





EQUITY RESEARCH REPORT

FINANCE AND INVESTMENT CELL SHRI RAM COLLEGE OF COMMERCE

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ABOUT TATA MOTORS

Tata Motors is India's largest automobile manufacturing company with a diverse portfolio, including sports utility vehicles, trucks, buses, defence vehicles, and other passenger and commercial vehicles. As the company's tagline, "Connecting Aspirations", states, the company is known for its legacy—the legacy of customer satisfaction and market penetration in the automobile sector.

Tata Motors was founded in 1945 as Tata Engineering and Locomotive Company (TELCO), a manufacturer of locomotives. The company entered the commercial and passenger vehicle sector by forming a joint venture with Daimler-Benz of Germany in 1954 and launching Tata Sierra in 1991, respectively. The portfolio of the company includes Tata Nano, Tata Ace, Tata Prima, Tata 407, Tata Harrier and Tata Nexon due to its joint ventures with Tata Marcopolo, Fiat Tata, Tata Hitachi Construction Company and Hyundai Tata.

In recent years, the company has set the target of implementing its zero debt policy. The fulfilment of this policy requires reducing the company's capital expenditure and selling some of its non-core assets. Furthermore, the recent takeover of Ford's India plant is expected to increase the company's return on capital.

Despite these steps, the market sentiments for the company have not been favourable. As the third consecutive decline in the ROE shows, the shareholders have been consistently losing their money. Furthermore, the global semiconductor shortage and the lingering impacts of COVID-19 have led to the company recording a loss of INR 4951 crores in the fourth consecutive quarter.

Tata Motors Limited is a world leader in the production of automobiles, including cars, trucks, buses, and military vehicles. A strong global network of 86 subsidiary and associate companies

allows Tata Motors, the largest automaker in India and a member of the USD 37 billion Tata Group, to operate in the UK, South Korea, Thailand, South Africa, and Indonesia. With 9 million vehicles on Indian roads, Tata Motors is one of the leading producers of passenger cars and a leader in the commercial vehicle sector in the country. With design and research facilities in India, the UK, Italy, and Korea, Tata Motors works hard to develop ground-breaking new goods that capture GenNext customers' imaginations. In the foreign market, Tata vehicles are marketed across Europe, Africa, the Middle East, South Asia, East Asia, South Russia, Australia, and South America. The company has a wide variety of integrated smart and e-mobility solutions in its portfolio. Its array of automotive goods includes everything from small, medium, and big buses and coaches to passenger cars, as well as trucks ranging in weight from under one tonne to 49 tonnes (GVW), including pickup trucks.

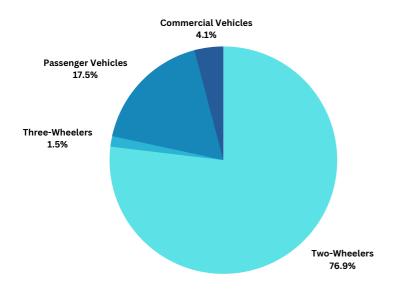
Tata Motors owns 13 subsidiaries, some of which include Tata Motors Cars, Tata Daewoo, Tata Hispano, Jaguar Land Rover PLC, TML Drivelines Ltd., Tata Technologies Ltd. and Tata Motors European Technical Centre. The company has a presence in 125+ countries and has plans to establish plants in Turkey, Indonesia and Eastern Europe in the next few years.





Tata Motors is also making ventures in the EV sector with its UK subsidiary, Tata Motors European Technical Centre, which holds a 50.3% stake in the Norwegian EV firm, Miljøbil Grenland. The company launched Nexon EV, an electric SUV in 2019 with a 30.2 kWh lithium-ion battery, which has made sales of 17,000+ units In the light of its ESG initiatives, the company has remained a front runner on GNCAP safety standards. The company also commits to SDG goals, taking steps and setting up regulations in the direction of the Government of India's vision of carbon footprint reduction.

AUTOMOBILE INDUSTRY IN INDIA



Market Segments in 2022

India is the 5th largest automobile market in the world with over 22.93 million vehicles produced during FY 21-22. The automobile industry contributes to 7.1% of the GDP of the country.

Currently valued at \$222 billion, the industry is expected to reach \$300 billion by 2026 and eventually turn India into the 3rd largest automobile market by 2030. India's passenger vehicle industry is expected to post a growth of 16% in FY23.

Industry Drivers:

1. Increase in Demand

- a. Rise in average household income by 3x in 2020 vis-à-vis 2010 along with a large young population (average age 25 by 2025) resulted in strong growth.
- b. The Indian automobile industry is aiming to increase exports by 5 times between 2016-2026. The industry accounts for 4.7% of the total exports of India. They have risen from \sim 3.5 million in 2016-17 to \sim 5.6 million in 2021-22 at a CAGR of \sim 10%,

with 2-wheelers accounting for the most.

