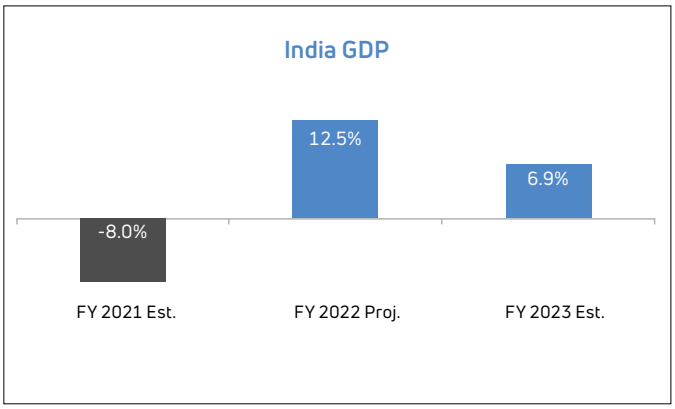
MANAGEMENT DISCUSSION AND ANALYSIS

ECONOMY OVERVIEW

INDIA



According to the National Statistical Office ("NSO"), India's GDP is estimated to contract by 8.0% in FY 2020-21. To control the spread of the COVID-19 pandemic, India had imposed severe lockdowns in April and May 2020 resulting in curtailment of economic activities. As a result of the lockdowns, India's GDP contracted by 24.4% in the first quarter of FY 2020-21. As lockdown restrictions were gradually eased from June 2020, the economy witnessed a strong V-shaped recovery. The recovery in economy is resilient with sustained improvement in majority of high frequency indicators. The Purchase Manager's Index manufacturing index was at 55.4 in March 2021 compared to 51.8 in March 2020. Based on data provided by the NSO, gross value added at basic prices for FY 2020-21 from the manufacturing sector is estimated to decline by 6.4% compared to FY 2019-20. Sector-wise, agriculture has remained the silver lining while contract-based services, manufacturing, construction were hit hardest, and have been recovering steadily. Government consumption and net exports have further provided support in the recovery. As per International Monetary Fund ("IMF") projections in March 2021, Indian economic growth is estimated at 12.5% in FY 2021-22 and 6.9% in FY 2022-23.

India has been severely affected by a second wave of the COVID-19 and hospitals in several states are, as of the state of this annual report, still reeling under the shortage of health workers, vaccines, oxygen, medicines and beds. Several states have introduced varying levels of curbs on economic activity and public movement to stop the spread of the virus, which are mostly being reviewed and extended on a weekly or fortnightly basis. The respective state governments are imposing restrictions as they are witnessing surges in the COVID-19 cases. We are expecting a weaker first quarter in FY 2021-22 on account of supply disruptions and COVID-19 pandemic in India. We expect gradual sequential recovery as supply chain and COVID-19 situations improve.

The RBI announced rate cuts in FY 2019-20 to revive growth and mitigate economic impact of the COVID- 19 pandemic. The repo rate remains unchanged at 4% and the RBI is continuing with its accommodative stance and will continue if necessary, to sustain growth on a durable basis and continue to mitigate the impact of the COVID-19 pandemic on the economy, while ensuring that inflation remains within the target going forward. To provide liquidity support and strengthen public in general in their fight against COVID-19 pandemic, the RBI Governor announced "on tap liquidity" to the public in general. Considering the present situation of the medical infrastructure in the country, banks are encouraged to provide fresh lending support to a wide range of entities including vaccine manufactures, importers and suppliers of vaccines and priority medical devices, hospitals/dispensaries, pathology labs, manufactures and suppliers of oxygen and ventilators, importers of vaccines and COVID-19 related drugs, logistics firms and patients for treatment. The RBI also announced certain relaxations in overdraft ("OD") facilities of state governments to better manage their fiscal situation in terms of their cash-flows and market borrowings. Accordingly, the maximum number of days of OD in a quarter is being increased from 36 to 50 days and the number of consecutive days of OD from 14 to 21 days will be available until September 30, 2021.

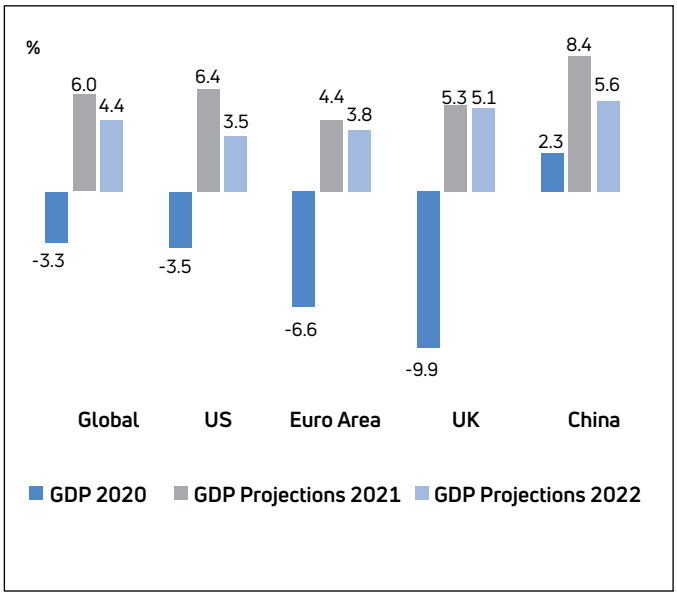
The automobile industry recovered slightly in FY 2020-21 due to the resurgence of the economy. According to data released by SIAM, in FY 2020-21, the Indian automotive industry recorded a 6.1% decline in domestic sales compared to a 20.3% decline in FY 2019-20. The Passenger Vehicle segment declined 2.0% in FY 2020-21, compared to a 17.3% decline in FY 2019-20. While overall industry sales were lower than in FY 2019-20, the trend of preference towards personal mobility reduced the overall impact of the slowdown. The Commercial Vehicle industry in India registered a 21.7% decline in FY 2020-21 compared to a 30.0% decline in FY 2019-20, because of the COVID-19 pandemic, lower freight utilizations, difficulties in obtaining financing and some hesitation due to rising costs for BS VI vehicles.

The demand for Passenger Vehicles has grown in FY 2020-21 on the back of some pent-up demand but more importantly a structural shift in personal mobility preference arising out of an urge to break free in the aftermath of the restrictions in travelling during the COVID-19 pandemic situation as well as resurgence in the rural markets. Passenger car sales are dominated by small and mid-sized cars. With the shutdown of all non-essential services accompanied by liquidity and cash crunch, the demand for Commercial Vehicles was severely impacted in the first half of FY 2020-21.

While there are short term challenges on account of COVID-19 pandemic, Commercial Vehicle industry is likely to rebound and show recovery after witnessing two consecutive years of double digit de-growth. Demand for Commercial Vehicles, particularly Medium and Heavy Commercial Vehicles, is likely to also benefit from various government initiatives to help revive the economy. Demand for Commercial Vehicles, particularly Medium and Heavy Commercial Vehicles, is likely to also benefit from various government initiatives to help revive the economy.

The Government of India has encouraged foreign investment in the automobile sector and has allowed 100% foreign direct investment ("FDI") under the automatic route. Focus is now shifting to electric vehicles to reduce emissions. Under union budget 2019-20, the Government of India has also provided an income tax deduction of ₹1.50 lakhs on interest paid on loan taken for purchase of electric vehicles. Government of India has shown strong intent of driving EV adoption in last few years and have introduced several policy interventions.

WORLD



Economic Growth: Global activity is estimated to have contracted 3.3% in 2020 because of COVID-19 pandemic. Given the unprecedented nature of the pandemic, prospects for the global economy are uncertain, and several growth outcomes are possible. Global growth is estimated at 6.0% in 2021 and is projected to stabilize further at 4.4% in FY 2022. Among advanced economies, the United States is expected to surpass its pre-COVID GDP level this year, while many others in the group will return to their pre-COVID levels only in 2022. Similarly, among emerging market and developing economies, China had already returned to pre-COVID GDP in 2020, whereas many others are not expected to do so until well into 2023. Most commodity prices rebounded in the second half of FY 2020-21. However, the pickup in oil prices lagged the broader recovery in commodity prices due to the prolonged impact of the pandemic on global oil demand. Oil demand fell 9% last year, the steepest one-year decline on record because of pandemic-control measures and the associated plunge in global demand, which was partly offset by historically large production cuts among OPEC+ (Organization of the Petroleum Exporting Countries), as well as Russia and other non-OPEC oil exporters.

Commodities: There has been significant increase in steel prices over the last one year. Base metal prices were, on net, broadly flat in the calendar year 2020, as sharp falls in the first half of the year were followed by a strong recovery in the second half due to rising demand from China. Prices of commodity items used in manufacturing automobiles, including steel, aluminium, copper, zinc, rubber, platinum, palladium and rhodium, have become increasingly volatile in recent years. Semiconductor shortages have also impacted the auto industry adversely. Many major automotive companies have been experiencing a shortage of semiconductors, used in the production of automotive chips and charging or other components of electric vehicles.

Major semi-conductor suppliers have been operating at reduced capacity for the past year due to proactive local government actions in response to the spread of COVID-19, causing a global shortage of semiconductors supply.

Post COVID-19 pandemic, automakers reduced their production and semi-conductor orders too, which also worsened the situation.

China: Growth in China decelerated to 2.3% in year 2020 which was still above the previous projections helped by the country's effective control of the COVID-19 pandemic and public investment-led stimulus. For most of last year, China's import growth lagged a rebound in exports, contributing to a widening current account surplus. Accommodative fiscal and monetary policies led to a sharp increase in the government deficit and total debt. Fiscal policy support, which initially focused on providing relief and boosting public investment, is starting to moderate. Growth in China is forecast to pick up to 8.4% in 2021 which is above previous projections due to the release of pent-up demand, lower base and moderate to 5.6% in 2022 as deleveraging efforts resume. Even as GDP growth returns to its pre-pandemic level in FY 2021, it is still expected to be approximately 2% below its pre-pandemic projections by 2022, with the crisis accentuating pre-existing vulnerabilities and imbalances. Following a sharp contraction, the Chinese economy returned to growth during the middle of 2021, albeit at an uneven pace. Industrial production has recovered much faster than consumption and services. Import growth has lagged, but there was a rebound in exports, which also contributed to a widening of the trade and current account surpluses. Industrial profits have improved, and government revenue has been strengthening.

Tensions between the United States and China remain elevated on numerous fronts, including on international trade, intellectual property, and cybersecurity. Domestic economic disparities arising from the pandemic downturn may also prompt new trade barriers, motivated by the need to protect domestic workers. Furthermore, risks of protectionist tendencies surrounding technology are emerging. Protectionist tendencies could extend to medical supplies and COVID-19 pandemic related pharmaceutical APIs, which would impede the global supply of vaccines and medicines.

United States: The decline in the U.S economy in the first half of year 2020 was nearly three times as large as the peak decline during the global financial crisis, underscoring the depth of the recession. U.S output fell by 3.5% in 2020. Although the COVID-19 pandemic's economic impact was not as severe as envisioned in previous projections, last year's contraction was more than one percentage point larger than that of 2009. Substantial fiscal support to household incomes far exceeding similar measures delivered during the global financial crisis contributed to a robust initial rebound in the third quarter of 2020, which was subsequently cut short by a broad resurgence of the pandemic. Growth in the U.S is forecast to recover to 6.4% in FY 2021, held down in the early part of the year by subdued demand amid renewed restrictions and a broad-based resurgence of the COVID-19, pandemic. Activity is expected to strengthen in the second half of this year and firm further next year, as improved COVID-19 management aided by ongoing vaccination allows for an easing of pandemic-control measures. At $1.9 trillion, the Biden administration's new fiscal package is expected to deliver a strong boost to growth in the United States in FY 2021 and provide sizable positive spillovers to trading partners. Debt service costs are expected to remain manageable across advanced economies, thanks to the relatively large fraction of their debt burden covered by long-term and sometimes negative-yielding bonds. Fiscal support in emerging market and developing economies has been more limited, and deficits are generally expected to decline as revenues improve and crisis-related expenditures unwind with the projected economic recovery. Higher debt service costs are also expected to constrain their ability to address social needs, including rising poverty and growing inequality, or to correct the setback in human capital accumulation during the crisis.

Europe: Economic activity in Europe has deteriorated significantly due to the widespread virus outbreak. In Europe, following the historic pandemic-induced collapse, an emerging rebound in economic activity

in the third quarter of last year was cut short by a sharp resurgence of the COVID-19 pandemic, which prompted many member countries to re-impose stringent lockdown measures. Against the backdrop of a historic recession, the policy response has been far-reaching and sustained. National fiscal support packages were bolstered by grants from the European Union to the hardest-hit member countries, which are expected to support activity starting in FY 2021. The European economy declined by 6.6% in 2020 and growth is expected to rebound to 4.4% in 2021 owing to improved COVID-19 management, an initial vaccine rollout, and rising external demand, particularly from China.

United Kingdom: The International Monetary Fund ("IMF") raised its forecast for British economic growth which is set to outpace the euro zone this year after its slump in 2020 but is unlikely to regain its pre-pandemic size until sometime in 2022. The IMF said the UK economy would grow by 5.3% in 2021, up from a previous forecast of 4.5% it made in January 2021, helped by the country's fast COVID-19 vaccination program and a latest round of stimulus by the government. The UK has suffered Europe's highest COVID-19 death toll and its economy shrank by almost 10% last year, the worst performance among the region's big economies except for Spain. But it has moved more quickly than almost all other countries with its coronavirus vaccination program. Almost half the total population of the United Kingdom had a first jab of the vaccine. For 2022, the IMF raised its forecast to British economic growth slightly to 5.1% which would be the strongest expansion among Europe's big economies next year, according to the IMF.

(Source: RBI, World bank, IMF, etc.)

COVID-19 Pandemic and managing workforce

At Tata Motors, the health and safety of our employees has always been our top priority. We have taken several proactive measures to ensure the safety of our employees and their families and offer them support as we navigate the COVID-19 pandemic. We moved our office operations into work from home model and enabled employees with all the tools to keep up their productivity. We launched a health portal where in employees' check in and declare the status on their and their family's' health. This information has enabled our Medical team to reach out to those who needed help and provide them support. In addition to this, we have also launched 'Employee Assistance Program', a confidential counselling service for employees and members of their families to foster their emotional well-being.

During Restart phase, dedicated 'Restart' teams at each location curated detailed guidelines and conducted intensive trainings for maintaining social distancing at all workplaces, shop floors and canteen facilities. We restarted our operations at select plants and dealership with limited, essential staff in each plant, adhering to all mandated safety norms while efficiently meeting operational requirements. Gradually we scaled up our operations with entire ecosystem of suppliers, vendors, dealers and customers coming up to speed.

At Jaguar Land Rover, the health, wellbeing and safety of its people and partners remains their utmost priority. Working with Public Health England, JLR were one of the first businesses and the largest in the UK, to introduce on-site Covid-19 testing. All of JLR's facilities benefit from effective social distancing, hygiene and health monitoring protocols and every one of its UK employees has been equipped with reusable face coverings. Furthermore, Jaguar Land Rover took part in a ground-breaking pilot scheme in partnership with Public Health England, where approximately 4,500 JLR employees were vaccinated against Covid-19 over a 10 day period, at JLR's Solihull manufacturing site in the West Midlands. Jaguar Land Rover's global retailer network were inevitably impacted during the pandemic but maintained sales channels through innovative remote solutions such as a 'click and delivery' arrangements.

COVID-19 Pandemic and its impact on Financials

COVID-19 pandemic has rapidly spread throughout the world, including India. Governments in India and across the world have taken significant measures to curb the spread of the virus including imposing mandatory lockdowns and restrictions in activities. Consequently, the Company's manufacturing plants and offices had to be closed down / operate under restrictions for a considerable period of time during the year and post year end. Lockdowns / restrictions have impacted the Company operationally including on commodity prices, supply chain matters (including semiconductor supplies), consumer demand and recoveries of loans under its vehicle financing business. More recently, the next wave of the pandemic has impacted India and the Company is monitoring the situation closely taking into account the increasing level of infections in India and across the world and directives from the various Governments. Management believes that it has taken into account all the possible impacts of known events arising from the COVID-19 pandemic in the preparation of the financial results including but not limited to its assessment of the Company's liquidity and going concern, recoverable values of its property, plant and equipment, intangible assets, intangible assets under development, allowances for losses for finance receivables ,product warranty, residual value risk, lease payments, employee benefits, government grants and the net realisable values of other assets including inventory and Deferred tax asset.

However, given the effect of these lockdowns and restrictions on the overall economic activity and in particular on the automotive industry, the impact assessment of the COVID-19 pandemic on the financial statement is subject to significant estimation uncertainties due to its nature and duration and, accordingly, the actual impacts in the future may be different from those estimated as at the date of approval of these financial statements. The Company will continue to monitor any material changes to future economic conditions and consequential impact on its financial statements.

Automotive Operations

Automotive operations is the Company's most significant segment, which include:

- All activities relating to the development, design, manufacture, assembly and sale of vehicles as well as related spare parts and accessories;
- distribution and service of vehicles; and
- financing of the Company's vehicles in certain markets.

The automotive operation is further divided into four reporting segments:

(i) Tata and other brand vehicles - Commercial vehicles;

(ii) Tata and other brand vehicles – Passenger vehicles;

(iii) Jaguar Land Rover; and

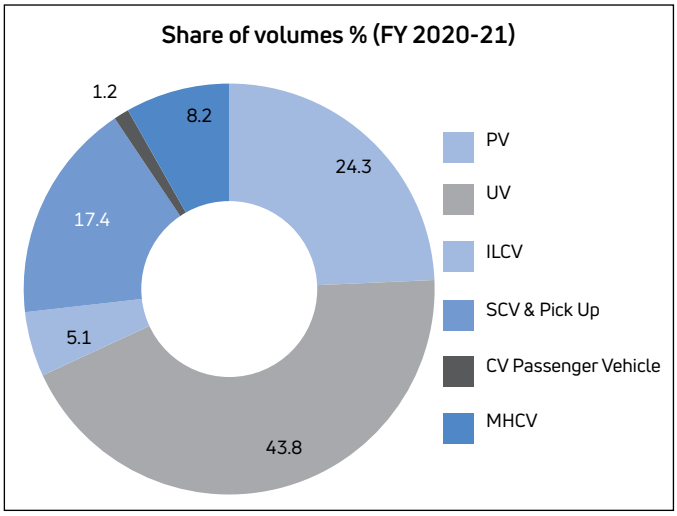
(iv) Vehicle Financing

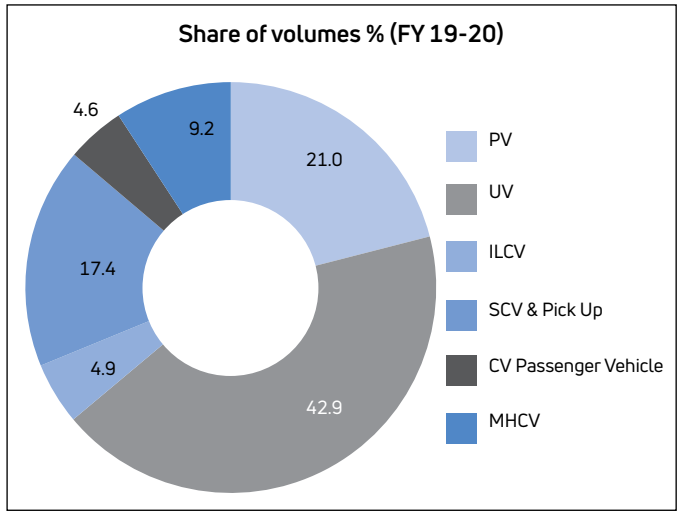
Overview of Automotive Operations

The total sales (excluding China joint venture) for FY 2020-21 and FY 2019-20 are set forth in the table below:

	FY 2020-21 Units	FY 2019-20 Units
Passenger cars	2,03,361	2,02,010
Utility vehicles	3,66,909	4,11,866
Intermediate and Light Commercial Vehicles	42,386	47,406
SCV & Pick Up	1,46,174	1,67,639
CV Passenger Vehicle	10,377	44,335
Medium and Heavy Commercial Vehicles	68,576	88,207
Total	**8,37,783**	**9,61,463**

We sold 4,90,151 units of Tata Commercial Vehicles and Tata Passenger Vehicles and 3,47,632 units (excluding wholesales from the China Joint Venture) of Jaguar Land Rover vehicles in FY 2020-21. In terms of units sold, our largest market was India where we sold 4,63,736 and 4,48,614 units during FY 2020-21 and FY 2019-20, respectively (constituting 55.4% and 46.7% of total sales in FY 2020-21 and FY 2019-20, respectively), followed by North America, where we sold 93,759 units and 1,35,766 units in FY 2020-21 and FY 2019-20, respectively (constituting 11.2% and 14.1% of total sales in FY 2020-21 and FY 2019-20, respectively).





