Management Discussion and Analysis

ECONOMY OVERVIEW

INDIA

The Indian economy started the FY 2018-19 with a healthy 8.2% growth in the first quarter on the back of domestic resilience. Growth eased to 7.3% in the subsequent quarter due to rising global volatility, largely from financial volatility, normalized monetary policy in advanced economies, externalities from trade disputes, and investment rerouting. Further, the Indian rupee suffered because of the crude price shock, and conditions exacerbated as recovery in some advanced economies caused faster investment outflows.

Real GDP growth of India is 7.2% in FY 2018-19 compared to 6.7% in FY 2017-18. However, Q3 of FY 2018-19 saw a growth of 6.6%, slowest in five quarters. With the Indian economy projected to slow further in the fourth quarter, the Reserve Bank of India focus shifted from inflationary concerns to sustaining the growth momentum. Data released by the Society of Indian Automobile manufacturers signaled a slowdown in urban demand as car sales grew 2.7% in FY 2018-19, signaling near term softness due to some liquidity stress and slowing rural growth. Despite these challenges, the Indian economy remains one of the fastest growing and possibly the least affected by global turmoil supported in part by India's strong macroeconomic fundamentals and policy changes (including amendments to the policy/code related to insolvency and bankruptcy, bank recapitalization, and foreign direct investment).

Currently, India is the fastest-growing trillion-dollar economy in the world and is expected to reach US$ 6 trillion by Fiscal 2027 and achieve upper-middle income status on the back of digitization, globalization, favourable demographics, and reforms. India is expected to be third largest consumer economy as its consumption is expected to triple to US$4 trillion by 2025. The World Bank expects, India's GDP growth to accelerate moderately to 7.5% in Fiscal 2020, driven by continued investment, improved export performance, and resilient consumption. India is likely to become the world's second-largest economy by 2030, next only to China.

WORLD

Global growth is moderating as the recovery in trade and manufacturing activity is losing its steam. Despite ongoing negotiations, trade tensions among major economies remain elevated. A strengthening U.S dollar, heightened financial market volatility, and rising risk premiums have intensified capital outflow and currency pressures in some large Emerging Market and Developing Economies (EMDEs), with some vulnerable countries experiencing substantial financial stress. Growth in the United States has remained solid, bolstered by fiscal stimulus. In contrast, activity in the Euro Area has been somewhat weaker than previously expected, owing to slowing net exports. While growth in advanced economies is estimated to have slightly decelerated to 2.2% last year, it is still above potential and in line with previous forecasts. U.S. growth in 2018 has picked up to 2.9%, up 0.2% point from previous projections, mostly reflecting stronger-than-expected domestic demand.

During 2018, commodities continued to remain volatile and have rebounded in the first quarter of 2019 due to rising trade tensions and geo-political risks. Having fallen or having remained subdued in the last quarter of 2018, most non-energy prices had recovered their losses by first quarter of 2019, with particularly strong rebounds in metal and minerals. This recovery in metal prices reflected improving growth prospects for China, which accounts for half of the global consumption, as well as a series of supply bottlenecks and concerns: the Vale dam accident in Brasil (iron ore, nickel); heavy floods in Chile (copper); smelter restrictions in response to environmental concerns in China (lead zinc); and export restrictions in Indonesia (tin)

The Euro Area growth slowed notably in 2018 to an estimated 1.9%. In particular, exports have softened, reflecting the appreciation of the Euro and slowing external demand. While unemployment has declined, inflation remains stubbornly low. Core inflation remained at around 1%, while long-term inflation expectations continue to hover around 1.6%, as in the past three years.

China registered a growth of 6.5% in 2018. A rebound in private fixed investment helped offset a decline in public infrastructure and other state spending. However, industrial production and export growth have decelerated, reflecting easing global manufacturing activity. Import growth continued to outpace export growth, contributing to a shrinking current account surplus. Net capital outflows have resumed, and international reserves have been edging down. Stock prices and the RMB have experienced continued downward pressures, and sovereign bond spreads have risen amid ongoing trade tensions and concerns about the growth outlook. New regulations on commercial bank exposures to shadow financing, together with stricter provisions for off-budget borrowing by local governments, have slowed credit growth to the non-financial sector. However, in mid and late 2018, the authorities reiterated their intention to pursue looser macroeconomic policies to counter the potential economic impact of trade disputes with the United States. Prices of newly constructed residential buildings have rebounded, including in Tier 1 cities, following several years of correction. Consumer price inflation has generally moved up since mid-2018, partly reflecting currency depreciation and higher energy and food prices in most of last year, but it remains below target.

Japan's economy also saw annualized growth of 0.8% due to bad weather and natural disasters. The labour market has been robust, with the unemployment rate at 2.4%, rising earnings, and the participation rate standing above 79%—up 1.5%, since the beginning of last year. Rising labour force inputs, however, have been offset by weak productivity. The Bank of Japan continues to provide stimulus by keeping long-term rates near zero and adding to its balance sheet. It now holds about 40% of government debt.

The GDP rate of Russia slowed down to 0.8% in 2018. At a growth rate of 1.2%, South Africa's economic expansion would still be above the 0.8% level at which the economy expanded in 2018. The Middle East economy growth looks uncertain with the cut in oil production in compliance with OPEC+ deal and geopolitical risks will continue to cap the growth.

The global automobile industry is on the brink of major transformation. Technology is driving this shift, shaped by demographic, regulatory and environmental pressures. By 2025, the vehicle will grow smarter and more efficient, with high efficiency engines, lighter materials and autonomous driving systems. The industry will evolve, with new competition from tech companies, and suppliers capable of producing high-tech parts at low prices. The recent studies show that a dramatic shift of production and sales to the Asian markets will take place, and as a result, three lac jobs in Europe is expected to be at risk. Mobility ecosystems in major urban areas will lead to demotorization. Electric vehicles is expected to account for about 10% of new vehicle sales by 2025. Hybrids will reach a 40% share.

Global Commercial vehicle market is expected to reach $2.27 trillion by 2025. The market is projected to expand at a CAGR of 7.1% during the forecast period. Increased urbanization, coupled with rising spending on infrastructure development in emerging economies such as China, India, and Turkey, are expected to drive the market over the forecast period. In addition, increasing penetration of electric commercial vehicles is also anticipated to contribute toward market expansion over the coming years. Adoption of electric vehicles (EVs) is primarily driven by need to meet emission reduction standards and regulations enforced by government bodies worldwide. Commercial vehicle telematics is another trend that is gaining traction and is anticipated to have a positive impact on the market over the forecast period.

Global Car and Sports Utility Vehicles sales in 2019 is expected to fall slightly as the world economy stumbles. (Source : Global Economic Prospects, World Bank)

Automotive Operations

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

- 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 Company's consolidated total sales (including international business sales and Jaguar Land Rover sales, excluding China joint venture) for FY 2018-19 and FY 2017-18 are set forth in the table below:

	FY 2018-19		FY 2017-18	
	Units	%	Units	%
Passenger cars	2,86,730	22.5%	2,91,299	23.9%
Utility vehicles	4,60,056	36.1%	4,73,273	38.7%
Light Commercial Vehicles	3,34,005	26.2%	2,85,857	23.4%
Medium and Heavy Commercial Vehicles	1,93,281	15.2%	1,70,695	14.0%
Total	**12,74,072**	**100.0%**	**12,21,124**	**100.0%**

The Company sold 12,74,072 units and 12,21,124 units in FY 2018-19 and FY 2017-18, respectively (excluding wholesales from the China joint venture), consisting of 7,61,786 units of Tata and other brand vehicles and 5,12,286 units of Jaguar Land Rover vehicles for FY 2018-19. In terms of units sold, the Company's largest market is India, where the Company sold 6,93,756 units and 6,16,801 units during FY 2018-19 and FY 2017-18, respectively (constituting 54.5% and 50.5% of total sales in FY 2018-19 and FY 2017-18, respectively), followed by North America, where the Company sold 1,33,237 units and 1,36,447 units in FY 2018-19 and FY 2017-18, respectively (constituting 10.5% and 11.2% of total sales in FY 2018-19 and FY 2017-18, respectively). The automotive operations segment is further divided into

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

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

(iii) Jaguar Land Rover; and

(iv) Vehicle Financing

Tata and other brand vehicles

India is the primary market for Tata and other brand vehicles (including vehicle financing). During FY 2018-19, there was a robust and steady pace of economic growth in the geographic markets in which the Tata and other brand vehicles segment has operations.

The following table sets forth the Company consolidated total sales of Tata and other brand vehicles:

	FY 2018-19		FY 2017-18	
	Units	%	Units	%
Passenger cars	1,30,887	17.2%	1,40,815	20.8%
Utility vehicles	1,03,613	13.6%	78,459	11.6%
Light Commercial Vehicles	3,34,005	43.8%	2,85,857	42.3%
Medium and Heavy Commercial Vehicles	1,93,281	25.4%	1,70,695	25.3%
Total	**7,61,786**	**100.0%**	**6,75,826**	**100.0%**

The Company's overall sales of Tata and other brand vehicles increased by 12.7% to 7,61,786 units in FY 2018-19 from 6,75,826 units in FY 2017-18. Of the 7,61,786 units sold overall in FY 2018-19, the Company sold 6,93,756 units of Tata and other brand vehicles in India, while 68,030 units were sold outside of India, compared to 6,16,801 units and 59,025 units, respectively in FY 2017-18.

The above volumes includes Fiat branded vehicles of 23,237 in FY 2018-19, as compared to 29,807 in FY 2017-18.

Vehicle Sales in India

Automobile sales in India rose by 5.9% in FY 2018-19. The following table sets forth the Company's (on standalone basis) sales, industry sales and relative market share in vehicle sales in India. Passenger vehicles includes passenger cars and utility vehicles. Commercial vehicles include Medium & Heavy Commercial Vehicles and Light Commercial Vehicles.