2. Investments:

- a. 100% FDI has been allowed under the automatic route, thus making it simpler to establish new plants/stores in India. A cumulative FDI inflow of \$32 billion between FY21-FY22 and \$8-10 billion in local and foreign investments by 2023 are also expected.
- b. Investments yield better due to cost savings and advantages than Europe and Latin America.

3. Policy Schemes

- a. PLI Scheme was introduced on September 21 worth almost \$3.5 billion for the automobile sector, with financial incentives of up to 18% to boost manufacturing. This aims to bring investments of \$5.74 billion (INR. 4200 cr) by 2026.
- b. Automotive Mission Plan (2016-26), an initiative between the Indian Government and automakers for the industry's growth, was initiated.

4. EVs:

EV market in India is expected to reach INR 50,000 cr (\$7.09 billion) by 2025.

5. Miscellaneous

- a. Many foreign car manufacturers like Kia, Hyundai, and Volkswagen have adapted to the large middle-class population of India, enabling them to compete with domestic players like Maruti Suzuki, Tata Motors, etc.
- b. Increasing financing options are now available as manufacturers are partnering up with banks to help provide easier car loans to their customers.

KEY RISKS

Semiconductor chip shortage

The shortage in supply of semiconductors due to a variety of reasons, including the supply chain disruptions created by the COVID-19 pandemic, natural calamities at multiple plant locations, an unusual rise in the demand for consumer electronics and the 5G revolution, has resulted in reduced resources for the

automotive industry, and increased capacity allocation to the consumer durable goods industry. It has severely impacted Tata Motors' production schedules and the capacity to meet the demand for some of its vehicles, especially the lower-end models, in which its competitors exclusively operate and beat Tata Motors in terms of managing supplies. This has resulted in increased prices and expected delivery time, decreasing demand and accelerating cancellations. The shortage might also negatively affect the company's plans for implementation of JLR's Reimagine strategy since EVs utilise a greater extent of semiconductors than typical vehicles.

Russia-Ukraine conflict

Russia and Ukraine have historically contributed to around 2.5% of Jaguar Land Rover's annual revenue. However, to comply with current export restrictions, deliveries of vehicles to Russia have been halted resulting in a pileup of £43 million in connection to customer liabilities. Moreover, in April 2022, Russia paused gas supplies to Poland and Bulgaria. Further instances of this, especially in Slovakia where Jaguar Land Rover has a manufacturing facility, might result in increased component shortages or the inability of the company to operate its manufacturing facilities significantly impacting its bottom line.

Intensifying competition

The premium passenger vehicle category in the global automotive industry is highly competitive and the competition is likely to intensify further due to the entry of new participants. Increasing competition in the commercial vehicle sector has further placed pressure on Tata Motors' market share in the industry. Especially following Brexit, European Union-based companies have gained a competitive edge that would allow them to profit from their access to the EU single market post Brexit. Improving infrastructure and growth prospects in India has also attracted immense foreign competition, bringing advanced technology, global scale, international experience, and huge financial resources.

Changing customer preferences

Consumer demand patterns are influenced by numerous variables, some of which can be challenging

to anticipate, including disposable income, brand reputation, and environmental consciousness beyond purchasing factors standard such price. performance, design, and features. Customers' tastes are shifting away from diesel engines towards electric and hybrid automobiles, which could significantly impact Tata Motor's ability to sell luxury automobiles and large or medium-sized all-terrain vehicles. Whether in reaction to increasing fuel prices or due to other factors, a change in customer demand away from SUVs to compact and midsize passenger cars might have a negative impact on the company's overall profitability. Diesel-powered vehicle sales have decreased. especially in the UK and Europe, as a result of negative public opinion, which is mostly driven by the media and government policy, causing major disruption in the demand base.

Risks associated with the automobile financing business

The capacity of customers to obtain financing is crucial to the sales of Tata Motors' commercial and passenger vehicles segments. Rising defaults in repayment in recent years have contributed to a decline in automobile financing, which has negatively impacted the availability of credit for potential clients. Due to the slow growth in freight availability and pricing, the transportation and logistics industries were already experiencing considerable challenges. interruptions brought on by lockdowns and other COVID-19 pandemic-related measures implemented by local and federal governments worsened this condition. The company's prospects, financial conditions, results of operations, and cash flows might be seriously affected by customer default or failure to pay instalments when due.