Tata and other brand vehicles

India is the primary market for Tata and other brand vehicles (including vehicle financing). During FY 2020-21, the Indian automotive sector was impacted by several challenges, including COVID-19 pandemic, subdued demand, weak consumer sentiment and supply disruptions. The COVID-19 pandemic significantly impacted our sales in India in the first quarter of FY 2020-21, although some recovery was observed beginning with the second quarter of FY 2020-21.

The following table sets forth our total wholesale sales worldwide of Tata Commercial Vehicles and Tata Passenger Vehicles:

	FY 2020-21		FY 2019-20	
	Units	%	Units	%
Tata Passenger Vehicles	2,22,638	45.4%	1,37,924	28.4%
Tata Commercial Vehicles	2,67,513	54.6%	3,47,587	71.6%
Total	**4,90,151**	**100.0%**	**4,85,511**	**100.0%**

Of the 4,90,151 units sold overall in FY 2020-21, the Company sold 4,63,736 units of Tata and other brand vehicles in India and 26,415 units outside India, compared to 4,48,614 units and 36,897 units, respectively in FY 2019-20.

We maintained our leadership position in the Commercial Vehicle category in India, which was characterized by increased competition during the year. The Passenger Vehicle market also continued to be subject to intense competition.

The following table sets forth our market share in various categories in the Indian market based on TML wholesale volumes:

Category	FY 2020-21	FY 2019-20
Passenger Cars	8.8%	4.2%
Utility Vehicles	7.4%	5.6%
Total PV	**8.2%**	**4.8%**
Medium and Heavy Commercial Vehicles	58.1%	57.4%
Intermediate and Light Commercial Vehicles	45.9%	47.2%
SCVs and Pick Ups	37.5%	37.9%
CV Passenger Vehicles	40.6%	40.9%
Total CV	**42.4%**	**43.0%**
Total Four-Wheel Vehicles	**14.1%**	**12.7%**

Source: Society of Indian Automobile Manufacturers Report and our internal analysis.

The following table sets forth TML total domestic wholesales and retails of Tata Commercial Vehicles and Tata Passenger Vehicles

	Wholesale Volume (in units)			Retail Volume (in units)		
	FY 2020-21	FY 2019-20	% change	FY 2020-21	FY 2019-20	% change
Tata Commercial vehicles	2,41,668	3,12,267	(22.6)	2,08,437	3,60,787	(42.2)
Tata Passenger vehicles	2,22,074	1,31,796	68.5	2,28,863	1,48,789	53.8
Total	**4,63,742**	**4,44,063**	**4.4**	**4,37,300**	**5,09,576**	**(14.2)**

Passenger Vehicles in India

Industry sales of Passenger vehicles (including vans) decreased by 2.0% to 27,09,936 units in FY 2020-21 from 27,66,512 units in FY 2019-20. The following table sets forth the breakup of the wholesale sales in various categories of TML.

	Industry Sales			Tata Passenger Vehicles Sales		
	FY 2020-21 (in units)	FY 2019-20 (in units)	% change	FY 2020-21 (in units)	FY 2019-20 (in units)	% change
Passenger Cars	15,41,968	16,95,344	(9.0)	1,35,680	71,719	89.2
Utility Vehicles	10,62,887	9,52,764	11.6	86,394	60,077	43.8
Total	**26,04,855**	**26,48,108**	**(1.6)**	**2,22,074**	**1,31,796**	**68.5**

Industry-wide sales of Passenger cars in India decreased by 9.0% in FY 2020-21, compared to a 23.6% decline in FY 2019-20, while Utility Vehicles sales increased by 11.6% in FY 2020-21 compared to marginal increase in FY 2019-20. While overall industry sales were lower than in FY 2019-20, the trend of preference towards personal mobility reduced the overall impact of slowdown. TML Passenger vehicle sales increased by 68.5% to 2,22,074 units in FY 2020-21 compared to 1,31,796 units in FY 2019-20. Tata Passenger Vehicle sales in India increased by 62.8% to 2,22,075 units in FY 2020-21 from 1,36,446 units reflecting a strong response for the New Forever Range. Retail sales marginally outnumbered wholesale sales, thereby reaffirming strong demand and thin pipeline inventory at our dealers.

In Passenger cars category, TML sales increased by 89.2% to 1,35,680 units in FY 2020-21 compared to 71,719 units in FY 2019-20. Tata-brand vehicles sales increased to 1,35,681 units in FY 2020-21, compared to 75,781 units in FY 2019-20. During FY 2020-21, we launched refreshed variants of products, including Altroz I Turbo, Altroz XM and Tiago XTA. Our market share for Passenger Cars in India was higher at 8.8% in FY 2020-21, compared to 4.2% in FY 2019-20.

In the Utility Vehicles category, TML sales increased by 43.8% to 86,394 units in FY 2020-21 compared to 60,077 units in FY 2019-20 and Tata-brand vehicles sales increased to 86,394 units in FY 2020-21 compared to 60,665 units in FY 2019-20 representing a strong demand for Tata Nexon and Tata Harrier. Our market share of Utility Vehicles in India has increased and stands at 7.4% in FY 2020-21, compared to 5.6% in FY 2019-20. In FY 2020-21, we launched Tata Safari and refreshed variants for Tata Nexon and Harrier. We launched Tata Safari in January 2021 and sold 3,855 units in FY 2020-21.

Tata Motors continued to remain market leader in electric vehicles in FY 2020-21 with a 71% share due to a strong response for Nexon EV.

Commercial Vehicles in India

Industry sales of commercial vehicles decreased by 21.7% to 5,69,307 units in FY 2020-21 from 7,26,762 units in FY 2019-20. The following table sets forth the breakup of the wholesale sales in various categories on standalone basis.

Category	Industry Sales			Tata Commercial Vehicle Sales		
	FY 2020-21 (in units)	FY 2019-20 (in units)	% change	FY 2020-21 (in units)	FY 2019-20 (in units)	% change
Medium and Heavy Commercial Vehicles	1,00,712	1,32,272	(23.9)	58,528	75,918	(22.9)
Intermediate and Light Commercial Vehicles	82,386	89,066	(7.5)	37,826	42,077	(10.1)
SCVs and Pick Ups	3,65,347	4,11,352	(11.2)	1,36,835	1,55,790	(12.2)
CV Passenger Vehicles	20,862	94,072	(77.8)	8,479	38,482	(78.0)
Total	**5,69,307**	**7,26,762**	**(21.7)**	**2,41,668**	**3,12,267**	**(22.6)**

The Commercial Vehicle industry continued to be impacted in FY 2020-21, because of the COVID-19 pandemic, lower freight utilizations, difficulties in obtaining financing and some hesitation due to rising costs for BS VI vehicles.

MHCVs in India

Sales of TML in the MHCVs category in India decreased by 22.9% to 58,528 units in FY 2020-21 compared to 75,918 units in FY 2019-20 and Tata-brand vehicle sales decreased to 58,521 units in FY 2020-21, compared to 75,848 units in FY 2019-20. The MHCV segment witnessed a sharp decline in first quarter of FY 2020-21, thereby sequentially improving quarter-on-quarter, as the economy unlocked and infrastructure projects, housing construction and mining segment picked up. We continued to witness strong demand in this segment and increased our market share by 70 bps to 58.1% in FY 2020-21.

ILCVs in India

Sales of TML in the ILCVs category in India decreased by 10.1% to 37,826 units in FY 2020-21 compared to 42,077 units in FY 2019-20 and Tata-brand vehicle sales decreased to 37,826 units in FY 2020-21, from 42,052 units in FY 2019-20.

SCVs and Pickups in India

Sales in SCVs & Pick Ups category in India of Tata-brand vehicle decreased by 12.2% to 1,36,835 units in FY 2020-21 from 1,55,790 units in FY 2019-20. Amongst all segments in commercial vehicles, the SCV and Pick Up category witnessed a lower decline because of increased demand from e-commerce players and necessity for last mile distribution. TML received a significant order of 6,413 Tata Ace Gold vehicles from Andhra Pradesh State Civil Supplies Corporation.

CV Passenger Vehicles in India

Sales in CV Passenger Vehicles category in India of TML decreased by 78.0% to 8,479 units in FY 2020-21 compared to 38,482 units in FY 2019-20 and Tata-brand vehicle sales decreased to 8,479 units in FY 2020-21 from 38,478 units in FY 2019-20. CV Passenger segment was impacted the highest because of the COVID-19 pandemic, with work from home protocols, schools not reopening and lower demand from State Transport Undertakings.

Tata Commercial Vehicles and Tata Passenger Vehicles — Exports

International business is a key part of our portfolio since its inception in 1961. We have a global presence in more than 46 countries, including all South Asian Association for Regional Cooperation countries, South Africa, Africa, Middle East and Southeast Asia. We market a range of products including M&HCV trucks, LCV trucks, buses, pickups and small commercial vehicles.

Our overall sales in international markets decreased by 32.0% to 20,849 units in FY 2020-21, compared to 31,144 units in FY 2019-20. Commercial vehicles exports were 20,283 units in FY 2020-21, as compared to 29,664 units in FY 2019-20. In Africa, Tanzania clocked the highest retails since September 2018, while both Congo and Ghana recorded highest retails after five years. Saudi Arabia also clocked its highest retails in the last two years and the entire Middle East buses closed the year with a 12% higher market share than the previous year. Passenger Vehicles exports were at 566 units in FY 2020-21, compared to 1,480 units in FY 2019-20. Sales were substantially impacted by the COVID-19 pandemic.

Tata Daewoo Commercial Vehicle Co. Ltd or TDCV's, our subsidiary company that engages in the design, development and manufacturing of MHCVs and LCVs, witnessed a marginal decrease in overall sales by 1.2% to 5,127 units in FY 2020-21 from 5,190 units in FY 2019-20. In its domestic market (South Korea), TDCV's sales increased by 3.4% from 3,581 units in FY 2019-20 to 3,701 units in FY 2020-21. The market share for this segment was 20.1% in FY 2020-21, compared to 20.5% in FY 2019-20. Apart from MHCV, TDCV also launched new product range of LCV vehicles in the fourth quarter of FY 2020-21 which accounted 241 units of sales in the FY 2020- 21. Due to the product range expansion total domestic sales increased by 10.1% from 3,581 units in FY 2019-20 to 3,942 units in FY 2020-21. The export market was severely impacted by the COVID-19 pandemic and experienced a reduction of 26.4% from 1,609 units in FY 2019-20 to 1,185 units in FY 2020- 21.

Tata Commercial Vehicles and Tata Passenger Vehicles - Sales and Distribution

Our sales and distribution network in India as at March 31, 2021 comprised approximately over 5,959 touch points for sales and service for its Passenger Vehicles and Commercial Vehicles businesses. We use a network of service centers on highways and a toll-free customer assistance center to provide 24-hour roadside assistance including replacement of parts, to vehicle owners.

We have customer relations management system at all of our dealerships and offices across India, which supports users both at our company and among our distributors in India and abroad.

We market our Commercial Vehicles and Passenger Vehicles in several countries in Africa, the Middle East, Southeast Asia, South Asia, Australia, Latin America, Russia, and the Commonwealth of Independent States countries. We have a network of distributors in all such countries, where we export our vehicles. Such distributors have created a network of dealers and branch offices and facilities for sales and after-sales servicing of our products in their respective markets. We have also stationed overseas resident sales and service representatives in various countries to oversee our operations in the respective territories.

Tata Commercial Vehicles and Tata Passenger Vehicles - Competition

We face competition from various domestic and foreign automotive manufacturers in the Indian automotive market. Improving infrastructure and robust growth prospects compared to other mature markets have attracted strong international companies to India that have either formed joint ventures with local partners or have established independently owned operations in India. Global competitors bring with them their international experience, global scale, advanced technology, and significant financial resources, and as a result, competition is likely to further intensify in the future. We have designed our products to suit the requirements of the Indian market based on specific customer needs, such as safety, driving comfort, fuel-efficiency and durability. By moving to BS VI successfully we have demonstrated our ability to compete with the global players successfully. We believe that our vehicles are suited to the general conditions of Indian roads and the local climate. We also offer a wide range of optional configurations to meet the specific needs of our customers. We intend to develop and are developing products to strengthen our product portfolio in order to meet the increasing customer expectation of owning world-class products.

Tata Commercial Vehicles and Tata Passenger Vehicles - Seasonality

Demand for our vehicles in the Indian market is subject to seasonal variations. Demand generally peaks between January and March each year, although there tends to be a decrease in demand in February just before release of the Government of India's fiscal budget. Demand is usually lean from April to July and gains momentum again in the festival season from September onwards, with a decline in December due to year-end.

Tata and other brand vehicles – Vehicle Financing

Through our wholly-owned subsidiary TMF Holdings Ltd and its step-down subsidiaries Tata Motors Finance Ltd ("TMFL") and Tata Motors Finance Solutions Ltd ("TMFSL"), we provide financing services to purchasers of our vehicles through independent dealers, who act as our agents for financing transactions, and through our branch network. TMF group disbursed ₹13,258 crores and ₹15,029 crores in vehicle financing during FY 2020-21 and FY 2019-20, respectively. Approximately 33% and 31%, of our commercial vehicle unit sales in India were made by the dealers through financing arrangements with the Company's captive financing subsidiary during FY 2020-21 and FY 2019-20, respectively. As at March 31, 2021 and 2020, TMF group's customer finance receivable portfolio comprised 7,18,149 and 6,24,354 contracts, respectively. We follow specified internal procedures, including quantitative guidelines, for selection of our finance customers and assist in managing default and repayment risk in our portfolio. We originate all the contracts through our authorized dealers and direct marketing agents with whom we have agreements. All our marketing, sales and collection activities are undertaken through dealers or by TMF group.

TMFL securitizes or sells its finance receivables based on the evaluation of market conditions and funding requirements. The sell down happens either through Securitization Pass Through Certificates ("PTC") or through direct assignment route. Securitization PTC is backed by credit enhancement where certain percentages of losses are protected to the extent of credit enhancement. The PTC route is one of the most prominent sources of fund raising in the market. We also do securitization by way of direct assignment where there is no support provided to the pool in the form of credit enhancement. Significantly, these assets are Priority Sector Loan assets because of which demand for direct assignment is good with Public Sector Banks. The constitution of these pools is based on criteria that are decided by credit rating agencies and/or based on the advice that we receive regarding the marketability of a pool. TMFL undertakes these securitizations of our receivables due from purchasers by means of private placement.

TMFL acts as the collection agent on behalf of the investors, representatives, special purpose vehicles or banks, in whose favor the receivables have been assigned, for the purpose of collecting receivables from the purchasers on the terms and conditions contained in the applicable deeds of securitization, in respect of which pass-through certificates are issued to investors in case of special purpose vehicles, or SPVs. TMFL also secures the payments to be made by the purchasers of amounts constituting the receivables under the loan agreements to the extent specified by rating agencies by any one or all of the following methods:

- furnishing collateral to the investors, in respect of the obligations of the purchasers and the undertakings to be provided by TMFL;
- furnishing, in favor of the investors, certain percentages of the future principal in the receivables as collateral, for securitizations done through FY 2020-21, either by way of a fixed deposit or bank guarantee or subordinate tranche to secure the obligations of the purchasers and our obligations as the collection agent, based on the quality of receivables and rating assigned to the individual pool of receivables by the rating agencies; and
- by way of over-collateralization or by investing in subordinate pass-through certificates to secure the obligations of the purchasers.

Jaguar Land Rover

Total wholesale and retail volume of Jaguar Land Rover vehicles with a breakdown between Jaguar and Land Rover brand vehicles, in FY 2020-21 and FY 2019-20 are set forth in the table below:

	Wholesale Volume (in units excluding CJLR)			Retail Volume (in units including CJLR)		
	FY 2020-21	FY 2019-20	% change	FY 2020-21	FY 2019-20	% change
Jaguar	**67,333**	**1,25,820**	**(46.5)**	**97,669**	**1,40,593**	**(30.5)**
UK	22,305	35,033	(36.3)	22,529	32,533	(30.8)
North America	13,450	30,514	(55.9)	18,186	30,095	(39.6)
Europe	20,693	36,158	(42.8)	20,578	35,335	(41.8)
China	4,603	7,162	(35.7)	28,181	26,061	8.1
Overseas	6,282	16,953	(62.9)	8,195	16,569	(50.5)
Land Rover	**2,80,299**	**3,50,132**	**(19.9)**	**3,41,919**	**3,68,066**	**(7.1)**
UK	59,195	75,034	(21.1)	60,466	74,079	(18.4)
North America	80,309	1,05,252	(23.7)	92,619	99,251	(6.7)
Europe	55,913	77,112	(27.5)	58,682	71,702	(18.2)
China	42,542	31,150	36.6	83,025	64,063	29.6
Overseas	42,340	61,584	(31.2)	47,127	58,971	(20.1)
Jaguar Land Rover	**3,47,632**	**4,75,952**	**(27.0)**	**4,39,588**	**5,08,659**	**(13.6)**
UK	81,500	1,10,067	(26.0)	82,995	1,06,612	(22.2)
North America	93,759	1,35,766	(30.9)	1,10,805	1,29,346	(14.3)
Europe	76,606	1,13,270	(32.4)	79,260	1,07,037	(26.0)
China	47,145	38,312	23.1	1,11,206	90,124	23.4
Overseas	48,622	78,537	(38.1)	55,322	75,540	(26.8)
CJLR	**65,279**	**49,450**	**32.0**			

Jaguar Land Rover's performance on a wholesale basis:

In FY 2020-21, Jaguar Land Rover wholesale volumes (excluding our China Joint Venture) were 3,47,632 units down 27.0% compared to FY 2019-20, primarily reflecting the disruption in sales and production because of the COVID-19 pandemic. Wholesale volumes from the China Joint Venture were 65,279 units, reflecting a 32.0% increase compared to the 49,450 units in FY 2019-20. Wholesale volumes (excluding our China Joint Venture) in China strongly grew year-on-year in FY 2020-21, up 23.1% reaching 47,145 vehicles as the region continued to recover strongly from the pandemic. However, as a result of COVID-19-related impacts on society and business, Jaguar Land Rover wholesales declined in other regions including in Overseas markets (down 38.1% year-on-year), Europe (down 32.4%), North America (down 30.9%) and in the UK (down 26.0%). Wholesale volumes of all models declined due to the impact of the COVID-19 pandemic in FY 2020-21, apart from the new Land Rover Defender which wholesaled 53,501 vehicles reflecting the strong reception in the market for an anticipated model.