	Industry Sales			Company Sales			Market Share	
	FY 2018-19	FY 2017-18	Growth	FY 2018-19	FY 2017-18	Growth	FY 2018-19	FY 2017-18
	Units		%	Units		%	%	
Commercial Vehicles[1]	10,38,834	8,87,316	17.1%	4,68,788	3,99,821	17.2%	45.1%	45.1%
Passenger Vehicles[2]	33,46,374	32,55,010	2.8%	2,10,500	1,84,743	13.9%	6.3%	5.7%
Total	**43,85,208**	**41,42,326**	**5.9%**	**6,79,288**	**5,84,564**	**16.2%**	**15.5%**	**14.1%**

Source:

Society of Indian Automobile Manufacturers report and Company Analysis

[1] Commercial vehicles include V2 van sales.

[2] Passenger vehicles does not include Jaguar Land Rover-branded cars.

The Company's share of the Indian automotive vehicle market for commercial and passenger vehicles together increased from 14.1% in FY2017-18 to 15.5% in FY2018-19. Company maintained its leadership position in the commercial vehicle category in the industry, which was characterized by increased competition during the year. The passenger vehicle market also continued to be subject to intense competition. The commercial vehicle industry started on a very strong note which continues in the first half of FY2018-19. The increased axle load norms, liquidity crunch and other factors dampened the demand in the second half. The passenger vehicle industry performance was also affected by availability of retail finance, higher interest rates and insurance costs.

Passenger Vehicles in India

Industry-wide sales of passenger vehicles in India increased by 2.8% in FY 2018-19, compared to a 7.3% growth in FY 2017-18, Whilst market situation remained challenging throughout the year, the Company outperformed the industry with a growth of 13.9% for FY2018-19. The Company's passenger vehicles category consists of: (i) passenger cars and (ii) utility vehicles.

The following table sets forth the Company's passenger vehicle sales, industry sales and relative market share in passenger vehicle sales in India.

	Industry Sales			Company Sales			Market Share	
	FY 2018-19	FY 2017-18	Growth	FY 2018-19	FY 2017-18	Growth	FY 2018-19	FY 2017-18
	Units		%	Units		%	%	%
Passenger Cars	22,18,197	21,73,380	2.1%	1,31,035	1,34,860	(2.8%)	5.9%	6.2%
UV & Vans[1]	11,28,177	10,81,630	4.3%	79,465	49,883	59.3%	7.0%	4.6%
Total[2]	**33,46,374**	**32,55,010**	**2.8%**	**2,10,500**	**1,84,743**	**13.9%**	**6.3%**	**5.7%**

Source: Society of Indian Automobile Manufacturers report and Company Analysis

[1]Excludes V2 van sales. [2]Total industry numbers includes sale in other segments.

The Company sold 1,31,035 units in the passenger car category in FY 2018-19, representing a decrease of 2.8% compared to 1,34,860 units in FY 2017-18.

In the utility vehicles category, the Company sold 79,465 units in FY 2018-19, representing an increase of 59.3% from 49,883 units in FY 2017-18. Tata Nexon, which was launched in FY 2017-18 has helped the Company increasing its market share in UV segment to 7.0% in FY2018-19 as compared to 4.6% in FY2017-18. In January 2019, the Company launched, Harrier – SUV, the first model from Omega architecture and sold 4,363 units.

Commercial Vehicles in India

Industry sales of commercial vehicles increased by 17.1% to 10,38,834 units in FY 2018-19 from 8,87,316 units in FY 2017-18. Industry sales in the medium and heavy commercial vehicle segment has grown by 10.9% at 2,74,750 units in FY 2018-19, as compared to 2,47,659 in FY 2017-18. The M&HCV industry has shown signs of recovery since July 2017. The implementation of GST, restrictions on overloading and infrastructure growth supported by the Government has boosted the demand. Industry sales of ILCV reported an increase of 21.7% to 1,25,471 units in FY 2018-19, from 1,03,131 units in FY 2017-18. Industry sales of SCV & Pickups reported an increase of 22.4% to 5,15,491 units in FY 2018-19, from 4,21,084 units in FY 2017-18. The ILCV & SCV industry growth is mainly due to high investments in e-commerce segments which is driving demand for last mile transportation requirements, growth in replacement demand, improved financing and recovery in rural demand. Industry sales of CV Passenger reported an increase of 6.7% to 1,23,122 units in FY 2018-19, from 1,15,442 units in FY 2017-18.

The following table sets forth the Company's commercial vehicle sales, industry sales and relative market share in commercial vehicle sales in India.

	Industry Sales	Company Sales			Market Share			
	FY 2018-19	FY 2017-18	Growth	FY 2018-19	FY 2017-18	Growth	FY 2018-19	FY 2017-18
	Units	%	Units	%	%		%	
M&HCV	2,74,750	2,47,659	10.9%	1,51,004	1,34,455	12.3%	55.0%	54.3%
ILCV[1]	1,25,471	1,03,131	21.7%	57,015	46,343	23.0%	45.4%	44.9%
SCV & Pickups	5,15,491	4,21,084	22.4%	2,06,655	1,66,746	23.9%	40.1%	39.6%
CV Passenger	1,23,122	1,15,442	6.7%	54,114	52,277	3.5%	44.0%	45.3%
Total	10,38,834	8,87,316	17.1%	4,68,788	3,99,821	17.2%	45.1%	45.1%

Source:

Society of Indian Automobile Manufacturers report and Company Analysis

[1]LCVs include V2 van sales

[2]Total industry numbers includes sale in other segments.

The sales of the Company's commercial vehicles in India grew by 17.2% to 4,68,788 units in FY 2018-19 from 3,99,821 units in FY 2017-18. The Company's sales in the M&HCV category increased by 12.3% to 1,51,004 units in FY 2018-19, as compared to sales of 134,455 units in FY 2017-18. The Company's sales in the ILCV segment increased by 23.0% to 57,015 units in FY 2018-19, from 46,343 units in FY 2017-18. The sales in SCV & Pickups segment increased by 23.9% to 2,06,655 units in FY 2018-19 from 1,66,746 units in FY 2017-18.The CV Passenger segment grew by 3.5% to 54,114 units in FY 2018-19 from 52,277 units in FY 2017-18.

Tata and other brand vehicles — Exports

International business has consistently expanded since its inception in 1961. The Company have a global presence in more than 46 countries, including all South Asian Association for Regional Cooperation countries, South Africa, Africa, Middle East, Southeast Asia and Ukraine. The Company markets a range of products including M&HCV trucks, LCV trucks, buses, pickups and small commercial vehicles.

The Company's exports (on standalone basis) grew marginally by 1.4% to 53,140 units in FY 2018-19 as compared to 52,404 units in FY 2017-18. Commercial vehicles exports were 51,119 units in FY 2018-19, as compared to 50,106 units in FY 2017-18. The new regulations and political uncertainty in Sri Lanka and slump in Middle East, resulted in significant drop in the market, affecting the Company's sales. However, the Company's market share in both these markets improved for the commercial vehicles. The Company bagged several prestigious orders in FY 2018-19. Passenger vehicles exports stood at 2,021 units in FY 2018-19, compared to 2,298 units in FY 2017-18. Two large markets remain non-operational - Sri Lanka due to high import duties, tight retail financing and South Africa due to the closure of the distribution channel. Tata Motors made the first ever supply to Bangladesh Army with 18 Units of Hexa.

In FY 2018-19, Tata Daewoo Commercial Vehicle Co. Ltd or TDCV's vehicles sales were 6,672 units compared to 8,870 units in FY 2017-18, a drop of 24.8%.The domestic sales at 4,371 units in FY 2018-19, reduced by 36.3% as compared to 6,859 units in FY 2017-18, primarily due to lower industry volumes and aggressive discounting and marketing strategies of importers. The combined market share was 21.1% in FY 2018-19 as compared to 26.5% in FY 2017-18. The export market scenario continued to remain challenging in FY 2018-19, with factors like local currency depreciation against the US Dollar, continuing statutory regulations to reduce imports, the slowdown in Chinese economy impacting commodity exporting countries and increased dealer inventory and impact of US sanction on Iran. However, TDCV could increase its export sales to 2,301 units, 14.4% higher compared to 2,011 units in FY 2017-18. TDCV is working on an aggressive turnaround plan to get back to sustainable profitable growth in the coming years.

Tata and other brand vehicles — Sales and Distribution

The Company's sales and distribution network in India as at March 2019 comprised approximately over 6,600 touch points for sales and service for its passenger and commercial vehicle business. The Company's subsidiary, TML Distribution Company Limited, or TDCL, acts as a dedicated distribution and logistics management Company to support the sales and distribution operations of its vehicles in India. The Company believes this has improved the efficiency of its selling and distribution operations and processes. The Company uses 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.

TDCL provides distribution and logistics support for vehicles manufactured at the Company's facilities and has set up stocking points at some of Company's plants and at different places throughout India. TDCL helps us improve planning, inventory management, transport management and timing of delivery. The Company has customer relations management system, or CRM, at all of its dealerships and offices across the country, which supports users both at its Company and among its distributors in India and abroad.

The Company markets its commercial and passenger vehicles in several countries in Africa, the Middle East, South East Asia, South Asia, Australia, Latin America, Russia and the Commonwealth of Independent States countries. The Company has a network of distributors in all such countries, where it exports its vehicles. Such distributors have created a network of dealers and branch offices and facilities for sales and after-sales servicing of the Company's products in their respective markets. The Company has also stationed overseas resident sales and service representatives in various countries to oversee its operations in the respective territories.