Fluctuations in exchange and interest rates

The relative fluctuations in the value of GBP, the U.S. dollar, the Euro, the Russian Ruble, the Chinese Renminbi, and other foreign currencies have a substantial impact on Tata Motors' revenues and expenses as a result of the company's imports of capital goods, raw materials, and components as well as its manufacturing and sales of automobiles in numerous countries. Customs and other administrative snags caused by Brexit have persisted and might

eventually affect the UK economy. This can lead to more volatility in the value of the pound, which can have an impact on the Jaguar Land Rover range of the company. Because a sizable amount of Jaguar Land Rover's raw materials, parts, and capital equipment are imported, particularly from Europe, the company is exposed to risks arising from the fluctuation of the euro as well.

The exposure to interest rate fluctuations stems from the fact that the company has both interest-bearing assets, such as bank balances, and interest-bearing obligations, some of which carry interest at variable rates, such as the \$1 billion term loan facility for Jaguar Land Rover, the UK Export Finance (UKEF) and commercial loan facilities, and the United Kingdom fleet financing facility, whilst the current notes bear interest at fixed rates.

TATA MOTORS: EV

Tata Motors has had a demanding few years, orchestrating a turnaround, doubling its market share in passenger cars to 10% in a mere 5 years span, and preparing for the EV revolution. The carmaker has produced models that have dominated the Indian auto market after a decade of struggles, during which its vehicles lost touch with individual car purchasers. The turnaround also occurs at a time when the vehicle business had been turbulent, and severely impacted by the pandemic, opening the door for more advancements as sector sales resume normalcy.

The result has been a quadrupling of the company's market capitalisation over the past year, making it one of India's most valuable automakers at the moment. Tata Motors has not been resting on its laurels, despite all of its recent success. The company is currently building the groundwork for what it believes will be a revolution taking place in the Indian automotive industry over the next few years.

In order to increase adoption in the nation, the group is also devoted to creating what it calls Tata UniEVerse, an ecosystem that will make use of group synergies and allow various Tata firms to work together to offer EV solutions to consumers. The big bet on electric cars also comes at a time when 31 national governments and at least six major automakers, including Ford, Mercedes-Benz, General Motors, and Volvo, committed to phasing out the sale of new gasoline and diesel vehicles by 2035 in major markets and by 2040 on all global levels. This commitment was made at the recently concluded COP26. It is a significant chance to take the lead in the EV market, develop products, and build the necessary ecosystem so that the goal of promoting the rise of electrification is not hampered by the lack of an ecosystem.

Tata has worked quickly to establish its place next to major international automakers that are spending billions of dollars to create EVs that adhere to more stringent carbon reduction targets. While Tata is far behind other automakers in terms of development, electrification will drive its globalisation drive. In an effort to boost its EV drive, Tata Group might shortly announce plans to manufacture battery domestically and is also considering producing semiconductors on-site. Tata declared last year that it would invest around \$2 billion to produce 10 EV models by March 2026, with \$1 billion coming from the private equity firm TPG. The introduction of EVs is a key component of the Prime Minister's carbon reduction strategy, and by 2030, India plans for 30% of all cars sold to be electric. This fiscal year, Tata wants to increase EV production from 19,000 cars annually to over 80,000 units. Currently, 90% of all India's EV sales come from Tata, even though this market only accounts for 1% of the nation's yearly sales of approximately 3 million vehicles. Tata will look for export markets in regions with climates similar to those in India. It will be in areas with high electrification growth rates and favourable policy environments. The new platform's vehicles will be independent of battery chemistries and battery cell forms, enabling Tata's freedom to debut in any market. Additionally, the batteries will be more robust and have a higher density than those in their earlier automobiles.

The market for electric cars should positively take off as Tata Motors plans to launch more reasonably priced

vehicles by the beginning of next year, while on the other hand, rivals like Mahindra and Mahindra are also attempting to break into the market. Over the next 12 to 18 months, Tata Motors hopes to win over the price-conscious Indian consumer by offering Generation-1 and Generation-2 EVs at the most competitive price. Tata Motors is expected to have an 88% market share of electric passenger vehicles in Q1 FY23. It also plans to introduce the Tata Curvv, a mid-sized electric sports utility vehicle (SUV), and its Generation-3 born-electric EV line, based on the AVINYA concept, in 2024 and 2025, respectively.