Jaguar Land Rover's performance on a retail basis:

Jaguar Land Rover retail sales were 4,39,588 vehicles in FY 2020-21, down 69,071 vehicles (13.6%) from FY 2019-20. The decline in retail sales was primarily the result of the initial COVID-19 lockdown impacting the first quarter sales, with some recovery in sales thereafter. Retail sales in every region and on every model declined as a result of the COVID-19 pandemic with the exception of retail sales in China, which were up 23.1% year-on-year and sales of the newly introduced Land Rover Defender, which reached 45,244 vehicles in the period. In addition to the COVID-19 pandemic, other factors that impacted the sales in the industry during FY 2020-21 included ongoing in the UK and Europe related to Brexit related developments (in spite of a trade agreement between the UK and the EU being reached in December 2020) and more generally regulatory and emissions challenges as well as continuing trade tensions and other geopolitical pressures.

Retails by powertrain

Jaguar Land Rover continued to roll out electrification technology across its model range in FY 2020-21. Twelve of the JLR's 13 nameplates are now available with an electrified option, with plug-in hybrids ("PHEV") available in eight models and mild hybrids ("MHEV") in 11 models. As a result, the mix of electrified vehicles retailed in the full year was 51%, including 3.6% for the all-electric Jaguar I-PACE, 4.6% PHEV and 42.9% MHEV, with the remaining 48.9% of retail sales from traditional diesel and petrol internal combustion engines.

Jaguar Land Rover's Sales & Distribution

As at March 31, 2021, Jaguar Land Rover distributed its vehicles in 118 markets for Jaguar and 123 markets for Land Rover globally. Sales locations for vehicles are operated as independent franchises. Jaguar Land Rover is represented in its key markets through its National Sales Company's ("NSC's") as well as third-party importers. Jaguar and Land Rover has regional offices in certain select countries that manage customer relationships and vehicle supplies and provide marketing and sales support to its their regional importer markets. The remaining importer markets are managed from the United Kingdom.

Jaguar Land Rover products are sold through a variety of sales channels: through its dealerships for retail sales, for sale to fleet customers, including daily rental car companies, commercial fleet customers, leasing companies and governments. Jaguar Land Rover does not depend on a single customer or small group of customers to the extent that the loss of such a customer or group of customers would have a material adverse effect on its business.

As at March 31, 2021, the Jaguar Land Rover global sales and distribution network comprised 23 NSCs, 78 importers, one export partner and 2,839 franchise sales dealers in 1,513 sites, of which 1,326 are joint Jaguar and Land Rover dealers.

Jaguar Land Rover — Competition

Jaguar Land Rover operates in a globally competitive environment and faces competition from established premium and other vehicle manufacturers who aspire to move into the premium performance car and premium SUV markets, some of which are much larger than they are. Jaguar vehicles compete primarily against other European brands such as Audi, Porsche, BMW and Mercedes Benz as well as Tesla. Land Rover and Range Rover vehicles compete largely against SUVs from companies such as Audi, BMW, Infiniti, Lexus, Mercedes Benz, Porsche, Volvo and Volkswagen.

Jaguar Land Rover — Seasonality

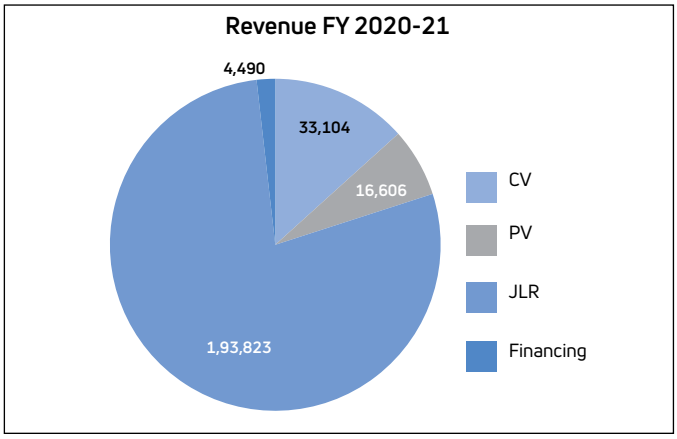
Jaguar Land Rover volumes are impacted by the biannual change in age related registration plates of vehicles in the United Kingdom, where new age-related plate registrations take effect in March and September each year. This has an impact on the resale value of the vehicles because sales are clustered around the time of the year when the vehicle registration number change occurs. Seasonality in most other markets is driven by the introduction of new model year vehicles and derivatives. Furthermore, Western European markets tend to be impacted by summer and winter holidays, and the Chinese market tends to be affected by the Lunar New Year holiday in either January or February, the PRC National Day holiday, and the Golden Week holiday in October. The resulting sales profile influences operating results on a quarter-to-quarter basis.

Other Operations

In addition to our automotive operations, we are also involved in other business activities, mainly information technology services. The Company's revenue from other operations before inter-segment eliminations was ₹2,612 crores in FY 2020-21, a decrease of 14.3% from ₹3,047 crores in FY 2019-20. The decrease in revenue of Tata Technologies due to the COVID-19 pandemic. Revenues from other operations represented 1.0% and 1.2% of total revenues, before inter-segment eliminations, in FY 2020-21 and FY 2019-20, respectively.

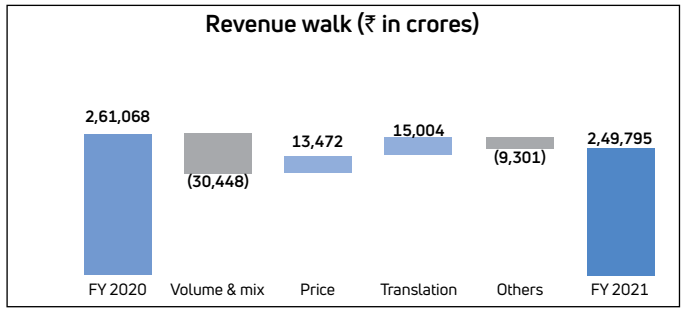
A. Operating Results

All financial information discussed in this section is derived from our Audited Consolidated Financial Statements.



Overview

In FY 2020-21 income from operations including finance revenues decreased by 4.3% to ₹2,49,795 crores in FY 2020-21 from ₹2,61,068 crores in FY 2019-20. This decrease was mainly attributable to lower sales volumes from both Tata Motors and Jaguar Land Rover and partially offset by a favorable currency translation from GBP to INR and increase in average selling price per unit under BS VI norms.



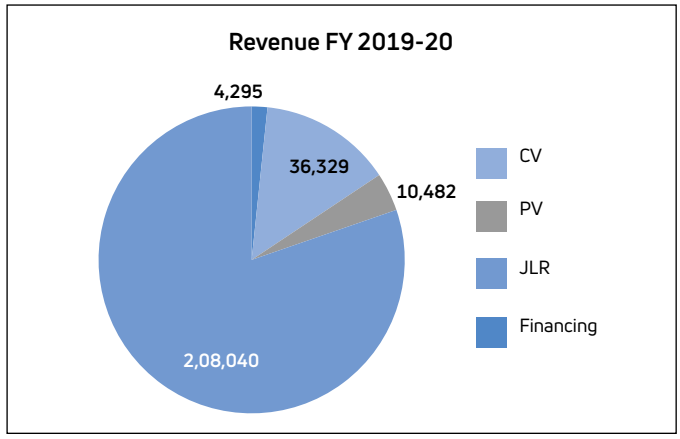
The net loss (attributable to shareholders of our Company) was ₹13,451 crores in FY 2020-21, compared to a loss of ₹12,071 crores in FY 2019-20. In FY 2020-21 we have taken a charge of ₹14,994 crores for our Jaguar Land Rover business due to the Reimagine strategy, reversal of impairment charge and onerous contract of ₹1,959 crores, as against provision of ₹2,549 crores in FY 2019-20 for our passenger vehicle business of Tata Motors Ltd. Excluding the exceptional items, profit before tax was ₹2,908 crores in FY 2020-21, compared to a loss of ₹8,709 crores in FY 2019-20, attributable to better product mix and cost reduction measures.

Automotive operations

Automotive operations are our most significant segment, accounting for 99.4% and 99.3% of our total revenues in FY 2020-21 and FY 2019-20, respectively. In FY 2020-21, revenue from automotive operations before inter-segment eliminations was ₹2,48,181 crores compared to ₹2,59,292 crores in FY 2019-20.

	FY 2020-21	FY 2019-20	Change %
Total revenue (₹ in crores)	248,181	259,292	(4.3)
Earning before other income, interest and tax (₹ in crores)	8,541	(43)	20,008
Earning before other income, interest and tax (% to total revenue)	3.4	(0.0)	

Our automotive operations segment is further divided into four reporting segments: Tata Commercial Vehicles, Tata Passenger Vehicles, Jaguar Land Rover and Vehicle financing.



	Total Revenues (₹ crores)		Earnings/(loss) Before Other Income, Interest and Tax (₹ crores)		Earnings Before Other Income, Interest and Tax (% of revenue)	
	FY 2020-21	FY 2019-20	FY 2020-21	FY 2019-20	FY 2020-21	FY 2019-20
Tata Commercial Vehicle	33,104	36,329	(305)	(368)	(0.9)	(1.0)
Tata Passenger Vehicle	16,606	10,482	(1,564)	(2,868)	(9.4)	(27.4)
Jaguar Land Rover	1,93,823	2,08,040	7,691	594	4.0	0.3
Vehicle Financing	4,490	4,295	2,794	2,855	62.2	66.5
Unallocable	284	216	(75)	(256)	(26.5)	(118.7)
Intra- segment elimination	(126)	(71)	-	-	-	-
Total	**2,48,181**	**2,59,292**	**8,541**	**(43)**		

In FY 2020-21, Jaguar Land Rover contributed 78% of our total automotive revenue compared to 80% in FY 2019-20 (before intra-segment elimination) and the remaining 22% was contributed by Tata and other brand vehicles and Vehicle Financing in FY 2020-21, compared to 20% in FY 2019-20. The following table sets forth selected data from Tata and other brand vehicles (including vehicle financing) and Jaguar Land Rover in FY 2020-21 and FY 2019-20 and the percentage change from period to period (before intra-segment eliminations) are set forth in the table below.

	FY 2020-21	FY 2019-20	Change
	(₹ in crores)		%
Tata and other brand vehicles including vehicle financing	54,484	51,322	6.2
Jaguar Land Rover	1,93,823	2,08,040	(6.8)
Intra-segment elimination	(126)	(71)	77.5
Total	**2,48,181**	**2,59,291**	**(4.3%)**

The Tata and other brand vehicles including vehicle financing consists of following categories:

	FY 2020-21	FY 2019-20	Change
	(₹ in crores)		%
Commercial Vehicles	33,104	36,329	(8.9)
Passenger Vehicles	16,606	10,482	58.4
Vehicle Financing	4,490	4,295	4.5
Unallocable	284	216	31.4
Total	**54,484**	**51,322**	**6.2**

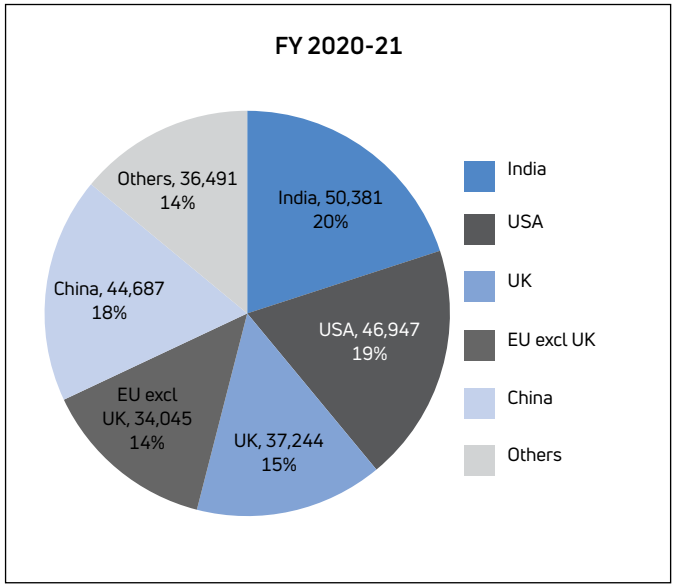
Other operations

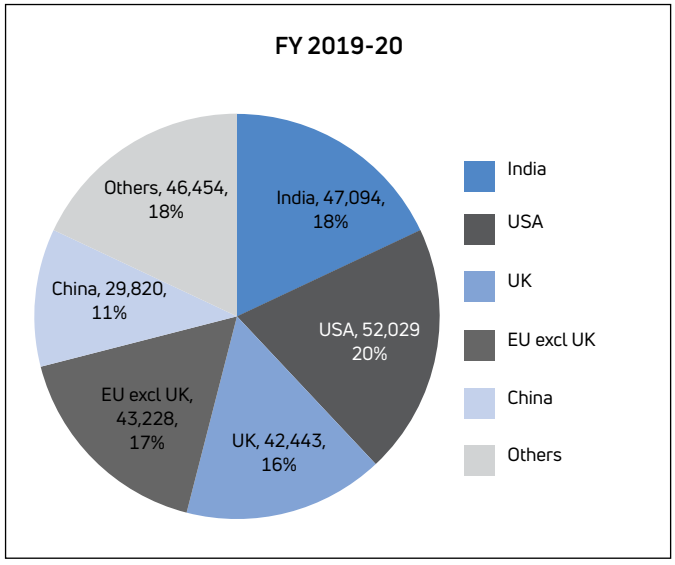
Our other operations business segment mainly includes information technology services, machine tools and factory automation solutions. The following table sets forth selected data regarding our other operations for the periods indicated and the percentage change from period to period (before inter-segment eliminations).

	FY 2020-21	FY 2019-20	Change %
Total revenue (₹ in crores)	2,612	3,047	(14.3)
Earning before other income, interest and tax (₹ in crores)	319	382	(16.4)
Earning before other income, interest and tax (% of revenue)	12.2%	12.5%	

Geographical Breakdown

As a result of the COVID-19 pandemic in FY 2020-21, there is a reduction in revenue across most geographical markets except China and India, In FY 2020-21 volume and percentage of revenues in China and India have improved from FY 2019-20 levels. China witnessed a double-digit growth in volumes in FY 2020-21 as the region continued to recover strongly from the pandemic. However, as COVID-19 pandemic spread globally, many government authorities were forced to introduce and re-introduce strict social distancing measures over the course of the year, as a result, Jaguar Land Rover wholesale volumes declined in other regions including in Overseas markets (down 38.1% year-on-year), Europe (down 32.4%), North America (down 30.9%) and in the UK (down 26.0%). In addition to COVID-19 pandemic, other factors impacting automotive industry sales during FY 2020-21 included Brexit uncertainty for the UK and Europe, although a trade agreement was reached between the UK and the EU in December 2020, and more generally regulatory and emissions challenges as well as continuing trade tensions and other geopolitical pressures. The following chart sets forth our revenue from key geographical markets:





The "Rest of Europe" market is geographic Europe, excluding the United Kingdom and Russia. The "Rest of World" market is any regions not included above.

The following table sets forth selected items from our consolidated statements of income for the periods indicated and shows these items as a percentage of total revenue:

	FY 2020-21 (%)	FY 2019-20 (%)
Revenue from operations	100.0	100.0
Expenditure:		
Cost of material consumed (including change in stock)	63.4	64.0
Employee Cost	11.1	11.7
Product development/Engineering expenses	2.1	1.6
Other expenses (net)	16.4	21.8
Amount transferred to capital and other accounts	(5.1)	(6.7)
Total Expenditure	87.8	92.4
Profit before other income, Depreciation and amortization, Finance costs, Foreign exchange (gain)/loss, exceptional item and tax	12.2	7.6
Other Income	1.1	1.1
Profit before Depreciation and Amortization, Finance costs, Foreign exchange (gain)/loss, exceptional item and tax	13.3	8.7
Depreciation and Amortization	9.4	8.2
Finance costs	3.2	2.8
Foreign exchange loss (net)	(0.7)	0.7
Exceptional Item (gain)/loss (net)	5.5	1.1
Profit/(loss) before tax	(4.2)	(4.1)
Tax expense / (credit)	1.0	0.1
Profit/(loss) after tax	(5.2)	(4.2)
Share of profits/(loss) of equity accounted investees (net)	(0.2)	(0.4)
Minority Interest	-	-
Profit/(loss) for the year	(5.4)	(4.6)
EBITDA	12.2	8.5
EBIT	2.6	(0.0)

EBITDA is defined to include the product development expenses charged to P&L and realised FX and commodity hedges but excludes the revaluation of foreign currency debt, revaluation of foreign currency other assets and liabilities, MTM on FX and commodity hedges, other income (except government grant) as well as exceptional items.

EBIT is defined as reported EBITDA plus profit from equity accounted investee less depreciation and amortization.

Revenue Analysis:

Our total consolidated revenue from operations including finance revenue, decreased by 4.3% to ₹2,49,795 crores in FY 2020-21 from ₹2,61,068 crores in FY 2019-20. Revenue from the sale of vehicle decreased to ₹2,06,419 crores in FY 2020-21, compared to ₹2,18,983 crores, a decrease of 5.7%. We sold 8,37,783 vehicles in FY 2020-21, compared to 9,61,463 vehicles in FY 2019-20.

The revenue of our Tata brand vehicles including vehicle finance increased by 6.2% to ₹54,484 crores in FY 2020-21 from ₹51,322 crores in FY 2019-20, mainly due to increased volumes in passenger car segment. The revenue from Tata commercial vehicle was ₹33,104 crores in FY 2020-21, compared to ₹36,329 crores in FY 2019-20, a decrease of 8.9%. The revenue from Tata Passenger Vehicles was ₹16,606 crores in FY 2020-21, compared to ₹10,482 crores in FY 2019-20, an increase of 58.4%. Our revenues from sales of vehicles and spare parts manufactured in India increased by 7.2% to ₹47,033 crores in FY 2020-21 from ₹43,865 crores in FY 2019-20.

The revenue from Passenger Cars in India has increased by 105.9% to ₹5,832 crores in FY 2020-21 from ₹2,833 crores in FY 2019-20, Electric vehicle increased to ₹571 crores in FY 2020-21 from ₹152 crores in FY 2019-20 and Utility Vehicles increased by 56.7% to ₹6,534 crores in FY 2020-21 from ₹4,169 crores in FY 2019-20. The increase in Passenger Vehicles was mainly on account of pent-up demand, better products and safety features of our New forever range of vehicles. The revenue from Commercial Vehicle in ILCVs category increased by 9.6% to ₹4,047 crores in FY 2020-21 from ₹3,693 crores in FY 2019-20. The SCVs and Pickups category in India increased by 26.1% to ₹4,824 crores in FY 2020-21 from ₹3,826 crores in FY 2019-20. However, revenues from MHCVs category decreased by 1.4% to ₹13,808 crores in FY 2020-21 from ₹14,006 crores in FY 2019-20 and CV Passenger Vehicles category revenue decreased by 72.6% to ₹1,078 crores in FY 2020-21 from ₹3,936 crores in FY 2019-20. The revenue of commercial vehicle at overall level decreased mainly due to the COVID-19 pandemic, lower freight utilizations, difficulties in obtaining financing and some hesitation due to rising costs for BS VI vehicles. There is a reduction in sales volume which was partially offset by increase in average selling price per unit under BS VI norms.