Tata and other brand vehicles – Vehicle Financing

Through the Company's wholly owned subsidiary TMF Holdings Ltd and its step down subsidiaries Tata Motors Finance Ltd (TMFL) and Tata Motors Finance Solutions Ltd (TMFSL), the Company provides financing services to purchasers of its vehicles through independent dealers, who act as the Company's agents for financing transactions, and through the Company's branch network. TMF group disbursed ₹21,993 crores and ₹15,406 crores in vehicle financing during FY 2018-19 and FY 2017-18, respectively. During FY 2018-19 and FY 2017-18, approximately 26% and 25%, respectively, of the Company's vehicle unit sales in India were made by the dealers through financing arrangements with Company's captive financing subsidiary. As at March 31, 2019 and 2018, the Company's customer finance receivable portfolio comprised 5,77,399 and 488,456 contracts, respectively. The Company follow specified internal procedures, including quantitative guidelines, for selection of its finance customers and assist in managing default and repayment risk in the Company's portfolio. The Company originate all of the contracts through its authorized dealers and direct marketing agents with whom the Company have agreements. All the Company's marketing, sales and collection activities are undertaken through dealers or by TMF group.

TMFL securitize or sell its finance receivables on the basis of the evaluation of market conditions and funding requirements. 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 undertake these securitizations of its receivables due from purchasers by means of private placement.

TMFL act as collection agents 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 secure 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, 14.39% of the future principal in the receivables as collateral, for securitizations done through FY 2018-19, 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 agency(ies); and
- by way of over-collateralization or by investing in subordinate pass-through certificates to secure the obligations of the purchasers.

Tata and other brand vehicles — Competition

The Company faces competition from various domestic and foreign automotive manufacturers in the Indian automotive market. Improving infrastructure and robust growth prospects compared to other mature markets has attracted a number of international companies to India that either have formed joint ventures with local partners or have established independently owned operations in India. Global competitors bring with them decades of international experience, global scale, advanced technology and significant financial resources, and, as a result, competition is likely to further intensify in the future. The Company has designed its products to suit the requirements of the Indian market based on specific customer needs such as safety, driving comfort, fuel-efficiency and durability. The Company believes that its vehicles are suited to the general conditions of Indian roads and the local climate. Its vehicles have also been designed to comply with applicable environmental regulations currently in effect. The Company also offers a wide range of optional configurations to meet the specific needs of its customers and intends to develop and is developing products to strengthen its product portfolio in order to meet the increasing customer expectations of owning world-class products.

Tata and other brand vehicles — Seasonality

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

Jaguar Land Rover

Total wholesales of Jaguar Land Rover vehicles (excluding Chery Jaguar Land Rover and JLR CKD operations) with a breakdown between Jaguar and Land Rover brand vehicles, in FY 2018-19 and FY 2017-18 are set forth in the table below:

	FY 2018-19		FY 2017-18	
	Units	%	Units	%
Jaguar	1,53,757	30.3%	1,50,484	27.6%
Land Rover	3,54,138	69.7%	3,94,814	72.4%
Total	5,07,895	100.0%	5,45,298	100.0%

In FY 2018-19, Jaguar Land Rover wholesale volumes (excluding sales from Chery Jaguar Land Rover) were 5,07,895 units, down 6.9%, compared to FY 2017-18, primarily reflecting weak market conditions in China as well as production downtime to reduce inventory, partially offset by growth in UK sales volumes. The introduction of new and refreshed models led by the Jaguar E-PACE, award winning I-PACE, Range Rover Velar and the refreshed Range Rover and Range Rover Sport were offset by lower sales of more established models, mainly in China, and the run-out of the first generation Range Rover Evoque in the third quarter ahead of with the launch of the new Evoque now available. Wholesale volumes (excluding sales from Chery Jaguar Land Rover) were up in the UK (4.1%), but down in other regions including North America (2.4%), Overseas markets (5.5%), Europe (6.1%) and China (38.8%).

Jaguar wholesale volumes were 1,53,757 units, up 2.2% compared to FY 2017-18, as the introduction of the E-Pace and award winning all electric I-PACE, were partially offset by lower sales volume other more established models, primarily F-PACE and XE.

Land Rover wholesale volumes were 3,54,138 units, down 10.3% compared to the previous year, as sales of the refreshed Range Rover and Range Rover Sport (including hybrid models) as well as a full year of Range Rover Velar sales were offset by lower volumes of more established models, mainly in China, and the run out of the first generation Range Rover Evoque in the 3rd quarter ahead with the launch of the new Evoque now available.

The wholesale volumes of Chery Jaguar Land Rover (China joint venture) were 57,428 units in FY 2018-19, down 34.9% compared to the 88,212 units in FY 2017-18, primarily reflecting the challenging market conditions in China. By model, the introduction of the Jaguar E-Pace and a full year of long wheel-base XEL sales were offset by lower sales of the more established Land Rover Discover Sport, Range Rover Evoque and long wheel-base Jaguar XFL.

Jaguar Land Rover's performance in key geographical markets on a retail basis

Retail volumes (including retail sales from the China Joint Venture) in FY 2018-19 declined by 5.8% to 5,78,915 units from 6,14,309 units in FY 2017-18 as the introduction of new and refreshed models led by the Jaguar E-PACE, award winning I-PACE, Range Rover Velar and the refreshed Range Rover and Range Rover Sport were offset by lower sales of more established models, mainly in China, and the run-out of the first generation Range Rover Evoque in the third quarter ahead of with the launch of the new Evoque now available.

United Kingdom

Industry vehicle sales fell 3.7% in FY 2018-19 in the United Kingdom as diesel (sales down 25.9% year on year) and Brexit uncertainty continued, with the Brexit deadline extended to the end of October but uncertainty remaining over any potential deal. Jaguar Land Rover retail volumes increased by 8.4% to 1,17,915 units in FY 2018-19 compared to 1,08,759 units in FY 2017-18. By brand, Jaguar retails were 38,515 vehicles in FY 2018-19, up 20.1% compared to 32,078 vehicles in FY 2017-18, and Land Rover retails were 79,400, up 3.5% compared to 76,681 last year.

North America

Economic performance in North America remained generally favourable in FY 2018-19 with solid GDP but industry vehicle sales were slightly lower (0.5%) year on year. Jaguar Land Rover retails increased significantly, up 8.1% year on year, to 1,39,778 units in FY 2018-19 compared to 1,29,319 units in FY 2017-18. By brand, Jaguar retails were 36,768 vehicles in FY 2018-19, down 10.0% compared to 40,855 vehicles in FY 2017-18, offset by Land Rover retails, which were 1,03,010, up 16.4% compared to 88,464 last year.

Europe

GDP growth in Europe was mixed in FY 2018-19 and slowed by the end of the year as economic growth in Germany slowed, and Italy entered recession. Industry volumes in Europe were down 0.9% and Jaguar Land Rover retail sales fell 4.5% year on year to 1,27,566 vehicles in FY 2018-19 from 1,33,592 in FY 2017-18, primarily as a result of continuing diesel uncertainty, Brexit and the change to more stringent World Harmonized Light Vehicle Testing Procedure (WLTP) emissions testing regime. By brand, Jaguar retails were 49,474 vehicles in FY 2018-19, up 36.5% compared to 36,248 vehicles in FY 2017-18, and Land Rover retails were 78,092, down 19.8% compared to 97,344 last year.

China

Economic growth continued to slow in China during FY 2018-19 as weaker market conditions and trade tension with the US continued. As a result, and compounded by uncertainty driven by import duties in July, industry vehicle sales declined by 8.3% year on year and Jaguar Land Rover retail volumes (including sales from the China Joint Venture) decreased by 34.1% to 98,922 units in FY 2018-19 from 1,50,116 units in FY 2017-18. By brand, Jaguar retails were 32,797 vehicles in FY 2018-19, down 26.6% compared to 44,705 vehicles in FY 2017-18, and Land Rover retails were 66,125, down 37.3% compared to 1,05,411 last year.

Other Overseas markets

Jaguar Land Rover's retail volumes in other overseas markets increased by 2.4% to 94,734 vehicles in FY 2018-19 compared to 92,523 units in the prior year. By brand, Jaguar retails were 22,644 vehicles in FY 2018-19, up 9.5% compared to 20,674 vehicles in FY 2017-18, and Land Rover retails were 72,090, up 0.3% compared to 71,849 last year.

Jaguar Land Rover's Sales & Distribution

As at March 31, 2019, Jaguar Land Rover distribute its vehicles in 120 markets for Jaguar and 128 markets for Land Rover globally. Sales locations for vehicles are operated as independent franchises. Jaguar Land Rover are represented in its key markets through its National Sales Company's ("NSC's") as well as thirdparty importers. Jaguar and Land Rover have regional offices in certain select countries that manage customer relationships and vehicle supplies and provide marketing and sales support to 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 do 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, 2019, Jaguar Land Rover global sales and distribution network comprised 23 NSCs, 77 importers, 2 export partners and 2,684 franchise sales dealers, of which 1,299 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 agerelated registration plates of vehicles in the United Kingdom, where new agerelated plate registrations take effect in March and September. 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 Overview

The Company's other operations business segment mainly includes information technology services, machine tools and factory automation services. The Company's revenue from other operations before inter-segment eliminations was ₹3,626.07 crores in FY 2018-19, an increase of 11.5% from ₹3,252.36 crores in FY 2017-18. Revenues from other operations represented 1.2% and 1.1% of total revenues, before inter-segment eliminations, in FY 2018-19 and FY 2017-18.

OPPORTUNITIES:

In the Budget 2019, the Government of India has allocated ₹83k crore to highways among various infra-based sectors. Apart from National Highways, Centre upgraded fiscal spending on rural roads at ₹19k crore under Pradhan Mantri Gram Sadak Yojana (PMGSY). Focus on road building under National Highway Authority of India and PMGSY will spur demand for commercial vehicles and tractors, respectively.