Due to the fact that they are based on current IC-engine powertrains, Tata Motors considers existing models like the Nexon EV and Tigor EV to be Gen-1 products. Products from the Gen-2 line will be constructed on an improved platform that is tailored for electric vehicles (EVs) but can also support internal combustion engines. The long-range Nexon EV Max from Tata Motors has an ex-showroom starting price of INR 17.7 lakh. Experts predicted that the pricing of M&M's next SUV XUV400, which is built on the XUV300 platform,

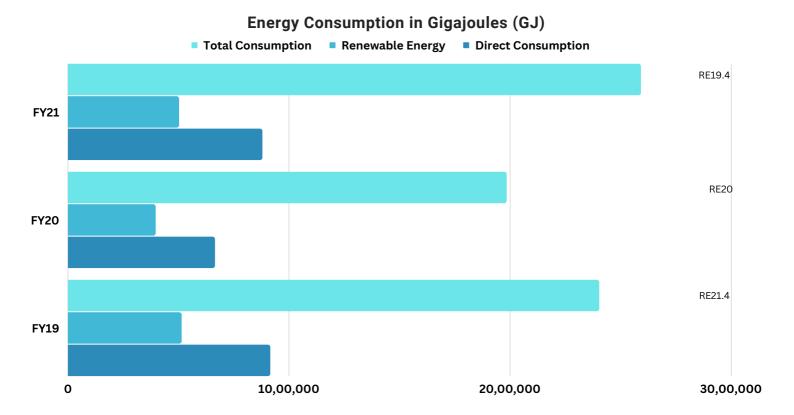
may be comparable to the Tata Counterpart. Six months is the typical waiting time for Nexon EV. Even as its rivals introduce several new vehicles, especially SUVs, Tata Motors is relying on a cycle of a product refresh, which will hit the market in the next year, to keep enticing buyers. Tata Motors is counting on its high-intensity of releases to maintain its leadership position as competition in the EV industry heats up in the years leading up to 2024-2025, when mass-market manufacturers will have numerous EVs built on dedicated, ground-up EV platforms.

SUSTAINABILITY

Tata Motors bases its sustainability endeavours on a three-pronged approach: sustainable mobility, sustainable manufacturing and product stewardship. Investments are continually and increasingly made in safety, emissions reduction and environmentally sustainable materials, prioritising going above and beyond compliance.

Energy

Tata Motors is a signatory of the RE100 initiative and aims to source 100% renewable electricity by 2030.



Emissions

Tata Motors aligns itself with carbon emissions reduction vision by the Government of India and targets the SBTi framework.

Year	Carbon footprint/ CO2e emissions (scope 1+scope 2) (per vehicle)	Cleanwater Consumption/ Water Withdrawal Intensity (per vehicle)	Specific hazardous waste generated (per vehicle)		
2021-22	0.49 tons	6,060 L	8.7 kg		
2020-21	0.59 tons	8,330 L	8.8 kg		
2019-20	0.69 tons	11,050 L	10.3 kg		



Translating energy to carbon emissions

In FY22, Tata Motors sourced 92.39 million kWh of renewable electricity for its manufacturing operations (19.4% of total), translating to avoidance equal to 72,992 tC02e.

Supply chain

As a part of a sustainable supply chain programme, Tata Motors has been organising sustainability awareness workshops for its suppliers. Since 2017, over 30 workshops have been organised covering around 700 suppliers.

These engagements are aimed at different sustainability parameters and encouraging suppliers to install rooftop solar PV modules and rainwater harvesting systems. The outcomes of these sustainable supply chain programmes bring about better sustainability awareness, safety culture and gradual suppliers' adoption of energy conservation initiatives, renewable energy sources and water conservation technology.

Initiatives

Tata Motors' initiative 'ProLife' 2013 is an after-market product support strategy for its commercial vehicle customers. Customers can exchange their old aggregates for reconditioned aggregates that retain original equipment-like performance even after the first lifecycle.

Tata Motors incorporates 100% recycled bumpers and extended oil drain life in its vehicles and has achieved a recyclability rate of 80% and recoverability rate of 85% for its passenger vehicle models.



Engines recycled or reused

In December 2020, Tata Motors launched the 'Go Green' initiative to plant a sapling in collaboration with an NGO each time a customer sale is made and also when a customer makes their first service touchpoint. The economic benefits of the trees are received by farmers on whose land these saplings are placed. The initiative has planted close to 1 million trees in two years.

In FY19, The 'Value from Hazardous Waste' initiative was launched, aimed at diverting hazardous waste from landfill and incineration sites to approved sites and deriving value from the same. Its goal is to achieve zero

waste from landfills from manufacturing operations. It prevented the disposal of 1976 MT of hazardous waste in FY20. Today, five out of seven Tata Motors plants are zero hazardous waste in landfills.