Revenue attributable to TDCV, increased marginally by 5.8% to ₹3,316 crores in FY 2020-21 from ₹3,134 crores in FY 2019-20. Domestic (South Korea) sales witnessed a 10.1% increase from 3,581 units in FY 2019-20 to 3,942 units in FY 2020-21 due to product range expansion. The export market was severely impacted by COVID-19 and experienced a reduction of 26.4% from 1,609 units in FY 2019-20 to 1,185 units in FY 2020- 21.

Revenue from our Vehicle Financing operations increased by 4.5% to ₹4,490 crores in FY 2020-21, compared to ₹4,295 crores in FY 2019-20. This is mainly due to increase in average loan book and upfront recognition of excess interest spread on the direct assignment transaction undertaken during FY 2020-21.

The revenue of our Jaguar Land Rover business decreased by 6.8% to ₹1,93,823 crores in FY 2020-21 from ₹2,08,040 crores in FY 2019-20. This was partially offset by a favorable translation of ₹14,994 crores from GBP to Indian rupees in FY 2020-21. Excluding currency translation, the revenue of Jaguar Land Rover decreased by 14.2% to GB£19,731 million in FY 2020-21 from GB£22,984 million in FY 2019-20. Jaguar Land Rover wholesale volumes (excluding China joint venture) declined across all key regions in FY 2020-21, down 27.0% year on year compared to FY 2019-20, except in China where wholesales grew 23.1% year-on-year. The reduction in revenue was much lower than the decline in wholesales, reflecting the strong favorable sales mix, higher average revenue per vehicle and much lower incentive spending during the year. Jaguar brand vehicles sales were 67,333 units in FY 2020-21 from 1,25,820 units in FY 2019-20, a decrease of 46.5%, and Land Rover vehicles sales from 3,50,132 units in FY 2019-20 to 2,80,299 units in FY 2020-21, a decrease of 19.9% (volumes excluding the China Joint Venture).

Revenue from other operations (before inter-segment eliminations) decreased by 14.3% to ₹2,612 crores in FY 2020-21 compared to ₹3,047 crores in FY 2019-20. This is mainly on account of decrease in revenue of Tata Technologies due to the COVID-19 pandemic.

Cost and Expenses

Raw Materials, Components and Purchase of Products for Sale (including change in inventories of finished goods and work-in-progress)

Material costs decreased by 5.3% to ₹1,58,292 crores in FY 2020-21 from ₹1,67,131 crores in FY 2019-20, in line with reduction in revenue. As a percentage of revenue material costs are 63.4% in FY 2020-21, compared to 64.0% in FY 2019-20.

Material costs for Tata Commercial Vehicles and Tata Passenger Vehicles increased by 9.5% to ₹37,603 crores in FY 2020-21 from ₹34,353 crores in FY 2019-20, due to increased volumes. The material costs as a percentage of total revenue increased to 75.6% in FY 2020-21, compared to 73.4% in FY 2019-20, primarily due to a change in product mix and increase in commodity prices specially steel and other precious metal.

For our India operations, material costs of Passenger Cars segment increased to ₹5,274 crores in FY 2020-21, compared to ₹2,471 crores in FY 2019-20, electric vehicles increased to ₹504 crores in FY 2020-21, compared to ₹142 crores in FY 2019-20 and Utility vehicles increased by 57.3% to ₹5,271 crores in FY 2020-21, compared to ₹3,354 crores in FY 2019-20. The increase in material cost is mainly due to increased sales volumes and increase price under BS VI. Material costs for ILCVs category increased by 15.4% to ₹3,119 crores in FY 2020-21, compared to ₹2,702 crores in FY 2019-20 and for SCVs and Pickups increased by 33.0% to ₹3,917 crores in FY 2020-21, compared to ₹2,946 crores in FY 2019-20 mainly due to increase in volumes and increase in commodity prices. Material costs for MHCVs category decreased by 4.7% to ₹10,191 crores in FY 2020-21, compared to ₹10,688 crores in FY 2019-20 and for CV Passenger Vehicles category substantially decreased to ₹828 crores in FY 2020-21, compared to ₹3,222 crores in FY 2019-20 mainly due to decrease in volumes which was partially offset by increase in commodity prices. The material costs as a percentage of revenue increased to 77.4% in FY 2020-21, compared to 75.5% in FY 2019-20.

Material costs increased by 8.2% to ₹2,319 crores in FY 2020-21, compared to ₹2,144 crores in FY 2019-20 for TDCV, primarily due to higher volumes, particularly in the domestic (South Korea) market. As a percentage of total revenue, material cost increased to 69.9% in FY 2020-21, compared to 68.1% in FY 2019-20, primarily due to product mix (introduction of LCVs).

At our Jaguar Land Rover operations, material costs in FY 2020-21 decreased by 9.1% to ₹1,20,335 crores, from ₹1,32,408 crores in FY 2019-20. The decrease was partially offset by an unfavourable currency translation from GBP to Indian rupees of ₹9,102 crores. Excluding currency translation, material costs attributable to our Jaguar Land Rover operations decreased by 16.0% to GB£12,335 million in FY 2020-21 from GB£14,684 million in FY 2019-20, mainly due to a 27.0% decrease in sales volume and change in product mix. Material costs at our Jaguar Land Rover operations as a percentage of revenue decreased to 62.5% in FY 2020-21, from 63.6% in FY 2019-20 (in GBP terms).

Employee Costs

Our employee costs decreased by 9.2% in FY 2020-21 to ₹27,648 crores from ₹30,439 crores in FY 2019-20, including the foreign currency translation impact from GBP to Indian rupees as discussed below.

Our permanent employee headcount decreased by 4.6% as at March 31, 2021 to 75,278 employees from 78,906 employees as at March 31, 2020, primarily due to voluntary early separations that commenced in third quarter of FY 2020-21 at Tata Motors and Jaguar Land Rover and in FY 2019-20 at Tata Daewoo in FY 2019-20. The average temporary headcount has increased to 28,291 employees in FY 2020-21 from 19,169 employees in FY 2019-20, due to increase in productions, mainly passenger vehicles.

The employee costs for Tata Commercial Vehicles and Tata Passenger Vehicles decreased by 4.3% to ₹5,517 crores in FY 2020-21 from ₹5,767 crores in FY 2019-20. For our India operations, employee costs decreased by 3.6% to ₹4,632 crores in FY 2020-21 from ₹4,807 crores in FY 2019-20, mainly due to reduction in permanent employee headcount, reduction in staff welfare expenses due to nationwide lockdown in Q1 and lower production in first quarter of FY 2020-21 at TML. The permanent headcount decreased by 4.4% as at March 31, 2021 to 37,301 employees from 39,012 employees as at March 31, 2020 mainly due to voluntary early separations commenced in third quarter of FY 2020-21 at Tata Motors. Employee cost at Tata Motors Limited, the parent company, decreased by 3.9% to ₹4,213 crores in FY 2020-21, compared to ₹4,384 crores in FY 2019-20. The employee cost as a percentage of revenue decreased to 9.0% in FY 2020-21 from 10.0% in FY 2019-20, mainly due to increase in revenue.

Employee costs at TDCV were decreased to ₹687 crores in FY 2020-21, compared to ₹759 crores in FY 2019-20 primarily due to abolishment of certain overtime and voluntary early separation that was given during FY 2020-21.

The employee costs at Jaguar Land Rover decreased by 10.1% to ₹20,873 crores (GB£2,141 million) in FY 2020-21 from ₹23,206 crores (GB£2,568 million) in FY 2019-20, primarily due to average headcount reduction of 5.8% (FY21 average 37,500 vs FY 20 average 39,800) and furlough grant of ₹1,824 crores (GB£188m) received under the UK governments Coronavirus Job Retention Scheme. This decrease was partially offset by an unfavourable foreign currency translation impact from GBP to Indian rupees of ₹1,527 crores. The employee costs as a percentage of revenue decreased to 10.9% in FY 2020-21 from 11.2% in FY 2019-20 (in GBP terms).

Product development/Engineering expenses

Product development/Engineering expenses represent research costs and costs pertaining to minor product enhancements, refreshes, and upgrades to existing vehicle models. These represented 2.1% and 1.6% of total revenues ₹5,227 crores and ₹4,188 crores for FY 2020-21 and FY 2019-20, respectively.

Other Expenses

Other expenses decreased by 28.3% to ₹40,922 crores in FY 2020-21 from ₹57,087 crores in FY 2019-20. There was an unfavourable foreign currency translation of GBP to Indian rupees of ₹2,493 crores. As a percentage of total revenues, these expenses decreased to 16.4% in FY 2020-21 from 21.9% in FY 2019-20. The major components of expenses are as follows:

	FY 2020-21	FY 2019-20	% Change	Percentage of Total Revenue	
	(₹ In crores)			FY 2020-21	FY 2019-20
Freight and transportation expenses	5,716	6,484	(11.8)	2.3	2.5
Works operation and other expenses	14,230	17,847	(20.3)	5.7	6.8
Publicity	4,385	7,614	(42.4)	1.8	2.9
Allowance for trade and other receivables and finance receivables	979	763	28.3	0.4	0.3
Warranty and product liability expenses	7,609	10,885	(30.1)	3.0	4.2
Processing charges	965	1,070	(9.8)	0.4	0.4
Stores, spare parts, and tools consumed	1,279	1,501	(14.8)	0.5	0.6
Power and fuel	1,113	1,265	(12.0)	0.4	0.5
Information technology/computer expenses	2,720	2,372	14.7	1.1	0.9
Engineering expenses	3,308	6,598	(49.9)	1.3	2.5
MTM (gain)/loss on commodity derivatives	(1,382)	688	300.9	(0.5)	0.3
Total	**40,922**	**57,087**	(28.3)	**16.4**	21.9

1. Freight and transportation expenses decreased by 11.8% to ₹5,716 crores in FY 2020-21. This is partially offset by an unfavourable currency translation of ₹370 crores from GBP to INR. At Jaguar Land Rover freight and transportation expenses decreased by 18.3% from GB£611 million in FY 2019-20 to GB£499 million in FY 2020-21, mainly due to lower sales volumes. At Tata Motors standalone level, expenses decreased by 26.2% from ₹1,066 crores in FY 2019-20 to ₹787 crores in FY 2020-21 on account of lower production, mainly for commercial vehicles in first quarter of FY 2020-21 due to nationwide lockdown.

2. Our works operation and other expenses represented 5.7% and 6.8% of total revenue in FY 2020-21 and FY 2019-20, respectively. Other expenses mainly relate to volume-related expenses at Jaguar Land Rover and Tata Motors Limited. On absolute terms, the expenses decreased to ₹14,230 crores in FY 2020-21 from ₹17,847 crores in FY 2019-20, mainly on account of miscellaneous contract job/outsourcing expenses decreased due to the COVID-19 pandemic lockdown.

3. Publicity expenses were 1.8% and 2.9% of our total revenues in FY 2020-21 and FY 2019-20, respectively. The publicity expenses at Jaguar Land Rover decreased to GB£397 million (2.0% of the revenue) in FY 2020-21, compared to GB£733 million (3.2% of revenue) in FY 2019-20. Marketing activity was limited early in the year due to the ongoing impact of the COVID-19 pandemic, though routine product and brand campaigns increased expenditure through to the end of March 31, 2021, particularly in China, US, and UK. In addition to routine product and brand campaigns, we incurred expenses relating to new product introduction campaigns in FY 2020-21, mainly the new Land Rover Defender at Jaguar Land Rover and the new Safari at Tata Motors India operations.

4. The allowances for finance receivables related to Vehicle Financing segment. These mainly reflect provisions for the impairment of vehicle loans of ₹958 crores for FY 2020-21, compared to ₹660 crores in FY 2019-20. The increase was mainly on account of additional provisions carried on account of uncertainty involved due to the second wave of the COVID-19 pandemic. The allowances for trade receivables were ₹21 crores in FY 2020-21, compared to ₹104 crores in FY 2019-20, due to better collections.

5. Warranty and product liability expenses represented 3.0% and 4.2% of our total revenues in FY 2020-21 and FY 2019-20, respectively. The warranty expenses at Jaguar Land Rover decreased to GB£706 million (3.6% of the revenue) in FY 2020-21, compared to GB£1,131 million (4.9% of revenue) in FY 2019-20, mainly due to increased retailer guidance, guided diagnostics enhancement, proactive issue detection, prioritisation and resolution coming from charge+ initiatives, significant quality improvements in vehicles and the implementation of other business enhancement activities. For Tata Motors' Indian operations, these represent 0.9% and 1.2% of the revenue for FY 2020-21 and FY 2019-20, respectively, due to quality improvements and product mix.

6. Engineering expenses decreased by 49.9 % to ₹3,308 crores in FY 2020-21, compared to ₹6,598 crores in FY 2019-20. These expenses represents 1.3% and 2.5% of our total revenues in FY 2020-21 and FY 2019-20, respectively and are attributable mainly to decreased expenditure at Jaguar Land Rover. A significant portion of these costs are capitalized and shown under the line item "expenditure capitalized" discussed below.

7. There has been MTM gain on commodity derivatives of ₹1,382 crores in FY 2020-21, compared to loss of ₹688 crores in FY 2019-20.

Expenditure capitalized

This represents employee costs, stores and other manufacturing supplies and other work expenses incurred mainly toward product development projects. Considering the nature of our industry, we continually invest in the development of new products to address safety, emission, and other regulatory standards. The expenditure capitalized decreased by 26.6% to ₹12,849 crores in FY 2020-21 from ₹17,503 crores in FY 2019-20. The decrease includes favourable foreign currency translation impact from GBP to Indian rupees of ₹852 crores pertaining to Jaguar Land Rover.

Other income

There was a net gain of ₹2,643 crores in FY 2020-21, compared to ₹2,973 crores in FY 2019-20, representing decrease of 11.1%.

- Interest income decreased to ₹493 crores in FY 2020-21, compared to ₹1,170 crores in FY 2019-20, mainly decreased short term fixed deposit at both Tata Motors Limited and Jaguar Land Rover.

Further, at Tata Motors Limited, most of the dealers were Cash and carry, reducing the credit period.

- Incentive from government has marginally decreased to ₹1,918 crore in FY 2020-21, compared to ₹1,984 crores in FY 2019-20. Government incentive includes exports and other incentives of ₹548 crores and ₹1,370 crores received by foreign subsidiaries on Tax credit on qualifying expenditure for research and development in FY 2020-21.
- MTM gain on investments fair valued through profit or loss of ₹20 crores in FY 2020-21, compared to loss of ₹389 crores in FY 2019-20, loss in FY 2019-20 was primarily driven by fair value reduction of Lyft investment at Jaguar Land Rover.
- Profit on sale of investments measured at fair value through profit or loss is ₹194 crores in FY 2020-21, compared to ₹187 crores in FY 2019-20.

Depreciation and Amortization

Our depreciation and amortization expenses increased by 9.9% in FY 2020-21, the breakdown of which is as follows:

(₹ in crores)

	FY 2020-21	FY 2019-20
Depreciation	10,873	10,610
Amortization	11,502	9,699
Amortization of Leased Assets (RTU)	1,172	1,116
Total	**23,547**	**21,425**

The increase in depreciation and amortization expenses is mainly due to an unfavourable foreign currency translation from GBP to Indian rupees of ₹1,420 crores. This is further increased due to Job 1 programs in the year, Velar and 20MY Range Rover & Range Rover sport at Jaguar Land Rover and at TML by ₹203 crores due to Capitalization of Altroz and BSVI projects.

Finance Cost (interest expenses)

Our interest expense (net of interest capitalized) increased by 11.8% to ₹8,097 crores in FY 2020-21 from ₹7,243 crores in FY 2019-20. As a percentage of total revenues, interest expense represented 3.2% and 2.8% in FY 2020-21 and FY 2019-20, respectively. The interest expense (net) for Jaguar Land Rover was GB£251 million (₹2,425 crores) in FY 2020-21, compared to GB£209 million (₹1,880 crores) in FY 2019-20. The increase in interest expense primarily reflects interest accrued on increased indebtedness which included the RMB5 billion China loan completed in June 2020, the US$700 million 7.750% 5-year senior notes issued in October 2020 and the US$650 million 5.875% 7-year senior notes issued in December 2020. For Tata Commercial Vehicles and Tata Passenger Vehicles, interest expense increased by 5.4% to ₹5,669 crores in FY 2020-21 from ₹5,379 crores in FY 2019-20, mainly due to higher borrowings and lower interest capitalisation and warranty discounting. For the Vehicle Financing business, interest expense decreased by 7.4% to ₹2,851 crores in FY 2020-21 from ₹3,079 crores in FY 2019-20, mainly due to lower cost of borrowings.

Foreign exchange (gain)/loss (net)

We had a net foreign exchange gain of ₹1,732 crores in FY 2020-21, compared to loss of ₹1,739 crores in FY 2019-20.

- Jaguar Land Rover recorded an exchange gain of ₹1,787 crores in FY 2020-21, compared to loss of ₹1,252 crores in FY 2019-20. There was a net exchange gain on senior notes and other borrowings of GB£314 million in FY 2020-21, compared to a loss of GB£135 million in FY 2019-20, due to GBP strengthening against USD and EUR in FY 2020-21. There is a gain of GB£182 million in FY 2020-21, compared to a loss of GB£137 million in FY 2019-20, due to fluctuations in foreign currency exchange rates on derivatives contracts that are not hedge accounted and natural hedges of debt, mainly reflecting a stronger U.S. dollar and Euro. Furthermore, this also includes a loss on revaluation of other assets and liabilities of GB£2 million in FY 2020-21, compared to a loss of GB£23 million in FY 2019-20.
- For India operations, we incurred a net exchange loss of ₹25 crores in FY 2020-21, compared to ₹237 crores in FY 2019-20, mainly attributable to foreign currency denominated borrowings.
- There was a net exchange loss on revaluation of foreign currency loans at our subsidiary TML Holdings Pte. Limited of ₹25 crores in FY 2020-21, compared to ₹253 crores in FY 2019-20.

Exceptional Item (gain)/loss (net)

(₹ in crores)

	FY 2020-21	FY 2019-20
Employee separation cost	460	436
Defined benefit pension plan amendment past service cost	85	-
Write off/provision (reversal) for tangible/intangible assets (including under development)	114	(73)
Charge associated with change in JLR Strategy	14,994	-
Impairment losses/(Reversal) in Passenger Vehicle Business	(1,182)	1,419
Provision/(Reversal) for Onerous Contracts and related supplier claims	(663)	777
Provision for costs of closure of operation of a subsidiary	(47)	(66)
Impairment in subsidiaries	-	353
Provision for loan given to a Joint venture	-	25
Total	**13,761**	**2,871**

Employee separation cost

During the year ended March 31, 2021, Tata Motors Limited, Jaguar Land Rover and Tata Motors European Technical Centre PLC (TMETC) had announced a voluntary redundancy programme and accordingly had a charge of ₹1,404 crores. This is partially offset by Tata Daewoo Commercial Vehicles has taken a reversal towards employee separation cost of ₹54 crores during FY 2020-21, which was provided in previous year.