The Automotive Mission Plan 2016-26 aims at 12% share of automotive industry in GDP, along with implementation of BS6 vehicles by 2023 for four wheelers. Budget 2019 saw for the first time, government's intent to have electric mobility by 2030. The Faster Adoption And Manufacturing of (Hybrid) & Electric (FAME) Vehicles in India lays down the roadmap to support the development of electric and hybrid vehicles market and its manufacturing eco-system with a view to achieve self-sustenance as early as 2020. Technology development, demand creation, pilot projects and charging infrastructure are the focus areas of the scheme.

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 Range Rover Velar (on sale since July 2017), the Jaguar E-PACE (on sale since November 2017) and the all-electric Jaguar I-PACE (on sale since June 2018) as well as the refreshed Range Rover and Range Rover Sport (including hybrid models), the recently announced new Defender and other new and refreshed products, ensures that Jaguar Land Rover can compete in the premium segments with class-leading products.

FINANCIAL PERFORMANCE ON A CONSOLIDATED BASIS

The financial information discussed in this section is derived from the Company's Audited Consolidated Financial Statements.

The Company has adopted Ind AS 115 with a modified retrospective approach. The Company makes transport arrangements for delivering its vehicles to the dealers. The gross consideration received in respect of these arrangements was recognized and presented with revenue in the statement of profit and loss. The costs associated with these arrangements were presented within freight cost in the statement of profit and loss. In accordance with Ind AS 115, the Company has determined that it is an agent in providing these services, and therefore the gross consideration received, net off cost associated with respect to these arrangements is presented within revenue effective April 1, 2018. Certain payouts made to dealers such as infrastructure support payments are to be treated as variable components of consideration and are therefore in accordance with Ind AS 115, recognized as revenue deductions in future. These changes in presentation in the income statement has resulted in decrease in both revenues and expenses by ₹3,809.03 crores for the year ended March 31, 2019.

Overview

The Company income from operations including finance revenues increased by 3.3% to ₹3,01,938.40 crores in FY 2018-19 from ₹2,92,340.64 crores in FY 2017-18. The increase is mainly attributable to better sales volumes of the Company's India business and favourable currency translation from GB£ to INR of ₹14,516.58 crores, offset by lower sales of Jaguar Land Rover.

The Company has pursued a strategy of increasing exports of Tata and other brand vehicles to new and existing markets. Tata Technologies Ltd (TTL), subsidiary of the Company, witnessed increase in revenue due to favourable currency movement, which helped in growth of revenue in the UK, Europe and North America. The growth in Asia Pacific revenue of TTL was primarily driven by strong revenue growth in India and China in key accounts and growth in educational product sales. However, due to lower sales of JLR and increased growth in revenue in India in FY 2018-19, the proportion of the Company's net sales earned from markets outside of India decreased to 77.4% in FY 2018-19 from 79.9% in FY 2017-18. Further, in FY 2018-19, the revenue of the Company's subsidiary in South Korea, TDCV, has been lower due to lower industry volumes and aggressive discounting and marketing strategy of importers. The following table sets forth the Company's revenues from its key geographical markets and the percentage of total revenues that each key geographical market contributes for the periods indicated:

Revenue	FY 2018-19		FY 2017-18	
	(₹ in crores)	%	(₹ in crores)	%
India	68,087.44	22.6%	58,659.18	20.1%
China	30,414.75	10.1%	42,635.26	14.6%
UK	49,113.81	16.3%	50,456.60	17.3%
United States	52,472.91	17.4%	44,991.88	15.4%
Rest of Europe*	49,814.17	16.4%	46,393.27	15.9%
Rest of World*	52,035.32	17.2%	49,204.45	16.7%
Total	3,01,938.40		2,92,340.64	

Earnings before other income, interest and tax, were ₹3,774.03 crores in FY 2018-19 compared to ₹11,787.51 crores in FY 2017-18. The decrease was primarily driven by the performance of Jaguar Land Rover business, including higher depreciation and amortization, fixed marketing expenses/selling costs. The Company's net loss (attributable to shareholders of the Company) was ₹28,826.23 crores in FY 2018-19 as compared to a profit of ₹8,988.91 crores in FY 2017-18. In FY 2018-19, the Company has taken an impairment charge of £3,105 million (₹27,837.91 crores). The Company assessed the recoverable amount of the Jaguar Land Rover business, which represent a single cash-generating unit (CGU), as the higher of Fair Value Less Cost of Disposal ('FVLCD') and Value in Use ('VIU') of the relevant assets of the CGU, due to weaker sales and profitability, change in market conditions especially in China, technology disruptions.

The Company's operations is divided into automotive operations and other operations as described further below.

A core initiative of the Company was the implementation of the Organization Effectiveness (OE) program, a strategic program designed to overhaul and transform the Company.

Pursuant to the changes implemented as a result of the OE program, the Company has drawn separate strategies for commercial vehicles, passenger vehicles and financing business from FY 2018-19. Consequent to these changes, commencing FY 2018-19, the reportable segments is as follows:

I. **Automotive:** The Automotive segment consist of four reportable sub-segments: Tata Commercial Vehicles, Tata Passenger Vehicles, Jaguar Land Rover and Vehicle Financing.

II. **Others:** Others consist of IT services and machine tools and factory automation solutions.

Tata Commercial vehicles include commercial vehicles manufactured under Tata and Daewoo brands. Tata passenger vehicles include passenger vehicles manufactured under Tata and Fiat brands and excludes vehicles manufactured under Jaguar Land Rover brands. Vehicle Financing which is Tata Motors Finance include financing of Tata and Jaguar Land Rover new vehicles, pre-owned vehicles including other OEMs brands and corporate lending to the Company's channel partners.

The Company believe that this reorganization will improve speed, agility and simplicity within our business units, and enable strong functional leadership, improved decision-making, quicker responses to changing market conditions and clear accountability.

The table below sets forth the breakdown in revenues between the Company automotive operations and other operations in FY 2018-19 and FY 2017-18 and the percentage change from period to period.

	FY 2018-19	FY 2017-18	Change
	(₹ in crores)		%
Automotive operations	2,99,655.61	2,90,384.64	3.2
Others	3,626.07	3,252.36	11.5
Inter-segment elimination	(1,343.28)	(1,296.36)	3.6
Total	3,01,938.40	2,92,340.64	3.3

Automotive operations

Automotive operations are the Company most significant segment, accounting for 99.2% and 99.3% of the Company's total revenues in FY 2018-19 and FY 2017-18 respectively. In FY 2018-19, revenue from automotive operations before inter-segment eliminations was ₹2,99,655.61 crores as compared to ₹2,90,384.64 crores in FY 2017-18, an increase of 3.2%.

The following table sets forth selected data regarding the Company's automotive operations for the periods indicated, and the percentage change from period to period (before inter-segment eliminations).

	FY 2018-19	FY 2017-18	Change %
Total revenue (₹ in crores)	2,99,655.61	2,90,384.64	3.2
Earning before other income, interest and tax (₹ in crores)	3,388.77	11,512.38	(70.6)
Earning before other income, interest and tax (% to total revenue)	1.1%	4.0%	

The Company's automotive operations segment is further divided into Tata and other brand vehicles, Vehicle financing and Jaguar

Land Rover. In FY 2018-19, Jaguar Land Rover contributed 75% of the Company's total automotive revenue compared to 77% in FY 2017-18 and the remaining 25% was contributed by Tata and other brand vehicles and Financing in FY 2018-19 compared to 23% in FY 2017-18.

The Company's revenue from Tata and other brand vehicles (including vehicle financing) and Jaguar Land Rover in FY 2018-19 and FY 2017-18 and the percentage change from period to period (before intra-segment eliminations) is set forth in the table below.

	FY 2018-19	FY 2017-18	Change
	(₹ in crores)		%
Tata and other brand vehicles including vehicle financing	76,417.68	65,685.50	16.3
Jaguar Land Rover	2,23,513.58	2,24,831.05	(0.6)
Intra-segment elimination	(275.65)	(131.91)	(109.0)
Total	**2,99,655.61**	**2,90,384.64**	**3.2**

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

	FY 2018-19	FY 2017-18	Change
	(₹ in crores)		%
Commercial Vehicle	58,137.10	49,373.55	17.7
Passenger Vehicle	14,469.80	13,342.04	8.5
Unallocable	110.60	169.69	(34.8)
Vehicle Finance	3,700.18	2,800.22	32.1
Total	**76,417.68**	**65,685.50**	**16.3**

Other operations

The following table sets forth selected data regarding the Company's other operations for the periods indicated and the percentage change from period to period (before inter-segment eliminations).

	FY 2018-19	FY 2017-18	Change (%)
Total revenue (₹ in crores)	3,626.07	3,252.36	11.5%
Earning before other income, interest and tax (₹ in crores)	505.44	422.32	19.7%
Earning before other income, interest and tax (% to total revenue)	13.9%	13.0%	

The other operations business segment includes information technology, machine tools and factory automation solutions. In FY 2018-19, revenue from other operations before inter-segment eliminations was ₹3,626.07 crores compared to ₹3,252.36 crores in FY 2017-18. Results for the other operations business segment before other income, finance cost, tax and exceptional items (before inter-segment eliminations) were ₹505.44 crores in FY 2018-19 as compared to ₹422.32 crores for FY 2017-18.

