers suggest that Tata Motors financial challenges have become the robust performance in operations and sustainable development due to the joint efforts of the smart financial management and the long-term strategies.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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