Defined benefit pension plan amendment past service cost

Jaguar Land Rover had recognised a past service cost due to the requirement to equalise male and female members' benefits for the inequalities within guaranteed minimum pension ('GMP') earned in the year ended March 31, 2019. This assessment has been updated during the year ended March 31, 2021 based on new information and accordingly, a charge of ₹85 crores (GBP 9 million) has been recognised.

Write off/provision (reversal) for tangible/intangible assets (including under development

Exceptional amount of ₹114 crores and ₹(73) crores is recognised during the year ended March 31, 2021 and 2020, respectively, related to write off/(reversal) of provision for impairment (net) of certain property, plant and equipment, capital work-in-progress and intangibles under development.

Charge associated with change in JLR Strategy

Project Reimagine was approved by the JLR board on February 11, 2021, which targets the production of more sustainable and fully electric luxury vehicles including the goal of having a fully electric fleet of luxury vehicles by the end of the decade and 100% of sales from pure battery electric vehicles by 2036, as well as striving towards achieving net zero carbon emissions across its supply chain, among other environmentally driven strategies by 2039. This revised strategy, particularly the cancellation of the MLA-Mid architecture, resulted in a charge being recognised comprising the following: a) Asset write-downs of GB£952 million (₹9,606 crores) in relation to models cancelled. b) Restructuring costs of GB£534 million (₹5,388 crores) includes costs of GB£526 million (₹5,312 crores) accruals to settle legal obligations on work performed to date and provisions for redundancies and other third-party obligations and defined benefit past service cost of GB£8 million (₹76 crores).

Impairment losses/(Reversal) in Passenger Vehicle Business

As at March 31, 2020, the Company assessed the recoverable value of Passenger vehicle business of Tata Motors Limited, which represent a single cash-generating unit (CGU), due to refresh of its strategy in response to change in market conditions on account of various factors (economic environment, demand forecasts etc.) including the COVID 19 pandemic. The recoverable value determined by Fair Value less Cost of Disposal ('FVLCD') was lower than the carrying value of the CGU and this resulted in an impairment charge of ₹1,419 crores for FY 2019-20. As at March 31, 2021, the Company identified certain triggers for reversal of the previously recorded impairment based on both external and internal indicators. Accordingly, the Company reassessed its estimates and determined the recoverable value for this CGU considering the significant improvement in absolute and relative performance and outlook of the business when compared with the assumed performance at the time when the impairment loss was recorded. Based on this reassessment, the Company has reversed the initially recognised impairment for this CGU.

Provision for Onerous Contracts and related supplier claims

During the year ended March 31, 2020, a provision had been recognized for certain supplier contracts ranging from five to ten years, which had become onerous, as the Company estimated that it will procure lower quantities than committed and the costs will exceed the future economic benefit. As at March 31, 2021, the Company has reassessed the onerous provision created and based on the revised volume outlook a reversal of provision aggregating ₹777 crores have been accounted. During the year the Company has also made provision for estimated supplier claims of ₹114 crores, which are under negotiations with supplier.

Provision for cost of closure of operation of a subsidiary

On July 31, 2018, we decided to cease current operations of Tata Motors (Thailand) Ltd. Accordingly, the relevant restructuring cost of ₹381 crores have been accounted during FY 2018-19. There is a reversal of restructuring cost of ₹52 crores during FY 2020-21, compared to ₹66 crores in FY 2019-20, basis actual cash outflow compared to estimates done earlier.

Provision for impairment in subsidiaries

As a result of change in market conditions, the Company performed an impairment assessment for assets forming part of wholly owned subsidiaries Tata Motors European Technical Centre PLC (TMETC) and Trilix S.r.l (Trilix). The recoverable amount of these assets was estimated to be lower than their carrying value and this resulted in an impairment charge of ₹297 crores and ₹56 crores in TMETC and Trilix, respectively during the year ended March 31, 2020.

Provision for loan given to Joint venture

During the year ended March 31, 2020, we created provision for loans given to certain Joint venture.

Tax expenses / (credit)

Our income tax expenses is ₹2,542 crores in FY 2020-21, compared to ₹395 crores in FY 2019-20, resulting in consolidated effective tax rates of 24.3% and 3.7%, for FY 2020-21 and FY 2019-20, respectively.

Tax rates applicable to individual entities decreased to 18.0% for FY 2020-21, compared to 25.7% in FY 2019-20, mainly on account of few subsidiaries and Joint Operations opting for lower tax regime.

There is significant increase in tax expense as referred to above due to the following reasons:

- During the year FY 2020-21, deferred tax assets not recognised of ₹3,682 crores (FY 2019-20: ₹3,192 crores) mainly comprises of Jaguar Land Rover ₹2,719 crores (FY 2019-20 : ₹75 crores) and Tata Motors Ltd ₹788 crores (FY 2019-20 : ₹2,922 crores) due to uncertainty of future taxable profits. Further, the Minimum Alternate Tax credit of ₹72 crores (FY 2019-20: ₹22 crores) has not been recognised in the case of few Subsidiaries and Joint Operations due to uncertainty of realization.
- During the year, there is tax charge on Undistributed Earnings of Subsidiaries amounting to ₹311 crores as compared to tax credits of ₹86 crores arising out of losses in FY 2019-20.
- Additional cost in deduction for patent, research and product development cost of ₹2 crores in FY 2020-21, compared to additional deduction of ₹282 crores in FY 2019-20, was mainly due to non-availability of weighted deduction u/s 35(2AB) of the Act on R&D expenditure with effect from April 1, 2020, applicable for FY 2020-21, which was being claimed in Tata Motors Limited on a standalone basis.
- During the year, Jaguar Land Rover has written down its tangible assets under construction of ₹430 crores, which does not qualify for tax relief.

Profit/(loss) after tax

Our consolidated net loss in FY 2020-21, excluding shares of non-controlling interests, is ₹13,451 crores, increased from net loss of ₹12,071 crores in FY 2019-20. However, profit before interest and tax of ₹7,144 crore in FY 2020-21, compared to loss before interest and tax ₹555 crores in FY 2019-20. This was mainly the result of the following factors:

- Earnings before other income (excluding Incentives), finance cost, foreign exchange gain/(loss) (net), exceptional items and tax for Jaguar Land Rover of ₹7,691 crores in FY 2020-21, compared to profit of ₹594 crores in FY 2019-20. In FY 2020-21, Jaguar Land Rover charged ₹15,350 crores as exceptional item of which ₹14,994 crores under Reimagine strategy in fourth quarter.
- Earnings before other income (excluding Incentives), finance cost, foreign exchange gain/(loss) (net), exceptional items and tax for Vehicle Financing amounted to ₹2,794 crores in FY 2020-21, compared to ₹2,855 crores in FY 2019-20.
- Loss before other income (excluding Incentives), finance cost, foreign exchange gain/(loss) (net), exceptional items and tax for Tata Commercial Vehicles amounted to ₹305 crores in FY 2020-21, compared to earnings of ₹368 crores in FY 2019-20, primarily due to lower volumes and product mix.
- Loss before other income (excluding Incentives), finance cost, foreign exchange gain/(loss) (net), exceptional items and tax for Tata Passenger Vehicles amounted to ₹1,564 crores in FY 2020-21, compared to ₹2,868 crores in FY 2019-20, due to increased sales volume in cars and Utility Vehicle segment.

Share of profit/(loss) of equity-accounted investees and non-controlling interests in consolidated subsidiaries, net of tax

In FY 2020-21, our share of equity-accounted investees reflected a loss of ₹379 crores, compared to ₹1,000 crores in FY 2019-20. Our share of profit (including other adjustments) in the China Joint Venture in FY 2020-21 was loss of ₹363 crores, compared to loss of ₹1,016 crores in FY 2019-20. The decrease in losses was mainly due to increase in sales volumes and better business performance.

The share of non-controlling interests in consolidated subsidiaries was decreased to ₹56 crores in FY 2020-21 from ₹96 crores in FY 2019-20.

B.BALANCE SHEET

Below is a discussion of major items and variations in our consolidated balance sheet as at March 31, 2021 and 2020, included elsewhere in this annual report.

₹ in crores

	As at March 31, 2021	As at March 31, 2020	Change	Translation of JLR	Net Change
ASSETS					
(a) Property, plant and equipment, right of use and intangible assets	1,58,868	1,61,952	(3,085)	9,233	(12,318)
(b) Goodwill	804	777	27	-	27
(c) Investment in equity accounted investees	4,201	4,419	(218)	229	(447)
(d) Financial assets	1,28,648	98,922	29,726	4,688	25,038
(e) Deferred tax assets (net)	4,520	5,458	(938)	287	(1,225)
(f) Current tax assets (net)	1,869	1,295	574	58	516
(g) Other assets	7,907	11,647	(3,740)	349	(4,089)
(h) Inventories	36,089	37,457	(1,368)	2,185	(3,553)
(i) Assets classified as held-for-sale	221	194	27	-	27
TOTAL ASSETS	**3,43,126**	**3,22,121**	**21,005**	**17,029**	**3,976**
EQUITY AND LIABILITIES					
EQUITY	56,820	63,892	(7,072)	3,805	(10,877)
LIABILITIES					
(a) Financial liabilities:	2,34,453	2,12,456	21,997	10,019	11,978
(b) Provisions	26,455	25,066	1,389	1,699	(310)
(c) Deferred tax liabilities (net)	1,556	1,942	(386)	84	(470)
(d) Other liabilities	22,756	17,725	5,031	1,349	3,682
(d) Current tax liabilities (net)	1,086	1,040	46	73	(27)
TOTAL LIABILITIES	**2,86,306**	**2,58,229**	**28,077**	**13,224**	**14,853**
TOTAL EQUITY AND LIABILITIES	**3,43,126**	**3,22,121**	**21,005**	**17,029**	**3,976**

Our total assets were ₹3,43,126 crores and ₹3,22,121 crores as at March 31, 2021 and 2020, respectively. The increase by 6.5% in assets as at March 31, 2021 considers a favourable foreign currency translation from GBP into Indian rupees as described below.

Our total current assets increased by ₹27,300 crores to ₹1,46,888 crores or 22.8% as at March 31, 2021, compared to ₹1,19,587 crores as at March 31, 2020.

Cash and cash equivalents increased by 71.7% to ₹31,700 crores as at March 31, 2021, compared to ₹18,468 crores as at March 31, 2020, which also includes a favourable foreign currency translation of ₹1,592 crores from GBP to Indian rupees. We hold cash and cash equivalents principally in Indian rupees, GBP, Chinese Renminbi, EURO and USD. Out of cash and cash equivalents as at March 31, 2021, Jaguar Land Rover held the GB£2,202 million equivalent of ₹22,190 crores, which consists of surplus cash deposits for future use.

As at March 31, 2021, we had short-term deposits of ₹14,346 crores, compared to ₹14,829 crores as of March 31, 2020, a marginal decrease of 3.3%, due to decrease in the value of deposits invested over a term of three months or longer mainly at Jaguar Land Rover.

As at March 31, 2021, we had finance receivables, including the non-current portion (net of allowances for credit losses), of ₹34,715 crores, compared to ₹31,079 crores as at March 31, 2020, an increase of 11.7%, due to lower run down of loan book on account of a moratorium in the first half of FY 2020-21 followed by a decent revival of pent-up demand in the second half of FY 2020-21. We had also extended Emergency Credit Line Guarantee Scheme loans to eligible customers which had a one-year principal repayment moratorium. Gross finance receivables were ₹35,963 crores as at March 31, 2021, compared to ₹31,730 crores as at March 31, 2020. Vehicle financing is integral to our automotive operations in India.

Trade receivables (net of allowance for doubtful receivables) were ₹12,679 crores as at March 31, 2021, representing an increase of ₹1,506 crores or 13.5% over March 31, 2020. The increase was partially due to favourable foreign currency translation of ₹624 crores from GBP to Indian rupees. Trade receivables at Tata and other brand vehicles (including vehicle finance) increased by 23.6% to ₹3,833 crores as at March 31, 2021 from ₹3,102 crores as at March 31, 2020, primarily on account of higher sales volume during the recovery phase after lockdown due to the COVID-19 pandemic. The trade receivables of Jaguar Land Rover were ₹8,501 crores as at March 31, 2021, compared to ₹7,586 crores as at March 31, 2020 and increase of 12.1%. The past dues for more than six months (gross) decreased from ₹1,744 crores as at March 31, 2020 to ₹1,679 crores as at March 31, 2021. These mainly represent dues from government-owned transport undertakings and Passenger Vehicle dealers, for which we are pursuing recovery.

As at March 31, 2021, inventories were at ₹36,089 crores, compared to ₹37,457 crores as at March 31, 2020, a decrease of 3.7%. The decrease in finished goods inventory was ₹2,319 crores from ₹29,632 crores as at March 31, 2020 to ₹27,313 crores as at March 31, 2021, mainly due to an increase in volumes at Tata Motors. This decrease was offset by a favourable currency translation of ₹2,185 crores from GBP to Indian rupees. In terms of number of days to sales, finished goods represented 42 inventory days in sales in FY 2020-21, compared to 43 inventory days in FY 2019-20.

Our investments (current and non-current investments) increased to ₹20,419 crores as at March 31, 2021 from ₹11,890 crores as at March 31, 2020, representing an increase of 71.7%. Our investments mainly comprise mutual fund of ₹19,051 crores as at March 31, 2021, compared to ₹10,862 crores as at March 31, 2020. Investments attributable to Jaguar Land Rover were ₹16,095 crores as at March 31, 2021, compared to ₹9,515 crores as at March 31, 2020, an increase of 48.2% mainly on account of mutual fund. Tata Motors Limited (Parent) on Standalone basis

has investments in mutual funds of ₹1,578 crores as at March 31, 2021, compared to ₹885 crores as at March 31, 2020.

Our other assets (current and non-current) decreased by 32.1% to ₹7,907 crores as at March 31, 2021 from ₹11,646 crores as at March 31, 2020. The decrease is mainly attributable to pension assets which was recognized in FY 2019-20 for the surplus on the UK defined benefit pension scheme at Jaguar Land Rover consequent to changes in actuarial assumptions causing the defined benefit schemes moved to a net liability position as at March 31, 2021 from net asset position as at March 31, 2020.

Our other financial assets (current and non-current) increased to ₹11,088 crores as at March 31, 2021 from ₹9,336 crores as at March 31, 2020. Derivative financial instruments (representing options and other hedging arrangements, mainly related to the Jaguar Land Rover business) increased to ₹6,113 crores as at March 31, 2021 from ₹4,682 crores as at March 31, 2020, predominantly due to the strengthening of the GBP compared to EURO and therefore the increasing fair value of derivative contracts. This increase is partially offset by decrease in recoverable from suppliers to ₹1,546 crores as at March 31, 2021 from ₹1,917 crores as at March 31, 2020.

Income tax assets (both current and non-current) increased by 44.3% to ₹1,869 crores as at March 31, 2021 from ₹1,295 crores as at March 31, 2020 mainly at Jaguar Land Rover.

Property, plants and equipment (net of depreciation) marginally increased by 2.3% from ₹77,883 crores as at March 31, 2020 to ₹79,640 crores as at March 31, 2021. The increase is partly due to a favourable foreign currency translation of ₹4,237 crores from GBP to Indian rupees. After adjusting for the foreign currency translation impact, a decrease of ₹2,480 crores is mainly including depreciation charged during the year for property, plant and equipment and lower addition during the year as compared to previous year. This decrease excluding translation is partially offset by reversal of impairment charges taken in Passenger Vehicle business at Tata Motors Limited.

Goodwill as at March 31, 2021 was ₹804 crores, compared to ₹777 crores as at March 31, 2020. The increase was attributable to a favourable translation impact pertaining to software consultancy and the services of our subsidiary, Tata Technologies Limited.

Intangible assets decreased by 7.0% from ₹69,195 crores as at March 31, 2020 to ₹64,360 crores as at March 31, 2021. This decrease is mainly due to ₹7,279 crores impairment done under the Reimagine strategy at Jaguar Land Rover business and amortization charge for the year. This decrease was partially offset by reversal of ₹545 crores impairment charges taken in Passenger Vehicle business at Tata Motors Limited and a favourable foreign currency translation of ₹4,104 crores from GBP to Indian rupees. As at March 31, 2021, there were product development projects in progress amounting to ₹12,587 crores compared to ₹27,023 crores as at March 31, 2020.

The carrying value of investments in equity-accounted investees decreased by 4.9% to ₹4,201 crores as at March 31, 2021, from ₹4,419 crores as at March 31, 2020. The value of investments in equity-accounted investees decreased mainly due to loss for the year FY 2020-21 at China Joint Venture.

A deferred tax liability (net) of ₹832 crores was recorded in our income statement and deferred tax asset of ₹280 crores in other comprehensive income which mainly includes assets of ₹1,507 crores toward post-retirement benefits and liability of ₹1,175 million toward cash flow hedges in FY 2020-21. The net deferred tax asset of ₹2,964 crores was recorded as at March 31, 2021, compared to ₹3,516 crores as at March 31, 2020.

Accounts payable (including acceptances) were ₹76,040 crores as at March 31, 2021, compared to ₹66,398 crores as at March 31, 2020, an increase of 14.5%, reflecting an increase in operations and an unfavourable foreign currency translation of ₹4,195 crores from GBP to Indian rupees.

Other financial liabilities (current and non-current) were ₹37,411 crores as at March 31, 2021, compared to ₹40,402 crores as at March 31, 2020 (net of an unfavourable currency translation impact of ₹1,441 crores), reflecting liabilities toward current maturities of long-term borrowings, vehicles sold under repurchase arrangements, derivative instruments, and interest accrued but not due on loans and lease liabilities. Liability towards current maturities of long-term borrowings increased to ₹21,129 crores as at March 31, 2021 from ₹19,132 crores as at March 31, 2020 mainly due to higher repayment of long-term borrowings falling in FY 2021-22, compared to FY 2020-21. Liability toward vehicles sold under repurchasing arrangements decreased to ₹3,623 crores as at March 31, 2021 from ₹4,483 crores as at March 31, 2020, mainly due to decrease in the repurchase business at Jaguar Land Rover and this is partially offset by an unfavourable currency translation impact of ₹260 crores. Derivative financial instruments (representing options and other hedging arrangements, mainly related to Jaguar Land Rover) decreased by 40.6% to ₹4,480 crores as at March 31, 2021 from ₹7,536 crores as at March 31, 2020.

Provisions (current and non-current) increased by 5.5% to ₹26,455 crores as at March 31, 2021 from ₹25,066 crores as at March 31, 2020. This increase is mainly due to restructuring provision of ₹1,952 crores made at Jaguar Land Rover under the Reimagine strategy towards settling legal obligations on work performed to date and other third-party obligations and an unfavourable foreign currency translation impact of ₹1,699 crores from GBP to Indian rupees. Provisions for warranties decreased by 3.6% or ₹693 crores to ₹18,604 crores as at March 31, 2021, compared to ₹19,297 crores as at March 31, 2020 mainly at Jaguar Land Rover primarily due to lower retail sales. Furthermore, provisions for residual risk for Jaguar Land Rover decreased to ₹667 crores (GB£66 million) as at March 31, 2021, compared to ₹1,637 crores (GB£175 million) as at March 31, 2020. This is driven primarily by the resilience and recovery observed in the US economy and secondary vehicle market across FY 2020-21 following the anticipated impact of the COVID-19 pandemic as at March 31, 2020, further supported by Jaguar Land Rover's wider demand-led recovery.