Results of Operations

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

	FY 2018-19	FY 2017-18
	(%)	(%)
Revenue from operations (net of excise duty)	100.0	100.0
Expenditure:		
Cost of material consumed (including change in stock)	65	63.6
Excise Duty (refer below explanation)	-	0.3
Employee Cost	11	10.4
Product development/Engineering	1.4	1.2
Other expenses (net)	20.6	20.6
Amount transferred to capital and other accounts	(6.5)	(6.4)
Total Expenditure	91.5	89.7
Profit before other income, Depreciation and amortization, Finance costs, Foreign exchange (gain)/loss, exceptional item and tax	8.5	10.3
Other Income	1.0	1.4
Profit before Depreciation and Amortization, Finance costs, Foreign exchange (gain)/loss, exceptional item and tax	9.5	11.7
Depreciation and Amortization	7.9	7.4
Finance costs	1.9	1.6
Foreign exchange loss (net)	0.3	(0.4)
Exceptional Item (gain)/loss (net)	9.8	(0.7)
Profit/(loss) before tax	(10.4)	3.8
Tax expense / (credit)	(0.8)	1.5
Profit/(loss) after tax	(9.6)	2.3
Share of profits/(loss) of equity accounted investees (net)	0.1	0.8
Minority Interest	-	-
Profit/(loss) for the year	(9.5)	3.1

Cost of materials consumed (including change in stock)

	FY 2018-19	FY 2017-18
	(₹ in crores)	
Consumption of raw materials and components	1,82,254.45	1,73,371.19
Basis adjustment on hedge accounted derivatives	(1,245.37)	(1,378.60)
Purchase of product for sale	13,258.83	15,903.99
Change in inventories of finished goods, Work-in-progress and products for sale	2,053.28	(2,046.58)
Total	**1,96,321.19**	**1,85,850.00**

Cost of material consumed increased from 63.6% of total revenue (excluding income from vehicle financing) in FY 2017-18 to 65.0% in FY 2018-19. For Tata Motors Standalone (including Joint Operations), costs of materials consumed was 73.1% of net revenue in FY 2018-19 of total revenue as compared to 72.7% in FY 2017-18, representing an increase of 40 bps, which was mainly attributable to a change in product mix. For Jaguar Land Rover, costs of materials consumed was 63.8% of total revenue in FY 2018-19 compared to 61.9% in FY 2017-18, representing an increase of 190 bps, mainly driven by product mix.

Employee Costs were ₹33,243.87 crores in FY 2018-19 as compared to ₹30,300.09 crores in FY 2017-18, an increase of 9.7%. There was unfavourable translation impact of GB£ to INR of Jaguar Land Rover operation of ₹1,691.23 crores. At Jaguar Land Rover the increase in employee cost is by 3.5% to GB£2,822 million (₹25,903.78 crores) in FY 2018-19 as compared to GB£2,726 million (₹23,392.69 crores) in FY 2017-18, primarily reflects the average increase in the employee head count all across functions. For Tata Motors Standalone (including joint operations), the employee cost increased by 7.7% to ₹4,273.10 crores as compared to ₹3,966.73 crores in FY 2017-18, mainly due to annual increments, higher bonus and performance payment accruals and wage revisions. To manage, employee costs, in FY 2018-19, Jaguar Land Rover announced the voluntary redundancy program, resulting in a charge of ₹1,367.22 crores (considered in exceptional items).

Other Expenses includes all works operations, indirect manufacturing expenses, freight cost, fixed marketing costs and other administrative costs. These expenses have increased to ₹62,238.12 crores in FY 2018-19 from ₹60,184.21 crores in FY 2017-18. The breakdown is provided below:

	FY 2018-19	FY 2017-18	Change
		(₹ in crores)	
Processing charges	1,634.36	1,339.08	295.28
Consumption of stores and spare parts	2,444.15	2,210.56	233.59
Freight, transportation, port charges, etc.	7,804.47	10,742.12	(2,937.65)
Power and fuel	1,585.93	1,308.08	277.85
Warranty and product liability expenses	11,890.70	7,700.07	4,190.63
Publicity	8,729.63	8,968.59	(238.96)
Information technology/ computer expenses	2,340.45	2,143.18	197.27
Allowance for finance, trade and other receivables	534.43	57.87	476.56
Engineering expenses	5,275.58	5,278.84	(3.26)
MTM (gain)/loss on commodity derivatives	(84.75)	214.63	(299.38)
Works operation and other expenses	20,083.17	20,221.19	(138.02)
Other Expenses	62,238.12	60,184.21	2,053.91

The changes are mainly driven by volumes and the size of operations.

i. Processing charges were mainly incurred by Tata and other brand vehicles, which, due to higher volumes, led to higher expenditures.

ii. Freight, transportation, port charges etc. have decreased, for Jaguar Land Rover, predominantly due to decreased sales in certain geographies. As a percentage to total revenue, Freight, transportation and port charges etc. were at 2.6% in FY 2018-19, as compared to 3.7% in FY 2017-18. The decrease is also due to presentation change on adoption of Ind AS 115.

iii. Publicity expenses decreased by 2.7% mainly due to decrease in JLR and represented 2.9% of total revenues in FY 2018-19 and 3.1% in FY 2017-18. In addition to routine product and brand campaigns, the Company incurred expenses relating to new product introduction campaigns for the I-Pace, E-Pace, Velar and the all new Jaguar XF, the Harrier, Tiago/Tigor JTP range at Tata Motors.

iv. Warranty and product liability expenses represented 3.9% and 2.6% of the Company's revenues in FY 2018-19 and FY 2017-18, respectively. The warranty expenses at Jaguar Land Rover represented 4.2% of the revenue as compared to 2.7% last year, primarily due to new campaigns, whereas Tata Motors India operations these represent 1.5% and 1.3% of revenue for FY 2018-19 and FY 2017-18, respectively.

v. Works operation and other expenses have decreased to 6.7% of net revenue in FY 2018-19 from 6.9% in FY 2017-18.

vi. Engineering expenses at Jaguar Land Rover have been flat, reflecting the continued investment in the development of new vehicles. A significant portion of these costs are capitalized and shown under the line item "Amount transferred to capital and other accounts".

vii. The provision and write off of various debtors, vehicle loans and advances (net), has increased to ₹534.43 crores in FY 2018-19 as compared to ₹57.87 crores in FY 2017-18. Allowances for trade and other receivables for FY 2018-19 increased to ₹211.81 crores, as compared to ₹14.57 crores. In FY 2017-18, there was reversal of certain provisions for trade receivables due to favourable litigation award. Allowances for finance receivables has increased to ₹320.24 crores in FY 2018-19, as compared to ₹43.30 crores in FY 2017-18. The increase is due to higher finance receivables, due to increased volumes, lower calculations on percentage terms of finance receivables and there was a reversal of provision in FY 2017-18.

Amount transferred to capital and other accounts represents expenditure transferred to capital and other accounts allocated out of employee cost and other expenses, incurred in connection with product development projects and other capital items. The expenditure transferred to capital and other accounts has increased by 5.8% to ₹19,659.59 crores in FY 2018-19 from ₹18,588.09 crores in FY 2017-18, mainly due to various product development projects undertaken by the Company for the introduction of new products and the development of engine and products variants.

Other Income decreased by 25.1% to ₹2,965.31 crores in FY 2018-19 from ₹3,957.59 crores in FY 2017-18. Interest income increased to ₹786.46 crores in FY 2018-19, compared to ₹711.81 crores in FY 2017-18, whereas profit on sale of investment marginally decreased to ₹128.61 crores in FY 2018-19, compared to ₹129.26 crores in FY 2017-18. Fair value gain in investments has increased to ₹238.54 crores in FY 2018-19, as compared to ₹32.05 crores in FY 2017-18. During FY 2018-19, the fair value of the investment in Lyft has increased by GB£24.35 million (₹223.45 crores), due to IPO lisiting on the NASDAQ stock exchange.

Profit before Depreciation and Amortization, Finance costs, Foreign exchange (gain)/loss, exceptional item and tax is ₹28,535.55 crores in FY 2018-19, representing 9.5% of revenue in FY 2018-19 compared to ₹34,229.99 crores in FY 2017-18.

Depreciation and Amortization: During FY 2018-19, depreciation and amortization expenditures increased by 9.5% to ₹23,590.63 crores from ₹21,553.59 crores in FY 2017-18. The depreciation increase of 12.2% to ₹12,200.42 crores as compared to ₹10,874.34 crores in FY 2017-18 is mainly at Jaguar Land Rover due to new product launches and opening of new facilities (Slovakia). The amortization expenses have also increased by 6.7% to ₹11,390.21 crores in FY 2018-19 from ₹10,679.25 crores in FY 2017-18, and are attributable to new products introduced during the year, mainly at Jaguar Land Rover business.

Product development/engineering expenses The Company introduced the factor of "affordability" of investments w.e.f. April 1, 2018 for capitalization of product development costs. Accordingly, charge off increased by 19.6% to ₹4,224.57 crores in FY 2018-19 from ₹3,531.87 crores in FY 2017-18.

Finance Cost Increased by 23% to ₹5,758.60 crores in FY 2018-19 from ₹4,681.79 crores in FY 2017-18. The Increase was mainly attributable to higher interest rates and borrowings. The finance cost at JLR is higher from ₹724.65 crores to ₹1010.68 crores due to $1bn syndicated loan facility drawn down in October 2018.

Foreign exchange loss of ₹905.91 crores in FY 2018-19 as compared to gain of ₹1,185.28 crores in FY 2017-18. The loss was mainly due to depreciation of GBP and INR as compared to USD.

Exceptional items (gain)/loss

	FY 2018-19	FY 2017-18	Change
		(₹ in crores)	
Employee separation cost	1,371.45	3.68	1,367.77
Defined benefit pension plan amendment	147.93	(3,609.01)	3,756.94
Write off of Property, plant and equipment and capital work in progress	180.97	1,641.38	(1,460.41)
Provision for costs of closure of operation of a subsidiary	381.01	-	381.01
Provision for impairment in Jaguar Land Rover	27,837.91	-	27,837.91
Profit on sale of investment in a subsidiary Co.	(376.98)	-	(376.98)
Others	109.27	(11.19)	120.46
Total	**29,651.56**	**(1,975.14)**	**31,626.70**

a) In FY 2018-19, Jaguar Land Rover announced the voluntary redundancy program, resulting in a charge of ₹1,367.22 crores.

b) The debit of GB£16.5 million (₹147.93 crores) in FY 2018-19 as compared to credit of GB£437 million (₹3,609.01 crores) in FY 2017-18, related to the amendment of the Defined Benefit scheme of Jaguar Land Rover as past service costs.

c) In FY 2018-19, the Company has taken an impairment charge of £3,105 million (₹27,837.91 crores). The Company assessed the recoverable amount of the Jaguar Land Rover business, which represent a single cash-generating unit (CGU), as the higher of Fair Value Less Cost of Disposal ('FVLCD') and Value in Use ('VIU') of the relevant assets of the CGU, due to change in market conditions especially in China, technology disruptions and rising cost of debt.

d) On July 31, 2018, the Company decided to cease the current manufacturing operations of Tata Motors Thailand Ltd. The Company will address the Thailand market with a revamped product portfolio, suitable to the local market needs, delivered through a CBU distribution model. Accordingly, the relevant restructuring costs have been accounted in FY 2018-19.

e) In FY 2018-19, the Company has sold investment in TAL Manufacturing Solutions Limited to Tata Advanced Systems Ltd.