Social & CSR

Tata Motors has 4 CSR units: the Environment CSR, which planted 1.9 lakh trees of indigenous varieties and ensured a high survival rate of 80% for these trees; Education CSR, which introduced several education programs that have benefitted over 1 lakh students; CSR for Employability which trained 45,234 youth and farmers in secondary skills; Health CSR, which undertook several Covid measures, including vaccination campaigns, with 80,101 individuals being vaccinated. The CSR activities have impacted 0.79 million lives, spending a budget of INR 23.7 cr in FY21.

SMDF (Sumant Moolgaokar Development Foundation) is a social arm formed by Tata Motors in 2006. It receives 50% of its revenue from Tata Motors' grants and contributions made by its employees. The foundation focuses on rural development. It has

launched several initiatives in pursuance of inclusion and equity in aspects of water through National Drinking Water Programme and Disaster Response. The foundation spent INR 4.96 Cr in FY21, INR 2.8 Cr out of which was on the Covid-19 response.

Human capital





The number of training hours increased by 33.6% in FY22, and the number of health sessions increased by 29.9%.

(78.91%)



Non-Management



India's largest solar carport was inaugurated on 18th June 2021 by Tata Motors in collaboration with Tata Power, stretching 30,000 sq. m with 6.2 MWp capacity at Chikhali, Pune. It generates 86.4 lakh kWh of electricity per year to reduce 7000 tons of CO2 emissions in FY22. It will achieve 1.6 lakh tons of CO2 emissions avoidance over its lifecycle.

PESTEL ANALYSIS



Political

• Political conflict and the interference of local political parties in business operations pose a threat to the enterprise. An example of this is the relocation of the Tata Nano plant from Singur in West Bengal. Government actions have a domino effect on India's automotive industries. The government's budgetary allotments and tax laws are unstable. An example of this is the Maximum Axle Load Regulations Law and the Goods and Services Tax. The automobile industry took a hit from the increase in the maximum axle since it reduced the demand for new vehicles because existing vehicles can now handle more weight. To understand how well it is operating, the corporation must continuously reinvent itself and adjust to the unpredictable political landscape.

Economic

- India holds a promising future for its automobile industry. The nation has a strong position in the international heavy vehicles arena as it is the largest tractor manufacturer, second-largest bus manufacturer, and third-largest heavy truck manufacturer in the world. The automobile industry significantly occupies 7.1% of India's GDP and 49% of its manufacturing GDP. India's passenger vehicle industry meanwhile is posed to post a growth of 16% in FY23.
- The EV market in India is picking pace and is expected to grow at a CAGR of 49% between 2022-2030 and hit the target of 10 million units of annual sales by 2030. The EV industry will create 50 million direct and indirect jobs by 2030. A market size of \$50 billion for the financing of EVs in 2030 has been identified, valued at about 80% of the current size of India's retail vehicle finance industry.
- GST has changed the playing field for all manufacturers operating in India.
 Companies from sectors have either had positive or negative economic impacts from the law. Tata Motors Ltd. however sees a multitude of positive changes in its business model:
 - 1. Centralised taxation has streamlined supply chains.
 - 2. The cost of automobiles has decreased. Small cars and utility vehicles, where the GST was 28%, have been significantly impacted. Commercial vehicles, however, have slightly lower pricing thanks to GST.
 - 3. The sourcing of raw materials and procurement is simplified, which consequently increased production.
- The impact of Brexit has been significant on Tata Motors. According to JLR reports, a "Hard Brexit" may compel the company to close its UK operations, which would cost them \$1.52 billion. Tata Motors is also suffering from undesirable foreign exchange rates.

Social

- Any production-related company in India might benefit from the affordable labour that the country offers. Another benefit Tata leans on is trust in the brand. The company has always placed a premium on employing locals, creating job opportunities, and fostering goodwill within the community.
- The marketing of the Tata Nano adds to the perception of Tata cars as being inexpensive, especially in the passenger vehicle sector. Thus, most of the clients of the company include middle and lower-middle-class individuals who desire to upgrade from a 2-wheeler to a 4-wheeler. As a result, the corporation has strategically positioned its production facilities to provide them with a competitive edge. Moreover, the support demonstrated by the company to over 300 NGOs has given the company a society-friendly image.
- In the Indian automotive industry's manufacturing sector, labour unions are essential. An illustration of this is the Maruti-Suzuki Manesar Plant. However, Tata is regarded as an employer-friendly business, which is to the company's advantage.







Technology

- Tata Motors Ltd. owns Tata Technology Ltd., which supports the
 modernisation of Tata Motors' Design and Technology to adapt to
 contemporary technologies. In the category of commercial passenger vehicles,
 Tata has been promoting electrical vehicles (buses). Tata Motors made the
 most of its adoption of e-commerce by selling 15 Tata Safaris on the ecommerce platform Amazon in a single hour.
- 6,300 crores were spent on R&D for the Indian automotive industry during the fiscal year 2016-17. For medium and large commercial trucks, Tata Motors has launched Tata Alert, a highway assistance programme that will be accessible on all Indian national highways in four hours.
- The business has consistently developed technology advances first. It has the competitive advantage of being technologically advanced, thanks to its technology centre and adoption of new technologies.