Other liabilities (current and non-current) increased by 28.4% to ₹22,756 crores as at March 31, 2021, compared to ₹17,725 crores as at March 31, 2020. Employee benefit obligations increased to ₹4,092 crores as at March 31, 2021, compared to ₹342 crores as at March 31, 2020, mainly pertaining to the Jaguar Land Rover pension plan, consequent to changes in actuarial assumptions causing the defined benefit schemes to move to a net liability position as at March 31, 2021 from net asset position as at March 31, 2020.

Our total debt was ₹1,35,905 crores as at March 31, 2021, compared to ₹1,18,811 crores as at March 31, 2020, an increase of 14.4%, including an unfavourable currency translation of ₹4,438 crores from GBP to Indian rupees. Short-term debt (including the current portion of long-term debt) increased to ₹42,792 crores as at March 31, 2021, compared to ₹35,495 crores as at March 31, 2020. Long-term debt (excluding the current portion) increased by 11.8% to ₹93,113 crores as at March 31, 2021 from ₹83,316 crores as at March 31, 2020. Long-term debt (including the current portion) increased by 11.5% to ₹1,14,242 crores as at March 31, 2021, compared to ₹1,02,448 crores as at March 31, 2020.

Total equity was ₹56,820 crores as at March 31, 2021 and ₹63,892 crores as at March 31, 2020, respectively.

Equity attributable to shareholders of Tata Motors Limited decreased to ₹55,247 crores as at March 31, 2021, compared to ₹63,079 crores as at March 31, 2020. This decrease is mainly due to losses of ₹13,451 crores and actuarial losses in pension reserve of ₹5,901 crores, offset by hedging reserve gain of ₹4,147 crores, currency translation reserve gain of ₹3,853 crores and securities premium of ₹2,556 crores pursuant to conversion of share warrants.

C. CASH FLOW

The following table sets forth selected items from consolidated cash flow statement:

(₹ in crores)

	FY 2020-21	FY 2019-20	Change
Cash from operating activity	**29,001**	**26,633**	**2,368**
Profit/(Loss) for the year	(13,395)	(11,975)	
Adjustments for cash flow from operations	44,593	35,328	
Changes in working capital	(93)	5,065	
Direct taxes paid	(2,105)	(1,785)	
Cash used in investing activity	**(26,126)**	**(34,170)**	**8,044**
Payment for property, plant and equipment and other intangible assets (net)	(19,855)	(29,530)	
Net investments, short term deposit, margin money and loans given	(6,719)	(6,388)	
Dividend and interest received	447	1,748	
Net Cash from Financing Activities	**9,904**	**3,390**	**6,515**
Dividend Paid (including paid to minority shareholders)	(29)	(57)	
Interest paid	(8,107)	(7,518)	
Net Borrowings (net of issue expenses)	18,040	10,965	
Net increase / (decrease) in cash and cash equivalent	**12,778**	**(4,148)**	**16,926**
Cash and cash equivalent, end of the year	**31,700**	**18,468**	
Free Cash flow*	**1,452**	**(9,295)**	

*Free cash flow means cash flow from operating activities less payment for property, plant and equipment and intangible assets, add proceeds from sale of property, plant and equipment less interest paid add interest received, add dividend from equity accounted investees of core auto entities and less Investment in Equity Accounted investees of core auto entities.

Cash and cash equivalents increased by ₹13,232 crores in FY 2020-21 to ₹31,700 crores from ₹18,468 crores in FY 2019-20, including a favourable currency translation of ₹1,592 crores from GBP to Indian rupees. The increase in cash and cash equivalents (excluding currency translation) resulted from the changes to our cash flows in FY 2020-21 when compared to FY 2019-20 as described below.

Net cash provided by operating activities totalled ₹29,001 crores in FY 2020-21, an increase of ₹2,368 crores, compared to ₹26,633 crores in FY 2019-20. The net loss is ₹13,395 crores in FY 2020-21, compared to ₹11,975 crores in FY 2019-20. The cash flows from operating activities before changes in operating assets and liabilities is of ₹31,198 crores in FY 2020-21, compared to ₹23,352 crores in FY 2019-20. The changes in operating assets and liabilities resulted in a net outflow of ₹93 crores in FY 2020-21, compared to net inflow of ₹5,065 crores in FY 2019-20.

In FY 2020-21, the net outflow in vehicle finance receivables was ₹4,387 crores compared to inflow of ₹2,021 crores in FY 2019-20. For Tata Commercial Vehicles and Tata Passenger Vehicles there was an inflow of ₹4,226 crores in FY 2020-21 on account of changes in operating assets and liabilities, compared to ₹678 crores in FY 2019-20, which was mainly attributable to an increase in trade payables and acceptances. For Jaguar Land Rover brand vehicles, there was a net outflow of cash on account of changes in operating assets and liabilities accounting to ₹527 crores in FY 2020-21, compared to inflows of ₹2,462 crores in FY 2019-20. This is mainly due to provisions in FY 2020-21 compared to FY 2019-20.

Income tax paid has increased to ₹2,105 crores in FY 2020-21, compared to ₹1,785 crores in FY 2019-20, which was primarily attributable to tax payments by Jaguar Land Rover's foreign subsidiaries in their respective tax jurisdictions.

Net cash used in investing activities totalled of ₹26,126 crores in FY 2020-21, compared to ₹34,170 crores for FY 2019-20, a decrease of ₹8,044 crores or 23.5%, mainly due to decrease in cash outflows on capital expenditure, both at Jaguar Land Rover and Tata Motors Limited.

The following table sets forth a summary of our cash flow on property, plants and equipment and intangible assets for the periods indicated.

(₹ in crores)

	FY 2020-21	FY 2019-20
Tata Commercial Vehicles and Tata Passenger Vehicles	1,719	4,332
Jaguar Land Rover	18,123	25,139

Jaguar Land Rover achieved positive free cash flow of GB£185 million in FY 2020-21, after total investment spending of £2.3 billion. This is a significant improvement on the negative GB£759 million free cash flow in the prior year. In FY 2020-21, payments for capital expenditures at Jaguar Land Rover decreased by 27.9% to ₹18,123 crores from ₹25,139 crores in FY 2019-20. Investment spending in FY 2020-21 was GB£2.3 billion (11.9% of revenue), significantly lower than the GB£3.3 billion (14.3% of revenue) in the prior fiscal year, due to continued Charge+ savings. Of the GB£2.3 billion investment spending, £489 million was expensed through profit and loss statement and the remaining GB£1.9 billion was capitalised. Total research and development accounted for GB£1.2 billion (51.9%) of investment spending, while tangible and other intangible assets accounted for the remaining GB£1.1 billion (48.1%). Further, in FY 2020-21, payments for capital expenditures at Tata Commercial Vehicles and Tata Passenger Vehicles decreased to ₹1,719 crores from ₹4,332 crores in FY 2019-20. These capital expenditures are related to new products under development.

Our net investment in short-term deposit margin moneys and loans resulted in an outflow of ₹6,719 crores in FY 2020-21, compared to ₹6,389 crores in FY 2019-20. This is mainly due to higher investment of in FY 2020-21 towards mutual fund compared to FY 2019-20 which is partially offset by higher realisation of fixed deposit in FY 2020-21, compared to FY 2019-20.

Net cash inflow from financing activities totalled ₹9,904 crores in FY 2020-21, compared to ₹3,390 crores in FY 2019-20. Net Borrowings (net of issue expenses) done during FY 2020-21 of ₹18,057 crores, compared to ₹10,965 crores during FY 20219-20. For Tata Commercial Vehicles and Tata Passenger Vehicles excluding vehicle finance, the short-term debt (net) decreased by ₹3,864 crores, whereas long-term debt (net) increased by ₹2,054 crores, due to additional borrowings. There was an increase in debt (short-term and long-term) of ₹7,188 crores in FY 2020-21 at Vehicle

Financing, compared to decrease of ₹3,271 crores in FY 2019-20. For Jaguar Land Rover, short-term debt (excluding lease liabilities) increased to GB£1,206 million in FY 2020-21 (GB£526 million in FY 2019-20), primarily because of the CNY 5 billion China loan completed in June 2020. Long-term debt (excluding lease liabilities) increased to GB£4,972 million in FY 2019-20 (GB£4,817 million in FY 2019-20), including the new US$700 million 5 year and US$650 million 7 year unsecured bonds issued in third quarter of FY 2020-21, partially offset by a GB£300 million bond which matured in January 2021 and GB£125 million of the UKEF backed loan which amortised over the course of the year as well as a favourable revaluation of foreign currency debt as a result of the significantly stronger Pound at March 31, 2021 compared to March 31, 2020. Lease obligations totalled GB£519 million in FY 2020-21 compared to GB£541 million in FY 2019-20.

Interest paid in FY 2020-21 was ₹8,123 crores, compared to ₹7,518 crores in FY 2019-20. For Jaguar Land Rover, interest paid was ₹2,493 crores in FY 2020-21, compared to ₹1,863 crores in FY 2019-20 primarily because of the higher indebtedness as well as lower yield on cash balances, resulting from central banks interest rate cuts to help tackle the economic effects of COVID-19 pandemic. For Tata Commercial Vehicles and Tata Passenger Vehicles, interest paid was ₹2,735 crores in FY 2020-21, compared to ₹2,568 crores in FY 2019-20. For Vehicle Financing, interest paid was ₹2,892 crores in FY 2020-21, compared to ₹3,085 crores in FY 2019-20.

D. KEY FINANCIAL RATIOS

The details of significant changes (25% or more) in the key financial ratios in FY 2020-21 compared to FY 2019-20 is as follows:

	FY 2020-21	FY 2019-20	Formula used	Reason for change
Interest coverage ratio (in times)	1.10	0.04	EBIT / Interest expense	Due to higher Earnings before other income (excluding Incentives), finance costs, foreign exchange gain/(loss) (net), exceptional items and tax at both Tata motors and Jaguar Land Rover, in FY 2020-21 compare to FY 2019-20, the interest coverage ratio is high.
Debt Equity ratio	2.46	1.88	Debt (excluding leases)/ shareholders' equity	The consolidated gross debt has increased by 14.4% in FY 2020-21 compared to FY 2019-20. The net debt (net of cash and cash equivalent including bank balances, mutual fund and deposit with financial institution - current) equity ratio is increased by 7.3% to 1.25 as at March 31, 2021 compared to 1.16 as at March 31, 2020. Equity attributable to shareholders of Tata Motors Limited decreased to ₹55,247 crores as at March 31, 2021, compared to ₹63,079 crores as at March 31, 2020. This decrease is mainly due to losses of ₹13,451 crores and actuarial losses in pension reserve of ₹5,901 crores, offset by hedging reserve gain of ₹4,147 crores, currency translation reserve gain of ₹3,853 crores and securities premium of ₹2,556 crores pursuant to conversion of share warrants.

E. LIQUIDITY AND CAPITAL RESOURCES

We finance our capital expenditures and research and development investments through cash generated from operations, cash and cash equivalents, and debt and equity funding. We also raise funds through the sale of investments, including divestments in stakes of subsidiaries on a selective basis.

The key element of the financing strategy is maintaining a strong financial position that allows us to fund our capital expenditures and research and development investments efficiently even if earnings are subject to short-term fluctuations. Our treasury policies for liquidity and capital resources are appropriate for automotive operations and are set through business specific sensitive analysis and by benchmarking our competitors. These are reviewed periodically by the Board.

(i) Principal Sources of Funding Liquidity

Our funding requirements are met through a mixture of equity, convertible or non-convertible debt securities and other long- and short-term borrowings. We access funds from debt markets through commercial paper programs, convertible and non-convertible debentures, and other debt instruments. We regularly monitor funding options available in the debt and equity capital markets with a view to maintain financial flexibility.

See Note 41 to our audited consolidated financial statements included elsewhere in this annual report for additional disclosures on financial instruments related to liquidity, foreign exchange and interest rate exposures and use of derivatives for risk management purposes.

The following table sets forth our short- and long-term debt position:

(₹ in crores)

	As of March 31, 2021	As of March 31, 2020
Short-term debt (excluding current portion of long-term debt)	21,663	16,363
Current portion of long-term debt	21,129	19,132
Long-term debt net of current portion	93,113	83,316
Total Debt	**1,35,905**	**1,18,811**

During FY 2020-21 and FY 2019-20, the effective weighted average interest rate on our long-term debt was 5.1% and 5.9% per annum, respectively. The following table sets forth a summary of long-term debt (including current maturities of long-term borrowings) outstanding as of March 31, 2021.

Details of Long-term debt	Currency	Initial Principal amounts (millions)	Redeemable on	Interest Rate	Amount repaid during FY 2020-21 (₹ crores)	Outstanding (₹ crores)	
						31-Mar-21	31-Mar-20
Non-convertible debentures	₹			Various	3,500	13,740	11,899
Collateralized debt obligations	₹			Various	1,965	2,974	4,230
Buyers credit from bank	Various			Various	1,100	3,375	3,975
Loan from banks / financial institutions	Various			Various	7,497	40,958	37,051
Compulsory convertible Preference shares	₹			Various	458	337	789
Senior Notes							
Tata Motors Limited	US$	250	due 2024	5.750%		1,816	1,862
Tata Motors Limited	US$	300	due 2025	5.875%		2,181	2,270
Jaguar Land Rover	US$	500	due 2023	5.625%		3,646	3,775
Jaguar Land Rover	GB£	400	due 2023	3.875%		4,019	3,726
Jaguar Land Rover	GB£	400	due 2022	5.000%		4,023	3,725
Jaguar Land Rover	US$	500	due 2027	4.500%		3,876	4,235
TML Holdings Pte. Limited	US$	300	due 2021	5.750%		2,193	2,268
TML Holdings Pte. Limited	GB£	98	due 2023	4.000%		958	-
TML Holdings Pte. Limited	US$	300	due 2024	5.500%		2,176	-
Tata Motors Limited	US$	263	due 2020	4.625%	1,986	-	1,986
Jaguar Land Rover	US$	700	due 2025	7.750%		5,073	-
Jaguar Land Rover	US$	650	due 2028	5.875%		4,708	-
Jaguar Land Rover	EU€	500	due 2024	5.875%		4,266	4,139
Jaguar Land Rover	GB£	300	due 2021	2.750%	2,986	-	2,800
Jaguar Land Rover	EU€	650	due 2024	2.200%		5,563	5,398
Jaguar Land Rover	EU€	500	due 2026	4.500%		4,021	4,101
Jaguar Land Rover	EU€	500	due 2026	6.875%		4,339	4,219
Total Long-term debt					**19,492**	**1,14,242**	**1,02,448**

The following table sets forth a summary of the maturity profile for our outstanding long-term debt obligations (including current maturities of long-term borrowings) as of March 31, 2021.

Payments Due by Period[1, 2]	₹ in crores
Within one year	27,057
After one year and up to two years	27,800
After two year and up to five years	56,341
After five year and up to ten years	16,445
Total	**1,27,643**

1. Including interest.
2. As at March 31, 2021, Jaguar Land Rover's long-term debt obligations were senior notes and bank loans of ₹56,484 crores.

The following table sets forth our total liquid assets, namely cash and cash equivalents, short-term deposits and investments in mutual funds and money market funds (under other Investment—Current):

(₹ in crores)

	As of March 31, 2021	As of March 31, 2020
Total cash and cash equivalent	31,700	18,468
Total short-term deposits	14,346	14,829
Total mutual fund investments	19,051	10,862
Total liquid assets	**65,097**	**44,159**

These resources enable us to address business needs in the event of changes in credit market conditions. Of the above liquid assets, Jaguar Land Rover held ₹48,184 crores and ₹34,273 crores as of March 31, 2021 and 2020, respectively. Most of Jaguar Land Rover's liquid assets are maintained in GBP, USD, EUR and RMB with smaller balances maintained in other currencies to meet operational requirements in those geographic regions.

We expect total product and other investment spending to be around Rs. 28,900 crores in property, plants and equipment and product development during FY 2021-22.

We will continue to invest in new products and technologies to meet consumer demand and regulatory including to increase our range of electrified options (notably full battery electric) across our model range and on our vehicle architectures as recently announced as part of our Reimagine strategy We expect to satisfy our investments out of operating cash flows and additional funding through loans and other debt from time to time, as necessary but targeting a reduction in the coming years to achieve a net cash position from FY 2024-25.

Auto Free Cash Flow (cash flow from operating activities less payment for property, plant and equipment and intangible assets add proceeds from sale of property, plant and equipment less interest paid add interest received, add dividend from equity accounted investees core auto and less investment in equity accounted investees of core auto entities and less cash flow of TMF Group i.e., financing business) on consolidated basis was positive at ₹5,317 crores compared to negative ₹12,676 crores in FY 2019-20. This is mainly on account of improved operational and financial performance by reducing cost resultant into positive free cash flow for FY 2020-21, compared to FY 2019-20.

The following table provides information for the credit rating of Tata Motors Limited for short-term borrowing and long-term borrowing from the following rating agencies as of March 31, 2021: Credit Analysis &

Research Limited ("CARE"), Information and Credit Rating Agency of India Ltd. ("ICRA Limited" or "ICRA"), Credit Rating Information Services of India Ltd. ("CRISIL Ltd" or "CRISIL"), Standard & Poor's Ratings Group ("S&P") and Moody's Investors Service ("Moody's"). A credit rating is not a recommendation to buy, sell or hold securities. A credit rating may be subject to withdrawal or revision at any time. Each rating should be evaluated separately of any other rating. The credit rating of Tata Motors as at March 31, 2021 was as follows.

Rating agency	Long-term borrowings	Short-term borrowings
CARE	AA- / Stable	A1+
ICRA	AA- / Stable	A1+
CRISIL	AA- /Stable	A1+
S&P	B / Negative	-
Moody's	B1 / Negative	-

As at March 31, 2021, JLR's rating was "B1"/ Negative by Moody's, "B"/Negative by Standard & Poor's. Subsequently, Moody's revised the outlook of JLR to Stable and as of date of this annual report, credit rating of JLR stands at B1/Stable

As at March 31, 2021, for TMFHL and its subsidiaries, CRISIL, ICRA and CARE rating on long- term debt instruments and long-term bank facilities stood at "AA -/ Stable",

Subsequently, S&P and Moody's revised the outlook of Tata Motors Limited to Stable and as of the date of this annual report, the S&P credit rating of Tata Motors Limited stands at B / Stable and Moody's credit rating stands at B1/Stable.

We believe that we have sufficient liquidity available to meet our planned capital requirements. However, our sources of funding could be materially and adversely affected by an economic slowdown, as was witnessed in FY 2008-09, arising due to COVID-19 or other macroeconomic factors in India, the United Kingdom, the United States, Europe or China, which are beyond our control. A decrease in the demand for our vehicles could affect our ability to obtain funds from external sources on acceptable terms or in a timely manner.