Earnings Before Interest Tax (EBIT) decreased to ₹3,643 crores in FY 2018-19, compared to ₹11,846 crores in FY 2017-18. EBIT is defined to include the revaluation of current assets and liabilities and realized foreign exchange and commodity hedges as well as profits from equity accounted investees but excludes the revaluation of foreign currency debt, mark to market (MTM) on foreign exchange and commodity hedges, other income and exceptional items.

Consolidated loss before tax ₹31,371.15 crores in FY 2018-19, compared to profit of ₹11,155.03 crores in FY 2017-18. The loss before tax is primarily driven by -

- The profitability at Jaguar Land Rover operations were lower due to product mix, higher manufacturing expenses and other operating costs including higher marketing expenses, higher depreciation and amortization expenses related to significant capital expenditure incurred in prior periods.
- Impairment charge of ₹27,837.91 crores for Jaguar Land Rover.

  Offset by
- Improvement in the Tata Motors Ltd Standalone business in India, mainly favourable model mix and better management of other operating costs.
- The increase in profits in FY 2017-18 was also due to exceptional gain of ₹3,609.01 crores of pension cost.

Tax Expense represents a net credit of ₹2,437.45 crores in FY 2018-19, as compared to net charge of ₹4,341.93 crores (effective tax rate of 32.3%) in FY 2017-18. Due to impairment charge at Jaguar Land Rover, there is a write down of previously recognized deferred tax asset of ₹2,698.15 crores. Further, for Tata Motors Ltdand certain subsidiaries, the Company has not recognized deferred tax assets due to uncertainty of future taxable profits.

Consolidated loss after tax of ₹28,826.23 crores in FY 2018-19 from profit of ₹8,988.91 crores in FY 2017-18, after considering the profits from associate companies and shares of minority investees. The losses was mainly attributable to Jaguar Land Rover business performance, including impairment charge.

Consolidated Balance Sheet

₹ in crores

		As at March 31, 2019	2018	Change	Translation of JLR	Net Change
ASSETS						
(a)	Property, plant and equipment and intangible assets	1,42,370	1,61,331	(18,961)	(2,215)	(16.746)
(b)	Goodwill	748	116	632	-	632
©	Investment in equity accounted investees	5,335	5,385	(50)	(84)	34
(d)	Financial assets	1,03,404	1,04,184	(780)	(1,010)	230
(e)	Deferred tax assets (net)	5,151	4,159	992	(91)	1,083
(f)	Current tax assets (net)	1,209	1,109	100	(2)	102
(g)	Other assets	9,801	10,344	(543)	(116)	(427)
(h)	Inventories	39,014	42,138	(3,124)	(640)	(2,484)
(i)	Assets classified as held-for-sale	162	2,585	(2,423)	-	(2,423)
	TOTAL ASSETS	3,07,195	3,31,351	(24,156)	(4.158)	(19,998)
LIABILITIES						
(a)	Financial liabilities:	1,98,463	1,88,941	9,522	(2,292)	11,814
(b)	Provisions	22,052	18,902	3,150	(377)	3,527
©	Deferred tax liabilities (net)	1,491	6,126	(4,635)	(18)	(4,617)
(d)	Other liabilities	23,469	18,800	4,669	(394)	5,063
(d)	Current tax liabilities (net)	1,018	1,559	(541)	(17)	(524)
(e)	Liabilities directly associated with Assets held-for-sale	-	1,070	(1,070)	-	(1,070)
	TOTAL LIABILITIES	2,46,492	2,35,398	11,094	(3,098)	14,192

Property, plant and equipment and other intangible assets

	As at March 31, 2019	2018	Change
	(₹ in crores)		
Property, plant and equipment (including capital work-in-progress)	81,158.03	90,010.78	(8,852.75)
Other intangible assets (including assets under development)	61,212.41	71,320.13	(10,107.72)
Total	**1,42,370.44**	**1,61,330.91**	**(18,960.47)**

There is decrease (net of depreciation and amortization) in the intangible and tangible assets in FY 2018-19. The decrease was due to impairment charge of ₹27,837.91 crores at Jaguar Land Rover. Further, the decrease was due to unfavourable currency translation impact from GB£ to INR of ₹2,215 crores. This was offset mainly at Jaguar Land Rover Slovakia plant, tooling and facilities for new products like E-Pace, Evoque, I-Pace etc. At Tata Motors Ltd, the additions were mainly in dies, tooling's, and product development cost for new products.

Investments in equity accounted investees were ₹5,334.88 crores as at March 31, 2019, as compared to ₹5,385.24 crores as at March 31, 2018.

Financial Assets (Current + Non-current)

Investments (Current + Non-current) were ₹ 10,435.84 crores as at March 31, 2019, as compared to ₹15,427.51 crores as at March 31, 2018. The details are as follows:

	As at March 31, 2019	As at March 31, 2018	Change
	(₹ in crores)		
Mutual Funds	8,966.25	14,360.47	(5,394.22)
Quoted Equity shares	727.45	339.92	387.53
Unquoted Equity shares	562.18	609.08	(46.90)
Others	179.96	118.04	61.92
Total	**10,435.84**	**15,427.51**	**(4,991.67)**

The decrease in mutual fund investments was at Jaguar Land Rover and Tata Motors Limited. Increase in quoted equity shares is due to fair value gain.

Finance receivables (current + non-current) were ₹33,624.69 crores as at March 31, 2019, as compared to ₹23,881.18 crores as at March 31, 2018, an increase of 40.8%, primarily due to increased vehicle financing business. The Gross finance receivables were ₹34,457.74 crores as at March 31, 2019, as compared to ₹25,070.75 crores as at March 31, 2018.

Loans and Advances

	As at March 31, 2019	As at March 31, 2018	Change
	(₹ in crores)		
Long term loans and advances	407.42	495.41	(87.99)
Short term loans and advances	1,268.70	1,451.14	(182.44)
Total	**1,676.12**	**1,946.55**	**(270.43)**

Loans and advances include advances to suppliers and contractors etc. which has decreased to ₹1,177.45 crores as at March 31, 2019 from ₹1,431.98 crores as at March 31, 2018.

Other Financial Assets

	As at March 31, 2019	As at March 31, 2018	Change
	(₹ in crores)		
Other financial assets - non current	2,809.18	4,563.87	(1,754.69)
Other financial assets – current	3,213.56	3,857.64	(644.08)
Total	**6,022.74**	**8,421.51**	**(2,398.77)**

These included ₹2,146.68 crores of derivative financial instruments, mainly attributable to Jaguar Land Rover as at March 31, 2019 compared to ₹5,323.02 crores as at March 31, 2018, reflecting notional asset due to the valuation of derivative contracts. Recovery from suppliers has decreased to ₹1,927.28 crores as at March 31, 2019, as compared to ₹2,038.42 crores as at March 31, 2018. Further, there is deposit with financial institution of ₹500.00 crores as at March 31, 2019.

Deferred tax assets / liability: Deferred tax assets represent timing differences for which there will be future current tax benefits due to unabsorbed tax losses and expenses allowable on a payment basis in future years. Deferred tax liabilities represent timing differences where current benefit in tax will be offset by a debit in the statement of profit and loss.

	As at March 31, 2019	As at March 31, 2018	Change
	(₹ in crores)		
Deferred tax assets	5,151.11	4,158.70	992.41
Deferred tax liability	1,491.04	6,125.80	(4,634.76)

A deferred tax credit (net) of ₹4,662.68 crores was recorded in the income statement, mainly at JLR due to impairment charge during FY 2018-19 and ₹700.99 crores in other comprehensive income, which mainly includes post-retirement benefits and cash flow hedges in FY 2018-19.

Inventories as at March 31, 2019, were ₹39,013.73 crores as compared to ₹42,137.63 crores as at March 31, 2018, a decrease of 7.4%. Inventory at Tata and other brand vehicles (including vehicle financing) was ₹ 6,399.94 crores as at March 31, 2019 as compared to ₹7,318.87 crores as at March 31, 2018. Inventory at Jaguar Land Rover was ₹32,613.86 crores as at March 31, 2019, a decrease of 6.3%, as compared to ₹34,805.01 crores as at March 31, 2018. In terms of number of days of sales, finished goods represented inventory of 39 days in FY 2018-19 as compared to 40 days in FY 2017-18.

Trade Receivables (net of allowance for doubtful debts) were ₹18,996.17 crores as at March 31, 2019, representing a decrease of 4.5% compared to ₹19,893.30 crores as at March 31, 2018. Trade Receivables have increased at Tata and other brand vehicles (including vehicle financing) to ₹ 6,473.72 crores as at March 31, 2019 as compared to ₹5,492.78 crores as at March 31, 2018. The increase was mainly due to higher sales in FY 2018-19. Trade receivables at Jaguar Land Rover was ₹12,063.57 crores as at March 31, 2019, as compared to ₹14,374.03 crores as at March 31, 2018, due to lower receivables in UK. The allowances for doubtful debts were ₹970.10 crores as at March 31, 2019 compared to ₹1,261.67 crores as at March 31, 2018. In terms of number of day's sales, trade receivable represented 24 days in FY 2018-19 as compared to 21 days of 2018.