- Speaking of environmental measures, the corporation supports numerous programmes, including Clean Earth and Clear Earth, in its quest to become an eco-friendly business. In addition to pushing electric vehicles, the corporation is exploring the potential of hybrid vehicles with improved fuel efficiency. Tata Motors and Greaves have a deal on BS-VI engines with overseas companies to cut down on carbon emissions. The automotive industry benefits from abundant resources and favourable climatic conditions. Large sea coasts are beneficial for exports. Gujarat, Chennai, Nellore, and other coastal regions serve as the centre for India's automobile industry.
- Under its environment protection-based CSR initiative, Vasundhara, the company has planted 110,000+ saplings across diverse locations with a survival rate of 85%. The program also involves sensitising children towards climate change. As of now, TML has managed to reach 90,000+ kids, making this one of the most dynamic green initiatives in India.



Legal

- The laws governing patents for inventions and processes are inadequate.
 Operations in India also heavily rely on lobbying actions.
- The government's plan to eliminate all gasoline and diesel vehicles by 2030 and other environmental regulations are threats to the company, but also opportunities for its EV segment. The company must be flexible to survive.
- The company has significant interests in Europe. With the west becoming more climate-conscious and international summits like COP placing more burden on the developed countries to contribute to climate control, the company may face certain legal hurdles in following the new climate norms.

BENCHMARKING TATA MOTORS

Dimension	Tata Motors	Maruti Suzuki	Mahindra & Mahindra	Remarks
Product range	Passenger cars, trucks, vans, coaches, buses, sports cars, construction equipment, military vehicles	Passenger cars, vans, light commercial vehicles, coaches, sports cars, military vehicles	Construction equipment, passenger cars,two-wheelers, vans, trucks, coaches, military defence.	All the 3 companies offer a variety of vehicles. However, Maruti Suzuki does not have any option for heavy commercial vehicles yet. Moreover, Tata Motors is a market leader in most of the commercial vehicle sub-segments. In the mini truck segment, Tata ACE is one of the top-selling products, which is now being challenged by Maruti Suzuki's Super carry.
Price range: Prices of some popular models have been taken to draw an overall comparison	Tata Nano GenX (2.36 - 3.35 lakh, Ex- showroom, New Delhi), Tata Tiago (5.37 – 7.79 lakh, Ex- showroom, New Delhi), Tata Bolt (5.92 – 9.08 lakh, Ex-showroom, New Delhi), Tata Indica eV2 (4.01 – 4.87 lakh, Ex-showroom, New Delhi), Tata Sumo Gold (5.73 – 10.68 lakh, Ex- showroom, New Delhi), Tata Safari Storme (11.09 – 16.44 lakh, Ex-showroom, New Delhi), Tata Xenon XT (10.56 – 12.1 lakh, Ex- showroom, New Delhi), Tata Hexa (16.77 – 23.38 lakh, Ex- showroom, New Delhi), Tata Nexon (8.60 – 16.65 lakh, Ex- showroom, New Delhi)	Maruti Suzuki Alto 800 (3.39 – 5.03 lakh, Exshowroom, New Delhi), Maruti Suzuki Omni (2.13 – 3.17 lakh, Exshowroom, New Delhi) Maruti Suzuki Wagon R (5.45 – 7.08 lakh, Ex-showroom, New Delhi), Maruti Suzuki Ignis (5.35 – 7.72 lakh, Ex-showroom, New Delhi) Maruti Suzuki Baleno (6.49 – 9.71 lakh, Exshowroom, New Delhi), Maruti Suzuki Swift Dzire (6.24 – 9.18 lakh, Exshowroom, New Delhi) Maruti Suzuki Ertiga (8.41- 12.79 lakh, Exshowroom, New Delhi) Maruti Suzuki Vitara Brezza (7.99- 13.96, Ex-showroom, New Delhi)	Mahindra KUV100 NXT (6.21 lakh, Ex- showroom, New Delhi), Mahindra eKUV100(8 lakh , Ex-showroom, New Delhi), Mahindra XUV 300 (8.41 lakh, Ex-showroom, New Delhi), Mahindra Scorpio N (11.99 lakh, Ex-showroom, New Delhi), Mahindra XUV700 (13.45 lakh, Ex-showroom, New Delhi, Mahindra Marazzo (13.39 lakh, Ex-showroom, New Delhi), Mahindra thar (13.53 lakh, Exshowroom, New Delhi), Mahindra thar (13.53 lakh, Exshowroom, New Delhi), Mahindra bolero (9.52 lakh, Ex- showroom, New Delhi) ,Mahindra alturas G4 (31.88 lakh, EX- showroom, New Delhi), Mahindra XUV e9 (50 lakh, Ex-showroom, New Delhi),	There is no significant difference between the prices offered by Tata motors and Maruti Suzuki. While Maruti Suzuki offers a slightly lower price, M&M has a whole different set of prices, mainly because its primary products are SUVs or vehicles other than passenger cars.