The COVID-19 pandemic and resulting lockdowns may continue to impact our business. Given the significant uncertainties arising out of the COVID-19 pandemic, we assessed the cash flow projections and available liquidity for a period of eighteen months from the date of these financial statements. Based on this evaluation, our management believes that the Company will be able to continue as a 'going concern' in the foreseeable future. For further details kindly refer note 2 (e) in Significant accounting policies forming part of consolidated financial statement.

Our cash is located in various subsidiaries. The cash in some of these jurisdictions, notably South Africa and Brazil, is subject to certain restrictions on cash pooling, intercompany loan arrangements or interim dividends. However, annual dividends are generally permitted, and we do not believe that these restrictions have, or are expected to have, any impact on our ability to meet our cash obligations.

Long-term funding

To refinance our existing borrowings and support our long-term funding needs, we continued to raise funds during FY 2019-20 and FY 2020-21. Details of major funding during FY 2019-20 through FY 2020-21 are provided below.

During the year ended March 31, 2020, the Company has allotted 20,16,23,407 Ordinary Shares at a price of ₹150 per Ordinary Share aggregating to ₹3,024 crores and 23,13,33,871 Convertible Warrants ('Warrants'), each carrying a right to subscribe to one Ordinary Share per Warrant, at a price of ₹150 per Warrant ('Warrant Price'), aggregating to ₹3,470 crores on a preferential basis to Tata Sons Private Limited. An amount equivalent to 25% of the Warrant Price was paid at the time of subscription and the balance 75% of the Warrant Price was payable by the Warrant holder against each Warrant at the time of allotment of Ordinary Shares pursuant to exercise of the options attached to Warrant(s) to subscribe to Ordinary Share(s) by June 2021. The Company has fully utilised the amount of ₹3,892 crores towards repayment of debt, and other general corporate purposes of the Company and its subsidiaries.

During the quarter and year ended March 31, 2021, on exercise of options by Tata Sons Pvt Ltd and on receipt of the balance subscription money of ₹2,603 crores, the Company has fully converted 23,13,33,871 convertible warrants into Ordinary Shares, that were issued during the year ended March 31, 2020. The Company has not utilised any of this amount as at March 31, 2021.

During FY 2019-20, the Tata Motors raised unsecured term loans amounting to ₹1,500 crores from Banks for general corporate purpose and funding capital requirements. Tata Motors Limited raised unsecured, rated, listed NCD's amounting to ₹1,000 crores for utilisation towards capital expenditure including intangibles, refinancing of existing indebtedness and other general corporate purpose. In November 2019, Tata Motors Limited issued US$300 million bonds due 2025 at coupon rate of 5.875% for funding capital requirements and other permitted use as per ECB guidelines.

During FY 2019-20, TMFHL and its subsidiaries, raised ₹2,270 crores by issuing NCDs (including Sub Debt and Perpetual NCDs). Total issuance through Sub Debt and Hybrid Perpetual NCDs was ₹550 crores. Bank borrowings including ECB's continued to be a major source of funds for long-term borrowing and raised ₹4,320 crores during FY 2019-20.

In October 2019, Jaguar Land Rover Automotive PLC completed and drew down in full a GB£625 million five-year amortizing loan facility backed by a GB£500 million guarantee from UK Export Finance ("UKEF"), GB£448 million of this loan remained outstanding at 31 March 2021, after GB£125 million of the loan amortized during FY 2020-21. In addition, the Company signed a new GB£100 million working capital facility for fleet buybacks in October 2019, fully drawn in November 2019 (subsequently renewed and amended to a GB£113 million facility with GB£110 million drawn at 31 March 2021).

In November 2019, Jaguar Land Rover Automotive Plc issued EUR500 million senior notes due in 2024 at a coupon of 5.875% per annum and EUR300 million senior notes due in 2026 at a coupon of 6.875% per annum and an additional EUR200 million of senior notes in December 2019 due in 2026 also at a coupon of 6.875% per annum (the EUR300 million and EUR200 million senior notes due in 2026 are part of the same series of senior notes). The proceeds were for general corporate purposes, including support for Jaguar Land Rover's ongoing growth and capital spending requirements.

In November 2019, the US$500 million senior notes with a coupon of 4.250% issued by Jaguar Land Rover Automotive Plc in November 2014 matured and were fully repaid.

In March 2020, the US$500 million senior notes with a coupon of 3.500% issued by Jaguar Land Rover Automotive Plc in March 2015 matured and were fully repaid.

During FY 2020-21, the Tata Motors raised unsecured term loans amounting to ₹500 crores from Banks for general corporate purpose and funding capital requirements.

During FY 2020-21, Tata Motors Limited raised ₹1,000 crores through secured, rated, listed NCD's. Tata Motors Limited also raised ₹3,000 crores through secured term loan for utilization towards capital

expenditure including intangibles, refinancing of existing indebtedness and other general corporate purposes.

During FY 2020-21, Jaguar Land Rover (China) Investment Co. Ltd signed a RMB 5 billion unsecured three-year revolving loan facility with a syndicate of five Chinese banks (fully drawn as at March 31, 2021) which is subject to an annual confirmatory review. In addition, Jaguar Land Rover (China) Investment Co., Ltd entered into a small parts factoring facility in first quarter of FY 2020-21, of which RMB167 million (GB£19 million equivalent) was drawn as at March 31, 2021.

In October 2020, Jaguar Land Rover Automotive Plc issued $700 million senior notes due in 2025 at a coupon of 7.75% per annum. In December 2020, Jaguar Land Rover Automotive Plc issued US$650 million senior notes due 2028 at a coupon of 5.875%. The proceeds were for general corporate purposes.

In January 2021, the GB£300 million senior notes with a coupon of 2.750% issued by Jaguar Land Rover Automotive Plc in January 2017 matured and were fully repaid.

During FY 2020-21, TML Holding Pte Limited has issued GB£98 million Credit Enhanced Notes at a coupon rate of 4% and US$ 300 million Senior notes at a coupon rate of 5.5%. The proceeds have been used towards refinancing and meeting general corporate purposes.

During FY 2020-21, TMFHL and its subsidiaries, raised ₹4,836 crores by issuing debentures (including Hybrid and non-hybrid Perpetual NCDs). Total issuance through Hybrid Perpetual NCDs was ₹2,063 crores. Bank borrowings continued to be a major source for long-term borrowing and TMFHL and its subsidiaries raised ₹6,891 crores during FY 2021. Out of this, ECB amounted to ₹110 crores.

We plan to refinance and raise long-term funding through borrowings or equity issuances, based on review of business plans, operating results and covenant requirements of our existing borrowings.

Short-term funding

We fund our short-term working capital requirements with cash generated from operations, overdraft facilities with banks, short- and medium-term borrowings from lending institutions, banks and commercial paper. The maturities of these short-term and medium-term borrowings and debentures are generally matched to particular cash flow requirements. We had borrowings of ₹21,664 crores and ₹16,363 crores as of March 31, 2021 and 2020, respectively.

Our working capital limit for our India operations is ₹10,000 crores. The working capital limit is secured by hypothecation of existing current assets of Tata Motors Limited, including stock of raw material, stock in process, semi-finished goods, stores and spares not relating to plants and machinery (consumable stores and spares), bills receivables and book debts, including vehicle financing receivables and all other moveable current assets, except cash and bank balances, loans and advances of Tata Motors Limited, both present and future. The working capital limit is renewed annually for Tata Motors Limited. Tata Motors Limited currently has ₹1,000 crores revolving credit facility which remained undrawn as of March 31, 2021.

In December 2020 Jaguar Land Rover Limited renewed its GB£113 million committed, secured revolving loan facility for fleet buybacks for another year, with GB£110 million drawn as at March 31, 2021. As at March 31, 2021, Jaguar Land Rover Limited had sold receivables of GB£278 million equivalent under the US$500 million committed invoice discounting facility, which was renewed for another 2 years in March 2021. Under the terms of this facility receivables are accounted as sold (through trade receivables in working capital) and therefore not accounted as debt under Ind AS.

At March 31, 2021 the unutilised working capital limits for Tata Motors Limited were at ₹6,826 crores. The unutilised revolving credit facility amounted to ₹1,000 crores. For Jaguar Land Rover the unutilised committed revolving credit facility of GB£1,935 million. In April 2021, Jaguar Land Rover Automotive plc concluded negotiations with 20 banks to extend £1.3 billion of its committed undrawn revolving credit facility out to March 2024. In our opinion, our working capital facilities and short-term borrowings are sufficient for the company's present requirements.

Loan Covenants

Some of our financing agreements and debt arrangements set limits on and/or require prior lender consent for, among other things, undertaking new projects, issuing new securities, changes in management, mergers, sales of undertakings and investments in subsidiaries. In addition, certain negative covenants may limit our ability to borrow additional funds or to incur additional liens, and/or provide for increased costs in case of breach. Certain financing arrangements also include financial covenants to maintain certain debt-to-equity ratios, debt-to-earnings ratios, liquidity ratios, capital expenditure ratios and debt coverage ratios.

We monitor compliance with our financial covenants on an ongoing basis. We also review our refinancing strategy and continue to plan for deployment of long-term funds to address any potential non-compliance.

On June 30, 2020, we notified one of our Indian lenders in respect of our ₹2,700 crores loan facility that as at June 30, 2020, the Company had failed to maintain one of the financial ratios under the terms of the loan facility. The Company received confirmation from the lender that it has approved an increase in such threshold and has given waiver of the Company's failure to maintain the relevant financial ratio for FY 2020-21 and FY 2021-22. Further, the Company has received confirmation from another lender on its ₹3,000 crores loan facility, that it has given a waiver of the Company's failure to maintain this ratio before March 31, 2023.

Certain debt issued by Jaguar Land Rover is subject to customary covenants and events of default, which include, among other things, minimum liquidity requirement in the case of the UKEF facility (and the £1.3 billion extended RCF, drawable from July 2022, when the current RCF matures), restrictions or limitations on the amount of cash that may be transferred outside of the Jaguar Land Rover Group in the form of dividends, loans or investments to TML and its subsidiaries. These are referred to as "restricted payments" in the relevant Jaguar Land Rover financing documentation. In general, the amount of cash which may be transferred as restricted payments from the Jaguar Land Rover Group to the Company and its subsidiaries is limited to 50% of its cumulative consolidated net income (as defined in the relevant financing documentation) from January 2011. As of March 31, 2021, the estimated amount that is available for distributions was approximately GB£4.4 billion.

(ii) Capital Expenditures

Capital expenditures totalled ₹18,729 crores and ₹31,222 crores during FY 2020-21 and FY 2019-20, respectively. Our automotive operations accounted for most of such capital expenditures. We currently plan to invest over ₹28,900 crores in FY 2021-22 in new products and technologies.

Our capital expenditures in India during FY 2020-21 related mostly to (i) the introduction of new products, such as the Tata Altroz i-turbo, Tiago XTA, Harrier XT and Nexon XM-S and Tata Safari (ii) the development of planned future products and technologies, and (iii) quality and reliability improvements aimed at reducing operating costs.

Total product and other investment for Jaguar Land Rover in FY 2020-21 was GB£2.3 billion, primarily reflecting the ongoing launch of the all-new Land Rover Defender, including the short wheelbase 90 and commercial derivatives, as well as the launch of new and refreshed 2021 model year products, including the significant increase in electrified options across our model range now consisting of 8 Plug in hybrids, 11 mild hybrids and the all-electric Jaguar I-PACE. The investment spending in FY 2020-21 also supported the production of the new 3-litre 6-cylinder Ingenium diesel engine manufactured at our engine manufacturing centre in Wolverhampton and for upcoming product launches in FY 2021-22.

We continue to focus on development of new products for our various markets. Through Jaguar Land Rover, we continue to make investments in new technologies through its research and development activities to develop products that meet the requirements of the premium market, including developing sustainable technologies to improve fuel economy and reduce carbon dioxide emissions, such as the expansion of electrification across 12 of Jaguar Land Rover's 13 nameplates, including eight plug-in hybrid and eleven mild hybrid models as well as the all-electric Jaguar I-PACE.

We intend to continue investing in our business units and research and development over the next several years, including capital expenditures for our ongoing projects, new projects, product development programs, mergers, acquisitions and strategic alliances in order to build and expand our presence in the Passenger Vehicle and Commercial Vehicle categories.

F. Critical Accounting Policies

The preparation of financial statements in conformity with Ind AS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income, expenses and disclosures of contingent assets and liabilities as of the date of this annual report and the reported amounts of revenues and expenses for the years presented. The actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis and on each balance sheet date. Revisions to accounting estimates are recognized in the period in which the estimate is revised, and future periods are affected.

In particular, information about significant areas of estimation uncertainty and critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements are included in the following notes:

Impairment of Goodwill

CGUs to which goodwill is allocated are tested for impairment annually on each balance sheet date, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the CGU is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to that unit and then to the other assets of the unit pro rata on the basis of carrying amount of each asset in the unit. Goodwill impairment loss recognized is not reversed in subsequent period.

Impairment

Property, plants and equipment and intangible assets

On each balance sheet date, we assess whether there is any indication that any property, plants and equipment and intangible assets with finite lives may be impaired. If any such impairment exists, the recoverable amount of an asset is estimated to determine the extent of impairment, if any. Where it is not possible to estimate the recoverable amount of an individual asset, we estimate the recoverable amount of the CGU to which the asset belongs.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment annually on each balance sheet date, or earlier if there is an indication that the asset may be impaired.

The recoverable amount is the higher of fair value less costs to sell and VIU. In assessing VIU, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or CGU) is reduced to its recoverable amount. If this occurs, an impairment loss is recognized immediately in the profit and loss account.

Finance receivables

We provide allowances for losses on portfolio of finance receivables on the basis of expected future collection from receivables. The future collection are estimated on the basis of past collection trend which are adjusted for changes in current circumstances as well as expected changes in collection based on expectations with respect to certain macro-economic factors, such as GDP growth, fuel price and inflation as well as management judgement regarding qualitative factors, including economic uncertainty, observable changes in portfolio performance, and other relevant factors.

Capitalization of internally generated intangible assets

We undertake significant levels of research and development activity and for each vehicle program periodic review is undertaken. We apply judgement in determining at what point in a vehicle programs lifecycle that recognition criteria under accounting standards is satisfied.

Product Warranty

Vehicle warranties are provided for a specified period of time. Our vehicle warranty obligations vary depending upon the type of the product, geographical location of its sale and other factors.

The estimated liability for vehicle warranties is recorded when the products are sold or when new warranty programs are initiated. These estimates are established using historical information on the nature, frequency and average cost of warranty claims and management estimates regarding possible future warranty claims, customer goodwill and recall complains. The timing of outflows will vary depending on when warranty claim will arise, being typically up to six years and for batteries in Electric Vehicles warranty period is typically up to eight years.

We also have back-to-back contractual arrangements with our suppliers in the event that a vehicle fault is proven to be a supplier's fault. Estimates are made of the expected reimbursement claims based upon historical levels of recoveries from supplier, adjusted for inflation and applied to the population of vehicles under warranty as on balance sheet date. Estimated supplier reimbursements are recognized as separate asset. Actual claims incurred in the future may differ from our original estimates, which may materially affect warranty expenses.

Employee Benefits

Employee benefit costs and obligations are dependent on assumptions used in calculating such amounts. These assumptions include salary increases, discount rates, health care cost trend rates, benefits earned, interest costs, expected return on plan assets, mortality rates and other factors.

While we believe that the assumptions used are appropriate, differences in actual experience or changes in assumptions may affect our employee benefit costs and obligations.

Recoverability/recognition of deferred tax assets

Deferred tax assets and liabilities are recognized for the future tax consequences of temporary differences between the carrying values of assets and liabilities and their respective tax bases, and unutilized business loss and depreciation carryforwards and tax credits. Such deferred tax assets and liabilities are computed separately for each taxable entity and for each taxable jurisdiction. Deferred tax assets are recognized to the extent that it is probable that future taxable income will be available against which the deductible temporary differences, unused tax losses, depreciation carryforwards and unused tax credits could be utilized.

INTERNAL CONTROL SYSTEMS AND THEIR ADEQUACY

We have an adequate system of internal controls in place. We have documented policies and procedures covering all financial and operating functions. These controls have been designed to provide a reasonable assurance regarding maintaining of proper accounting controls for ensuring reliability of financial reporting, monitoring of operations, and protecting assets from unauthorized use or losses, compliances with regulations. We have continued our efforts to align all our processes and controls with global best practices.

Some significant features of the internal control of systems are:

- The Audit Committee of the Board of Directors, comprising of independent directors and functional since August 1988, regularly reviews the audit plans, significant audit findings, adequacy of internal controls, compliance with accounting standards as well as reasons for changes in accounting policies and practices, if any;
- Documentation of major business processes and testing thereof including financial closing, computer controls and entity level controls, as part of compliance programme towards Sarbanes-Oxley Act, as required by the listing requirements at New York Stock Exchange;
- An ongoing programme, for the reinforcement of the Tata Code of Conduct is prevalent across the organization. The Code covers integrity of financial reporting, ethical conduct, regulatory compliance, conflicts of interest's review and reporting of concerns.
- State-of-the-art Enterprise Resource Planning, supplier relations management and customer relations management connect our different locations, dealers and vendors for efficient and seamless information exchange. We also maintain a comprehensive information security policy and undertakes continuous upgrades to our IT systems;
- Detailed business plans for each segment, investment strategies, year-on-year reviews, annual financial and operating plans and monthly monitoring are part of the established practices for all operating and service functions;
- A well-established, independent, multi-disciplinary Internal Audit team operates in line with governance best practices. It reviews and reports to management and the Audit Committee about compliance with internal controls and the efficiency and effectiveness of operations as well as the key process risks. The scope and authority of the Internal Audit division is derived from the Internal Audit Charter, duly approved by the Audit Committee; and Anti-fraud programmes including whistle blower mechanisms are operative across the Company.

The Board takes responsibility for the overall process of risk management throughout the organization. Through an Enterprise Risk Management programme, our business units and corporate functions address risks through an institutionalized approach aligned to our objectives. This is facilitated by internal audit. The Business risk is managed through cross-functional involvement and communication across businesses. The results of the risk assessment are presented to the senior management. The Risk Management Committee reviews business risk areas covering operational, financial, strategic and regulatory risks.

There have been no changes in our internal control over financial reporting that occurred during the period covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Although we have implemented various initiatives for continuous business operation in response to the COVID-19 pandemic, including enabling most of our employees to telework, apart from those who need to work at their office for smooth operations, we believe these initiatives have not had a significant impact on our internal control over financial reporting.

During FY 2020-21, we assessed the effectiveness of the Internal Control over Financial Reporting and has determined that our Internal Control over Financial Reporting as at March 31, 2021 is effective.

HUMAN RESOURCES / INDUSTRIAL RELATIONS

We consider our human capital a critical factor to our success. Under the aegis of Tata Sons and the Tata Sons promoted entities, the Company has drawn up a comprehensive human resource strategy, which addresses key aspects of human resource development such as:

- The code of conduct and fair business practices;
- A fair and objective performance management system linked to the performance of the businesses which identifies and differentiates employees by performance level;
- Creation of a common pool of talented managers across Tata Sons and the Tata Sons promoted entities with a view to increasing their mobility through job rotation among the entities;
- Evolution of performance-based compensation packages to attract and retain talent within Tata Sons and the Tata Sons promoted entities; and
- Development and delivery of comprehensive training programs to impact and improve industry- and/or function-specific skills as well as managerial competence.