Cash and cash equivalents were ₹21,559.80 crores, as at March 31, 2019, compared to ₹14,716.75 crores as at March 31, 2018. The Company holds cash and bank balances in Indian rupees, GB£, Chinese Renminbi, etc.

Other bank balances were ₹11,089.02 crores, as at March 31, 2019, compared to ₹19,897.16 crores as at March 31, 2018. These include bank deposits maturing within one year of ₹10,574.21 crores as at March 31, 2019, compared to ₹19,361.58 crores as at March 31, 2018.

Current tax assets (net) (current + non-current) were ₹1,208.93 crores, as at March 31, 2019, compared to ₹1,108.81 crores as at March 31, 2018.

Other assets

	As at March 31, 2019	As at March 31, 2018	Change
	(₹ in crores)		
Other assets - non current	2,938.73	2,681.25	257.48
Other assets – current	6,862.22	7,662.37	(800.15)
Total	**9,800.95**	**10,343.62**	**(542.67)**

These mainly includes prepaid expenses, including rentals on operating lease of ₹2,341.67 crores as at March 31, 2019, as compared to ₹2,584.66 crores as at March 31, 2018. Taxes recoverable, statutory deposits and dues from government were ₹6,153.85 crores as at March 31, 2019, as compared to ₹6,724.43 crores as at March 31, 2018.

Shareholders' fund was ₹60,179.56 crores and ₹95,427.91 crores as at March 31, 2019 and 2018, respectively, a decrease of 36.9% mainly due to losses in FY 2018-19 of ₹28,826.23 crores, due to performance and impairment charge for Jaguar Land Rover business.

Reserves decreased by 37.2% from ₹94,748.69 crores as at March 31, 2018 to ₹59,500.34 crores as at March 31, 2019. Though, the loss for FY 2018-19 was ₹28,826.23 crores, decrease in Reserves of ₹35,248.35 crores was primarily attributable to following reasons:

- Debits for remeasurement of employee benefit plans was ₹2,174.01 crores in FY 2018-19.
- Translation loss of ₹2,068.84 crores recognized in translation reserve on consolidation of subsidiaries further contributed to a decrease in reserves and surplus.
- Further decrease in hedging reserves by ₹2,191.36 crores, primarily due to mark-to-market gains on forwards and options in Jaguar Land Rover, primarily due to Strengthening in the US$-GB£ forward rates.

Borrowings

	As at March 31,		Change
	2019	2018	
	(₹ in crores)		
Long term borrowings	70,973.67	61,199.50	9,774.17
Short term borrowings	20,150.26	16,794.85	3,355.41
Current maturities of long term borrowings	15,051.41	10,956.12	4,095.29
Total	**106,175.34**	**88,950.47**	**17,224.87**

- Current maturities of long-term borrowings represent the amount of loan repayable within one year.
- The closing net automotive debt increased to ₹28,394 crores at March 31, 2019 from ₹13,889 crores as at March 31, 2018 mainly due to cumulative negative free cash flow primary at JLR.
- During FY 2018-19,

o the Company raised ₹1,500 crores through Buyer's line of credit from banks with a tenor ranging from 4 years to 5 years.

o Jaguar land rover Automotive plc, arranged and draw down on a USD1 billion (₹6,834 crores) syndicated loan of USD 200 million (₹1,367.63 crores) and USD 800 million (₹5,466.74 crores) maturing in October 2022 and January 2025 respectively.

o Jaguar land rover Automotive plc, issued a €500 million (₹3,898.95 crores) bond in September 2018 maturing in January 2026 with a coupon of 4.5%.

o Tata Motors Finance group had raised ₹2,066 crores by issuing NCD and through secured term loan amounting to ₹6,306 crores.

Other financial liabilities

	As at March 31,		Change
	2019	2018	
Other financial liabilities - non current	2,792.71	2,739.14	53.57
Other financial liabilities – current	32,855.65	31,267.49	1,588.16
Total	**35,648.36**	**34,006.63**	**1,641.73**

These included ₹7,404.97 crores of derivative financial instruments, mainly attributable to Jaguar Land Rover as at March 31, 2019 compared to ₹8,657.86 crores as at March 31, 2018, reflecting favorable foreign exchange movement between US$ and GB£. Further, liability for capital expenditure decreased to ₹7,046.74 crores as at March 31, 2019, as compared to ₹8,219.45 crores as at March 31, 2018. These decreases were offset by increase in current maturities of long-term borrowings to ₹15,051.41 crores as at March 31, 2019, as compared to ₹10,956.12 crores as at March 31, 2018.

Trade payables were ₹68,513.53 crores as at March 31, 2019, as compared to ₹72,038.41 crores as at March 31, 2018. The number of day's payable outstanding is 110 days in FY 2018-19 compared to 121 days in FY 2017-18. The Consolidated cash conversion cycle indicates the time, the Company takes to collect cash from sale of inventory. It is calculated as trade receivables (in days) plus inventory (in days) less trade payable (in days). The status as at March 31, 2019 and 2018, is as follows:

	As at March 31,	
	2019	2018
	(Number of days)	
Tata Motors Ltd Consolidated	(39)	(47)
Jaguar Land Rover Automotive Plc.	(55)	(51)

Acceptances were ₹3,177.14 crores as at March 31, 2019, as compared to ₹4,901.42 crores as at March 31, 2018.

Provisions (current and non-current) were made towards warranty and employee benefit schemes. Short-term provisions are those, which are expected to be settled during next financial year. The details are as follows:

	As at March 31,		Change
	2019	2018	
	(₹ in crores)		
Long term provisions - non-current	11,854.85	10,948.44	906.41
Short term provisions – current	10,196.75	7,953.50	2,243.25
Total	**22,051.60**	**18,901.94**	**3,149.66**

i. Provision for warranty increased to ₹17,501.26 crores as at March 31, 2019, as compared to ₹15,935.10 crores as at March 31, 2018, an increase of ₹1,566.16 crores primarily at JLR.

ii. The provision for employee benefits obligations increased to ₹1,934.22 crores as at March 31, 2019, as compared to ₹844.64 crores as at March 31, 2018. The increase is due to provisions for employee separation cost at JLR of ₹954.40 crores.

iii. Provision for legal and product liability increased to ₹1,786.43 crores as at March 31, 2019, as compared to ₹1,319.87 crores as at March 31, 2018.

Other liabilities

	As at March 31,		Change
	2019	2018	
	(₹ in crores)		
Other liabilities - non current	13,922.21	11,165.19	2,757.02
Other liabilities – current	9,546.46	7,634.55	1,911.91
Total	**23,468.67**	**18,799.74**	**4,668.93**

These mainly includes liabilities towards employee benefits obligations of ₹6,110.12 crores as at March 31, 2019, as compared to ₹4,100.76 crores as at March 31, 2018, increase mainly at Jaguar Land Rover. Contract liabilities were ₹9,250.47 crores as at March 31, 2019, as compared to ₹7,867.89 crores as at March 31, 2018. Statutory dues (VAT, Excise, Service Tax, Octroi etc.) were ₹3,913.94 crores as at March 31, 2019, as compared to ₹3,176.86 crores as at March 31, 2018. Government Grants increased to ₹3,278.37 crores as at March 31, 2019 as compared to ₹2,976.65 crores as at March 31, 2018.

Consolidated Cash Flow

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

	FY 2018-19	FY 2017-18	Change
	(₹ in crores)		
Cash from operating activity	**18,890.75**	**23,857.42**	**(4,966.67)**
Profit for the year	(28,724.20)	9,091.36	
Adjustments for cash flow from operations	57,486.63	24,220.92	
Changes in working capital	(7,212.25)	(6,433.70)	
Direct taxes paid	(2,659.43)	(3,021.16)	
Cash from investing activity	**(19,711.09)**	**(26,201.61)**	**6,490.52**
Payment for property, plant and equipment and other intangible assets (net)	(35,236.29)	(35,048.62)	
Net investments, short term deposit, margin money and loans given	14,532.42	6,359.13	
Dividend and interest received	992.78	2,487.88	
Net Cash from / (used in) Financing Activities	**8,830.37**	**2,011.71**	**6,818.66**
Dividend Paid (including paid to minority shareholders)	(94.74)	(95.96)	
Interest paid	(7,005.09)	(5,410.64)	
Net Borrowings (net of issue expenses)	15,930.20	7,518.31	
Net increase / (decrease) in cash and cash equivalent	**8,010.03**	**(332.48)**	**8,342.51**
Cash and cash equivalent, beginning of the year	14,716.75	13,986.76	
Effect of exchange fluctuation on cash flows	(1,410.92)	1,306.41	
Classified as held for sale	-	(243.94)	
Reversal of opening held for sale adjustment	243.94	-	
Cash and cash equivalent, end of the year	**21,559.80**	**14,716.75**	

a) Cash generated from operations before working capital changes was ₹28,762.43 crores in FY 2018-19, as compared to ₹33,312.28 crores in the previous year, representing a decrease in cash from generated from consolidated operations. After considering the impact of working capital changes including the net movement of vehicle financing portfolio, the net cash generated from operations was ₹18,890.75 crores in FY 2018-19, as compared to ₹23,857.42 crores in the previous year. The increase in finance receivables offset by decrease in trade receivables, inventories and other assets, amounting to ₹6,515.44 crores mainly due to increase in sales was coupled with decrease in trade and other payables and provisions amounting to ₹696.81 crores.

b) The net cash outflow from investing activity decreased to ₹19,711.09 crores in FY 2018-19 from ₹26,201.61 crores in FY 2017-18..