Customer segment	Formally known to have been established as the offering of affordable product range, Tata is now drifting away from that image. Tata has only 4 models in the medium income middle-class customer segment. Most of the customers of upper income middle-class group still prefer Hyundai and Kia SUV brands. Tata Motors has just over 5% market share.	Maruti regulates the medium income middle-class customer segment with 12 models. The major models in low income segment include Celerio, WagonR, Ignis (2-5lakhs); medium income segment include Ertiga, Dzire, Baleno (5-8lakhs); high income segment include S-Cross, Ciaz, Vitara Brezza (8 lakhs and above).	M&M offers no options for the low income segment and only a few options for the middle income segment. Major proportion of its products are made for high income or elite class, as evident from numerous SUV models it offers for various sub segments of high income customers.	Both Tata and Maruti Suzuki have a wider market share because they have price ranges catering to almost all the customer segments. However, M&M does not have penetration into the market for low income customers.
Dealer involvement	Tata has 897 authorized showrooms across India and over service stations in Delhi, Mumbai, Bangalore, Chennai, Kolkata, Pune.	authorized showrooms across India and over service stations in Delhi, Mumbai, Bangalore, Chennai, 1182 authorized showrooms across India and 1641 service stations in Delhi, Mumbai, Bangalore, Chennai, India M&M has 400+ of centre agents at 18,000+ users working dealersh and 592 authoris showrooms across India		Maruti Suzuki offers better service and smoother customer interaction, as evident from higher sales. Tata motors and M&M lag significantly.
Manufacturing and plants locations	I and Pline in India as I		11 state of art manufacturing plants across India.	Considering the number of manufacturing facilities, Tata Motors is the winner followed by M&M and Maruti Suzuki respectively.

JLR: ANALYSIS (M&A)

On June 2, 2008, the Indian automaker Tata Motors completed the debt-free, cash-free acquisition of the Jaguar and Land Rover (JLR) divisions from the American automaker Ford Motor Company (Ford) for US\$ 2.3 billion. JLR, which belonged to Ford's Premier

Automotive Group (PAG), was regarded as a British icon. Jaguar was involved in the production of expensive luxury vehicles, whilst Land Rover produced expensive SUVs.

Jaguar Land Rover

- The first Jaguar car was produced in 1935 and the first Land Rover debuted at the Amsterdam Motor Show in 1948. Both marques with long histories prior to their merger first came together in 1968 as part of the British Leyland conglomerate. Jaguar Land Rover is unique in the global automotive industry. Jaguar offers peerless models with an unrivalled understanding of the future luxury needs of its customers, while Land Rover owns the brand name of being one of the most premium SUVs.
- Multiple honours like the 2019 Vincentric Best Value in America Awards for its numerous models in various segments highlight the global benchmark set by the company for its sheer brilliant engineering quality, automotive innovations, and advanced design.
- JLR also has the rights to the defunct Daimler, Lanchester, and Rover marques in addition to the Jaguar and Land Rover brands, which were also acquired by Tata Motors in 2008.
- Ford, the erstwhile holding company of JLR, invested a lot of money to increase quality, and it was only a matter of time until this paid off. JLR also possessed excellent vehicle factories. The dealers' perseverance in the face of losses during the previous four to five years highlighted the strong supply chain network.

Tata Motors

- The company is one of the market's true leaders in the passenger vehicle sector. For many years, the term Tata Motors has been synonymous with the automobile sector. The 1998 launch of the Indica cemented its position as India's first domestic automaker. Tata sold close to 1 million Indicas in 20 years after receiving more than 115000 reservations for the vehicle in the first year alone, making it the best-seller for years.
- Tata Motors also provided a broad range of commercial vehicles that are tailored to domestic requirements and uphold the highest standards for quality, safety, environmental standards, and user comfort.
- Tata has a massive presence in the ever-growing market of South East Asia, along with strong customer loyalty and the brand name of the Tata Group.