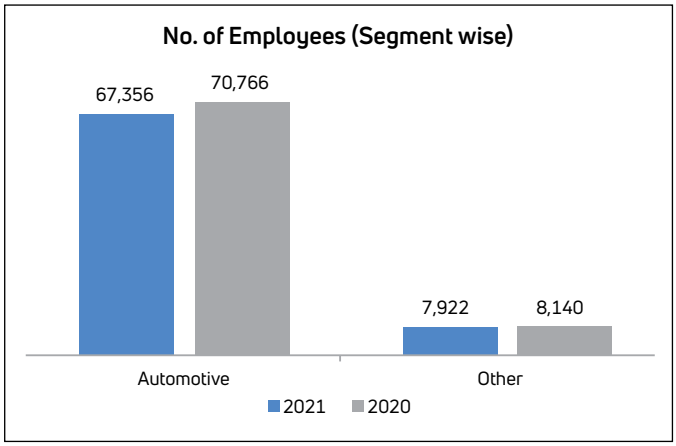
In line with the human resource strategy, the company has implemented various initiatives to build better organizational capabilities that we believe will enable if to sustain competitiveness in the global marketplace. The Company's focus is to attract talent, retain the better and advance the best. Some of the initiatives to meet this objective include:

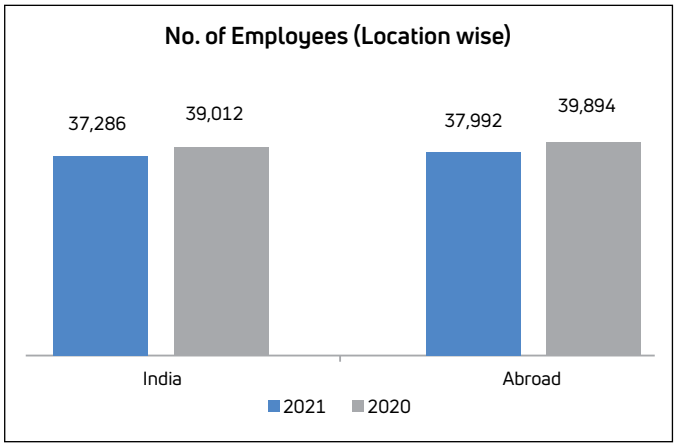
- Build strategic partnerships with educational institutions of repute to foster academia-based research and provide avenues for employees to further their educational studies;
- Enhance company's image and desirability amongst the target engineering and management schools, to enable it to attract the best;
- Foster diverse workforce to leverage the multiplicity of skillsets in all its operations;

- Skill development of all Blue collared workforce to enable them to effectively meet the productivity and quality deliverables; and
- Training youth under Government of India's National Employment Enhancement Mission in our skill development centers in all the plants. These trainees are given Automotive Skill Development Council certification, helping them get gainful employment in the industry. Engaging trainees benefit the company to meet the cyclicality of demand as well.

We employed approximately 75,278 and 78,906 permanent employees as at March 31, 2021 and 2020, respectively. The average number of flexible (temporary, trainee and contractual) employees for FY 2020-21, was approximately 28,291 (including joint operations) compared to 19,169 in FY 2019-20.

The following table set forth a breakdown of persons employed by the Company's business segments and by geographic location as at March 31, 2021 and 2020.





Talent Development

We are committed to the development of our employees to strengthen their functional, managerial and leadership capabilities. We have a focused approach with the objective of addressing all capability gaps and preparing our employees to adopt to the fast-changing external environment to meet the company's strategic objectives. Tata Motors Academy addresses development needs of various segments of our workforce through a structured approach. The Academy focuses on three functional pillars – customer excellence, product leadership, and operational excellence and management education, all of which are aligned with the Company-level strategic objectives. The emphasis of functional academies is to strengthen knowledge, skills and expertise with an in-depth approach, within respective function.

The Product Leadership Academy and Operational Excellence Academy are designing and deploying the courses and learning programs for our employees in Engineering and Operations functions, focused on organization's technical roadmap on Connected, Electric, Shared & Safe vehicles (CESS).

The Customer Excellence Academy delivers the capability building not only for Tata Motors front end functions but also for our channel partners. These training interventions are planned for Dealer Sales Agents to provide best in class experience to our customers.

Management education emphasizes on developing general management and leadership skills. Tata Motors Academy also provides executive education opportunities in the areas of B.Tech, M.Tech, and Executive MBA.

Keeping up with the digital age, the academy has also embarked upon a decisive journey of digital learning for all its employees. These include online learning and virtual classrooms, which augment the offering of functional as well as management education pillars.

Our annual Organizational & Talent Review process and Succession planning exercise ensures healthy succession pipeline of critical and leadership roles in the organization by enabling us identifying potential candidates and enabling their development.

Skill Development

We continue our endeavour to deliver high quality products by enhancing our craftsmanship and improving manufacturing and assembly processes.

To meet technology disruptions and changing market dynamics, we have developed the 'Future of Workplace' strategy, to build newer skills such high voltage (electric vehicles, mechatronics (Industry 4.0), auto electronics and vehicle communication in our workforce. We are reskilling our permanent workforce into these newer technology areas, simultaneously, we are working on creating 'new age' workforce, young skilled, agile, digital inclined through our company's flagship Full Time Apprenticeship program (newer craftsman trades) and introduction of the Bachelor of Vocational Education program.

We are now migrating from a trade-based training approach to a process-based training approach, which emphasizes team members' knowledge as related to their actual work, in addition to the general trade-based skills, which are developed at training institutes. These skills are very specific and not currently taught at the training institutes. To accomplish this, we are implementing a fundamental skills training initiative throughout organization. Its objective is to address key employee performance issues, such as inconsistent quality, poor craftsmanship, high frequencies of repair reworking and low productivity levels through training of front-line team members.

Diversity & Inclusion

Tata Motors is committed towards building diverse and inclusive workforce to position organization as equal opportunity employer. As step towards increasing gender diversity on the shop floor, Tata Motors employed women blue collar workers at the Pune PV plant on 2nd shift after initiating safety measures and compliance with statutory requirements. In our endeavour towards development of women employees, "Project EVE" a comprehensive development platform for high potential women employees was launched. Employees who are part of this program are working on challenging projects sponsored and mentored by the Executive Committee members of Tata Motors. Second Career Initiative Program (SCIP) is a platform that allows women, who have taken a break from their career, due to personal commitments, to restart their career. Tata Motors introduced Paternity

Leave and Adoption Leave for our gentlemen colleagues to support parenthood. The Company employed 5.48% women employees in FY 2020-21 compared to 5.79% in FY 2019-20.

Industrial Relations

We have labour unions for operative grade employees at all our plant across India, except at the Dharwad plant. The Company has generally enjoyed cordial relations with its employees at its factories and offices and has received union support in the implementation of reforms that impact safety, quality, cost erosion and productivity improvements across all locations.

Employee wages are paid in accordance with wage agreements that have varying terms (typically three to five years) at different locations. The expiration dates of the wage agreements with respect to various locations/subsidiaries are as follows:

Location/subsidiaries	Wage Agreement valid until
Pune commercial vehicles	August 31, 2021
Pune passenger vehicles	March 31, 2022
Jamshedpur	March 31, 2022
Mumbai	December 31, 2021
Lucknow	March 31, 2020*
Pantnagar	March 31, 2022
Sanand Passenger Vehicles	September 30, 2020*
Jaguar Land Rover – UK Plants	April 1, 2021*

*Negotiation on-going

The wage agreements at our Lucknow location, Sanand location and Jaguar Land Rover have expired and negotiations are underway for the new wage agreements. In the interim, the wages set forth in the previous wage agreements will continue until a new settlement is reached.

The Company's wage agreements link an employee's compensation to certain performance criteria that are based on various factors such as quality, productivity, operating profit and an individual's performance and discipline. As far as possible, we aim for cost neutral settlements, by achieving the critical performance parameters of the business with total employee involvement. We have generally received union support in its implementation of reforms that impact quality, cost erosion and productivity improvements across all locations. We have signed settlements with a variable pay as part of wage cost and have staggered the payment instead of one time pay to bring more cost effectiveness on account of fixed pay.

JAGUAR LAND ROVER

Automotive apprenticeships

Jaguar Land Rover has one of the largest apprenticeship programs in the UK automotive sector with 1,000 apprentices in development. Jaguar Land Rover invests in and supports lifelong learning and development for its employees, including accredited apprenticeship programs delivered through the Jaguar Land Rover Learning Academy. This includes JLR apprentice engineers and technicians developing their skills to help support the delivery of Jaguar Land Rover's Reimagine strategy. Jaguar Land Rover also supports the Automotive Engineering and Manufacturing Trailblazer Group and leads the creation and development of Levels 3, 4 and 6 automotive related Apprenticeship.

Closing the gender gap

Inspiring young females into an automotive career

Jaguar Land Rover focuses on promoting gender equality though school education programs to increase engagement in STEM (science, technology, engineering and mathematics) subjects as well as introducing successful female role models to girls as young as seven to increase their interest in engineering.

Each academic year Jaguar Land Rover runs a week-long career immersion program specifically designed to encourage more young female STEM talent to consider careers in Design, Engineering and Manufacturing. During 2019, 111 female students aged 15-18 participated in this weeklong program across all of our sites. Eligible students were encouraged to apply for available apprenticeship opportunities as part of the program deliverables. During the pandemic they were also able to offer a virtual work experience program for young females providing 56 students with valuable career insight into the processes followed from strategic concept through to development and build of a vehicle. These interactive sessions were led by Jaguar Land Rover Apprentices, Graduates and Young Professionals from across the business.

For undergraduates, Jaguar Land Rover offers a Women in Engineering Sponsorship Scheme aimed specifically at females studying engineering at University. It offers three, six and fifteen-month paid placements and the students join every summer until they graduate. Based on placement performance, the aim is to convert to a graduate hire. They are also provided with a Jaguar Land Rover female engineering mentor. During FY 2019-20, 13 females joined JLR on this program.

Jaguar Land Rover has partnered with The Pipeline, an organisation that delivers Executive Leadership Development programs designed for senior females in business. Since 2015, 11 employees have attended the topflight program and 57 employees have attended the Leadership Summit program. Both programmes offer learning from world-class business leaders and contributors.

Within Manufacturing, Jaguar Land Rover runs an Emerging Leaders program aimed at identifying and developing high potential talent early in the pipeline. Since its inception in 2011, over 20 females have completed this program and progressed into different or more senior roles as a result. In March 2020, Jaguar Land Rover held its first female senior leader event, bringing together its most senior female leaders from across the business to network and share experiences, contribute to the development of its female leadership strategy and explore what additional support would be required to enable females in Jaguar Land Rover to flourish and reach their full potential.

Jaguar Land Rover also has active employee led networks helping to drive gender equality. The Women in Engineering and Allies ("WIE&A") membership has continued to steadily grow and in March 2020 they held their annual conference. During this conference they kicked off their Allies Campaign which has focused on starting the conversation of what it is like to be an ally and how to support women at work. They plan to continue to roll out this training and raise awareness of this important inclusive behaviour.

The Mentoring scheme continued to run throughout 2019 / 2020, supporting both mentor and mentees in conversations around work, career satisfaction & personal development. The WIE&A network has also continued to run regular networking lunches and was able to switch to doing this virtually as the pandemic started.

The Gender Equality Network ("GEN") continued to grow its network members during the last year, expanding across sites and functions in Jaguar Land Rover. It remains focused on creating role models for employees by hosting regular interviews with senior women across the business. The GEN has also continued to run events and share communications aimed at engaging employees with issues related to gender and diversity more widely.

Human Rights

Jaguar Land Rover's Human Rights Policy sets out the commitment to respect and comply with all relevant laws, rules and regulations in the territories in which Jaguar Land Rover operates. These include provisions addressing slavery, human trafficking, forced labour, child labour and upholding each employee's right to freedom of association. Jaguar Land Rover has refreshed the assessment of slavery and human trafficking risks related to our operations and continue to deem the risk to be low.

OUTLOOK

LONG TERM

The automobile industry is supported by various factors such as availability of skilled labour at low cost, robust R&D centres, and low-cost steel production. The industry also provides great opportunities for investment and direct and indirect employment to skilled and unskilled labour. The Indian auto industry is expected to record strong growth in 2021-22, post recovering from effects of COVID-19 pandemic. India is expected to be the world's third-largest automotive market in terms of volume by 2026.

The Government of India has introduced vehicle scrappage policy, under which recycling clusters may be established near ports. In scrappage policy, recycled material will be useful for the automobile industry as it will reduce cost of manufacturing cars, buses, and trucks, increasing India's competitiveness in international markets. An incentive-based mechanism could make the scheme lucrative and encourage people to scrap their old vehicles and replace them with new ones. This scrappage policy will result in boosting demand for the automotive sector. The Indian automotive industry has welcomed this new proposal.

Keeping in view the climate change commitments made by Government of India during the COP21 Summit held at Paris to reduce emission intensity by 33- 35% by 2030 from 2005 levels, it is pertinent to introduce alternative means in the transport sector which can be coupled with India's rapid economic growth, rising urbanization, travel demand and country's energy security. Electric mobility presents a viable alternative in addressing these challenges, when packaged with innovative pricing solutions, appropriate technology and support infrastructure and thus, has been on the radar of Government of India.

Electric mobility will also contribute to balancing energy demand, energy storage and environmental sustainability. Electric vehicles could help diversify the energy needed to move people and goods thanks to their reliance on the wide mix of primary energy sources used in power generation, greatly improving energy security. Electric vehicles would also provide major contributions to keep the world on track to meet its shared climate goals.

Jaguar Land Rover has a strong product range that compete in various segments, including the increased electrification of the product portfolio. New and refreshed products, including the new Land Rover Defender, and 2021 model year updates across the model range including the expansion of electrification now consisting of 8 Plug in hybrids, 11 mild hybrids and the all-electric Jaguar I-PACE. With the advancement of technologies like AI (artificial intelligence), robotics and IoT (Internet of Things), the automobile industry has made some significant leaps towards growth and development. The utopian image of future – with cars that run on eco-friendly fuel and can drive themselves – isn't too far away now.

China could become the leading market for the transformation of the automotive industry. It is estimated that autonomous vehicles will account for 40% of the personal mileage driven in Europe in 2030. New car sales may rise by 30% in the US, China and Europe. 55% of all new car sales in Europe may be fully electrified by 2030.

Continued investment, by Jaguar Land Rover, in new products and technologies while balancing production with sales, is key for the success of the Company.

IMMEDIATE AND SHORT TERM

While there still seems to be uncertainty around the duration and the impact of COVID-19 pandemic, we anticipate demand situation to continue to improve despite ongoing COVID-19 related lockdowns. After witnessing a decline in past two years, it is anticipated that domestic Commercial Vehicles Industry (especially MHCV's) will see improvement. Supply bottlenecks and commodity pressures remain key concern area in the short term. Focus areas for Jaguar Land Rover include the successful execution of the Reimagine strategy, including the continued expansion of electrification across the model range, underpinned by the Refocus transformation programme. Management is focused on cash and cost savings initiatives and focus on sustained improvement in domestic business. Management is focused on significantly deleveraging the business and achieving net debt free position in the next three years.

The semiconductor shortage is expected to impact the automobile industry well into 2021. An ongoing shortage in semiconductor supply is disrupting production of parts and vehicles around the world. The supply bottleneck, which is caused by a combination of factors, including the impact of the COVID-19 pandemic on production in the first half of 2020 and on manufacturing investment, is affecting a number of major carmakers and their suppliers. The semiconductor shortages would continue to impact the volumes for the first half of FY 2021-22. However, semiconductor shortages are expected to improve in the second half of FY 2021-22 as new capacity comes online. As the industry continues its shift toward electric vehicles and autonomous vehicles, the importance of electronic components is increasing. The chip shortage looks set to persist for some time yet. With demand remaining high and little additional chip-making capacity expected in the short term, the shortage is expected to last into at least next year.

The COVID-19 pandemic is expected to continue to impact tourism due to social distancing measures as well as mobility restrictions. Similarly intercity travel via large intercity coach buses will also remain low. Corporates allowing work from home to its staff and similar situation is assumed for school segment, will severely impact the demand for buses.

OPPORTUNITIES:

The Union Cabinet chaired by the Prime Minister has given its approval to introduce the Production-Linked Incentive (PLI) Scheme in the Automobile and Auto Components sectors for Enhancing India's Manufacturing Capabilities and Enhancing Exports – Atmanirbhar Bharat. The PLI scheme has set target that PLI would result in additional investment of ₹1 lakh crore over a five year period with potential for additional employment generation of nearly 60 lakh jobs.

One of the major announcements and much awaited policy introduction was Vehicle Scrappage policy. The policy is aimed at reducing the population of old and defective vehicles, bringing down vehicular air pollutants, improving road and vehicular safety. It will also help achieve better fuel efficiency, formalize the informal vehicle scrapping policy and boost the availability of low cost raw material for the automotive, steel and electronics industry. Vehicles would be required to go through fitness test failing which or failing to get renewal of its registration certificate may be declared as 'end of life vehicle'.

Vehicle owners will get scrap value for the old vehicle by the scrapping center, which is estimated at 4 to 6% of ex-show room price of a new vehicle. The state governments are advised to offer a road tax rebate of up to 25% for personal vehicles and 15% for commercial vehicles. In addition, registration fees may also be waived off for purchase of new vehicle against the scrapping certificate.

It is estimated that 17 lakh MHCV are older than 15 years without a valid fitness certificate which pollute the environment 10 to 12 times more than fit vehicles. This initiative is believed to boost demand for automobiles in the coming years and will help the nation achieve its pollution emission targets. The government's plan for strengthening the public transport sector under PPP models with an outlay of ₹18,000 crores for operating 20,000 buses is encouraging for the electric vehicle industry. The scheme could strengthen the electric vehicle industry if more number of e-buses could be supported through the scheme.

Jaguar Land Rover new Reimagine strategy paves the way for a future of modern luxury by design with quality and sustainability permeating through every facet of Jaguar Land Rover business. This strategy aims to launch Jaguar as a pure electric brand from 2025 by introducing the first Land Rover all electric model by 2024 with an additional five all electric Land Rover models launched by 2026, Launch the modular longitudinal architecture and electrified modular architecture (native BEV architecture) for Land Rover products and a BEV only architecture dedicated to Jaguar and retain, right size, repurpose and reorganised Jaguar Land Rover global manufacturing and assembly footprint. Jaguar Land Rover's Reimagine strategy is underpinned by the Refocus transformation programme which is targeting 3% incremental EBIT margin by FY 2025-26 to support double digit EBIT margin ambition.

The aim is to make all Jaguar Land Rover nameplates in pure electric form by end of the decade. The accelerated path towards electrification through Reimagine will contribute to the goal of becoming net zero carbon by 2039.

CAUTIONARY STATEMENT

Statements in the Management Discussion and Analysis describing our objective, projections, estimates and expectations may be "forward-looking statements" within the meaning of applicable securities laws and regulations. Actual results could differ materially from those expressed or implied. Important factors that could make a difference to our Company operations include, among others, economic conditions affecting demand/supply and price conditions in the domestic and overseas markets in which we operate, changes in government regulations, tax laws and other statutes and incidental factors.