Synergy

- Despite having a ten-year presence in the domestic auto sector, the acquisition of JLR granted Tata Motors access to the worldwide market. Tata Motors was expected to become one of the leading participants in the global automotive sector with the help of the acquisition of Jaguar and Land Rover, its strong global presence and a portfolio of wellknown brands. With a global network of more than 8,800 touch points, the Tata Motors group is currently active in over 125 countries.
- After the purchase, Tata Motors became the owner of the \$2,500 Nano, the world's most affordable automobile at the time, as well as high-end brands like Jaguar and Land Rover. Tata Motors currently controls one of the most well-known brands in the automotive industry and can claim a full range of vehicles, starting at a few lakhs and going up to many crores. Thus, the acquisition broadened the customer base of Tata Motors, both in terms of geographical areas and income groups.
- As part of the agreement, Tata also received two cutting-edge design studios and technology. This provided Tata Motors access to cutting-edge technology, enabling Tata to enhance its flagship products in India.
- Corus, the primary supplier of automotive highquality steel to JLR and other automobile manufacturers in the US and Europe, was also previously acquired by Tata just before JLR for 6.7 billion pounds in one of the most expensive steel deals to date. The acquisition was made to give them a cost competitive advantage, increasing the synergy of not just Tata Motors but the Tata Group as a whole.

Other Factors

- Tata's plan for JLR was to increase production rather than reduce expenses. The Indian corporation agreed to make significant investments in cuttingedge technologies that will help the brands compete in the premium market. Consequently, JLR has emerged among the best-selling luxury car manufacturers today.
- Tata provided JLR with the necessary expertise in cash management along with the requisite capital to turn the company around in a way that Ford Motors had failed to do so

RATIO ANALYSIS

Ratio	Tata	Maruti Suzuki	Mahindra	Analysis	Tata Motors Charts
Current Ratio	0.98	0.99	1.34	The CR of TaMo is close to but the lowest among competitors. This is a little concerning as it is almost 1, meaning the short term assets are only just enough to cover its debts.	1.00 0.75 0.50 0.25 0.00 FY18 FY19 FY20 FY21 FY22
Debt/Equity Ratio	2.68	0.04	1.07	The leverage ratio is the highest among all at a value greater than 2.5, meaning company is financing a significant amount of its potential growth through borrowing and faces a higher risk of default.	2 1 0 FY18 FY19 FY20 FY21 FY22
Net Profit Margin	-4.06%	4.31%	7.96%	The lowest and a negative net profit margin signifies a lack of efficiency in generating profits from the sales.	5.00% 0.00% -5.00% FY18 FY19 FY20 FY21 FY22
Return on Capital Employed	1.63%	8.37%	10.28%	The lowest ROCE implies that the company is inefficient in generating profits from its capital employed.	7.50% 5.00% 2.50% 0.00% -2.50% FY18 FY19 FY20 FY21 FY22
Basic Earning Per Share	-29.88	128.43	59.2	The lowest and a negative EPS implies negative returns, i.e., loss to shareholders.	-100 FY18 FY19 FY20 FY21 FY22
Interest Coverage Ratio	0.32	38.10	2.41	The lowest ICR in the industry and a value of less than 1 implies that the earnings are not enough to cover up the interest obligations.	3 2 1 0 -1 FY18 FY19 FY20 FY21 FY22
Inventory Turnover Ratio	1.59	12.07	5.23	The lowest ITR implies inefficient inventory management.	8 6 4 2 0 FY18 FY19 FY20 FY21 FY22

DISCOUNTED CASH FLOW

	0	1	2	3	4	5
		2023	2024	2025	2026	2027
EBIT		5,005	11,330	19,740	21,674	23,430
Less: Taxes@30%		1,501	3,399	5,922	6,502	7,029
NOPAT		3,503	7,931	13,818	15,172	16,401
Add: Depreciation and Amortisation		24,973	27,290	28,944	30,163	31,570
Add/Less: Working capital changes		1,498	1,756	4,640	-553	-1,614
Less: Investment in fixed assets		30,299	44,283	41,146	39,203	41,834
FCFF		-324	-7,305	6,256	5,580	4,523
Discount factor - WACC@7.54%		0.9643	0.8967	0.8339	0.7754	0.7211
Present value of Explicit period	5942					
EV/EBITDA- EXIT MULTIPLE	8.76					
EBITDA						55,000
Enterprise value (Terminal Value)						481801
Present value of terminal value	335013					
Total Present value of operations	340956					
Add: Non Operating assets including cash	62765					
Value of firm	403720					
Less: Debt	161451					
Less: Non-controlling interest	4271					
Value of equity	2,37,999					
Shares outstanding	332					
Value per share (21-10-22)	 ₹ 716					

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