- Capital expenditure (net) was at ₹35,236.29 crores in FY 2018-19, compared to ₹35,048.62 crores, related mainly to capacity/ expansion of facilities, quality and reliability projects and product development projects.
- Net investments, short-term deposits, margin money and loans given was an inflow of ₹14,532.42 crores in FY 2018-19 as compared to inflow of ₹6,359.13 crores in FY 2017-18, mainly at Jaguar Land Rover.

c) The net change in financing activity was an inflow of ₹8,830.37 crores in FY 2018-19 as compared to ₹2,011.71 crores in FY 2017-18.

- In FY 2018-19, ₹12,755.97 crores were raised from long-term borrowings (net) as compared to ₹4,557.96 crores (net) in FY 2017-18 as described in further detail below
- Net increase in short-term borrowings of ₹3,174.23 crores in FY 2018-19 as compared to ₹2,960.35 crores in FY 2017-18, mainly at Tata and other brand vehicles (including vehicle financing).

d) There has been a net outflow in the Free cash flows of ₹16,345.54 crores due to lower growth and higher investments in Jaguar Land Rover.

As at March 31, 2019, the Company's borrowings (including short-term debt) were ₹1,06,175.34 crores, compared to ₹88,950.47 crores as at March 31, 2018..

KEY FINANCIAL RATIOS

The details of significant changes (25% or more) in the key financial ratios in FY 2019 compared to 2018 is as follows:

	FY 2018-19	FY 2017-18	Formula used	Reason for change
Debt Equity ratio (in times)	1.76	0.93	Total Debt / Shareholders Equity	The Consolidated debt has increased by 19% in FY 2018-19 compared to FY 2017-18. The Shareholders equity has been reduced due to impairment charge of GB£3,105 million taken in FY 2018-19 for Jaguar Land Rover.
Interest coverage ratio (in times)	0.66	2.52	EBIT as per segment / Interest expense	Due to higher Interest cost and lower sales at Jaguar Land Rover, the interest coverage ratio is low.
Net profit margin (%)	(10)	3	Net Profit / Revenue from operation	Due to subdued business performance at Jaguar Land Rover and impairment charge of GB£3,105 million in FY 2018-19, there has been a loss resulting in negative Net profit margin.

Principal Sources of Funding Liquidity

The Company finances its capital expenditures and research and development investments through cash generated from operations, cash and cash equivalents, debt and equity funding. The Company also raises funds through sale of investments, including divestment in stakes of subsidiaries on a selective basis.

The Company's cash and bank balances on a consolidated basis were ₹32,648.82 crores as at March 31, 2019, as compared to ₹34,613.91 crores as at March 31, 2018. These enable the Company to cater to business needs in the event of changes in market conditions.

The Company's capital expenditures were ₹36,635.67 crores and ₹42,672.29 crores for FY 2018-19 and FY 2017-18, respectively, and it currently plans to invest approximately ₹450 billion in FY 2018-19 in new products and technologies. The Company intends to continue to invest in new products and technologies to meet consumer and regulatory requirements. These investments are intended to enable the Company to pursue further growth opportunities and improve the Company's competitive positioning.

The Company expects to meet most of its investments out of operating cash flows and cash liquidity available. In order to meet the remaining funding requirements, the Company may be required to raise funds through additional loans and by accessing capital markets from time to time, as deemed necessary.

With the ongoing need for investments in products and technologies, the Company on a consolidated basis has free cash flow (a non-GAAP measure, measured at cash flow from operating activities, less payment for property, plant and equipment and intangible assets) negative in FY 2018-19, of ₹16,346 crores. The cash flow from financing arm is negative ₹7,177 crores. Net Automotive cash flow is negative ₹9,169 crores. The Company expects that with the improvement in macro-economic conditions and business performance, through other steps like raising funds, review of non-core investments, and through appropriate actions for raising additional long-term resources, the funding gap can be appropriately addressed.

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 at March 31, 2019: Credit Analysis and Research Ltd Ratings, or CARE, Information and Credit Rating Agency of India Ltd, or ICRA, Credit Rating Information Services of India Limited, or CRISIL Ltd, Standard & Poor's Ratings Group, or S&P, and Moody's Investor Services, or 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:

	CARE	ICRA	CRISIL	S&P	Moody's
Long-term borrowings	AA	AA	AA	B+	Ba2
Short-term borrowings	A1+	A1+	A1+	—	—

The Company believes that it has sufficient liquidity available to meet its planned capital requirements. However, the Company's sources of funding could be materially and adversely affected by an economic slowdown, as was witnessed in Fiscal 2009, or other macroeconomic factors in India and abroad, such as in the United Kingdom, the United States, Europe, Russia and China, all of which are beyond the Company's control. A decrease in the demand for the Company's vehicles could affect its ability to obtain funds from external sources on acceptable terms or in a timely manner.

The Company's cash is located at various subsidiaries within the Tata Motors Group. There may be legal, contractual or economic restrictions on the ability of subsidiaries to transfer funds to the Company in the form of cash dividends, loans, or advances. Brazil, Russia, South Africa and other jurisdictions have regulatory restrictions, disincentives or costs on pooling or transferring of cash. However, such restrictions have not had and are not estimated to have a significant impact on the Company's ability to meet its cash obligations.

In order to refinance the Company's borrowings and for supporting long-term fund needs, the Company continued to raise funds in FY 2017-18 and 2019, through issue of various debt securities and loans as described below.

The Company successfully completed liability management exercise by part refinancing of US$500 million notes due for repayment on April 30, 2020. The Company raised ECB of US$237.468 million maturing in June 2025 which was used to repay the investors, who had surrendered their bonds through the tendering process.

During FY 2018-19, Tata Motors Limited raised unsecured term loans of ₹1500 crores from banks for ongoing capital spending requirements.

During FY 2018-19, JLR issued EUR500 million senior notes due in 2026 at a coupon of 4.50% per annum. JLR also raised US$1,000 million through syndicated loan. The proceeds were for general corporate purposes, including support for JLR's ongoing growth and capital spending requirements.

During FY 2018-19, TMFHL and its subsidiaries, Tata Motors Finance Limited and TMFSL, raised ₹2,066 crores (Face Value) by issuing NCDs. Bank borrowings through secured term loans continued to be a major source of funds for long-term borrowing and raised ₹6,306 crores during FY 2018-19. TMFL has also done securitization of ₹3,862 crores in FY 2018-19.

The Tata Motors Group funds its 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-and medium-term borrowings and debentures are generally matched to particular cash flow requirements. The working capital limits are ₹10,000 crores from various banks in India as at March 31, 2019. The working capital limits are secured by hypothecation of certain existing current assets of the Company. The working capital limits are renewed annually.

Jaguar Land Rover Automotive plc currently has a GB£1,935 million revolving credit facility with a syndicate of 30 banks, maturing in 2022. The revolving credit facility remained undrawn as at March 31, 2019.

Some of the Company's 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 investment in subsidiaries. In addition, certain negative covenants may limit the Company's ability to borrow additional funds or to incur additional liens, and/or provide for increased costs in case of breach. Certain of the Company's 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.

The Company monitors compliance with its financial covenants on an ongoing basis. The Company also reviews its refinancing strategy and continues to plan for deployment of long-term funds to address any potential non-compliance.

As at March 31, 2019, GB£262 million of cash was held by Jaguar Land Rover subsidiaries outside of the UK. The cash in some of these jurisdictions is subject to certain restrictions on cash pooling, intercompany loan arrangements or interim dividends. However, annual dividends are generally permitted and JLR do not believe that these restrictions have, or are expected to have, any impact on Jaguar Land Rover's ability to meet its cash obligations.

Certain debt issued by Jaguar Land Rover is subject to customary covenants and events of default, which include, among other things, restrictions or limitations on the amount of cash, which may be transferred outside the Jaguar Land Rover group of companies in the form of dividends, loans or investments to the Company 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 at March 31, 2019, the estimated amount that is available for dividend payments, other distributions and restricted payments was approximately GB£4,315 million.

FINANCIAL PERFORMANCE ON A STANDALONE BASIS

The financial information discussed in this section is derived from the Company's Audited Standalone Financial Statements. These include the Company's proportionate share of income and expenditure in its two Joint Operations, namely Tata Cummins Pvt Ltd and Fiat India Automobiles Pvt Ltd.

	FY 2018-19 (%)	FY 2017-18 (%)
Income from operations (net of excise duty)	100	100
Expenditure:		
Cost of material consumed (including change in stock)	73.1	72.7
Excise Duty	--	1.4
Employee cost	6.2	6.8
Product development/Engineering expenses	0.8	0.8
Other expenses (net)	14.0	15.7
Amount capitalised	(1.6)	(1.5)
Profit before other income, depreciation and amortisation, finance costs, foreign exchange loss, exceptional items and tax	7.5	4.1
Other income	3.7	4.2
Profit before depreciation and amortisation, finance costs, foreign exchange loss, exceptional items and tax	11.2	8.3
Depreciation and amortisation	4.5	5.3
Finance costs	2.6	3.0
Foreign exchange (gain)/loss	0.3	0.0
Exceptional items – loss	0.3	1.6
Profit/(loss) before tax	3.5	(1.6)
Tax expenses	0.6	0.2
Profit/(loss) after tax	2.9	(1.8)

FY 2018-19 has been a good year for the Company, followed a period of high demand in the automotive sector in India.

Income from operations of the Company for FY 2018-19, stood at ₹69,202.76 crores as compared to ₹58,689.81 crores, an increase of 17.9%. Sale of vehicles stood at ₹61,357.95 crores as compared to ₹52,636.85 crores, an increase of 16.6%. Total number of vehicles sold were 732,428 units in FY 2018-19, as compared to 636,968 units in FY 2017-18, a growth of 15%. Sale of spare parts & miscellaneous products stood at ₹6,965.74 crores as compared to ₹5,231.19 crores, an increase of 33.2%.

FY 2018-19, was the first full year of benefits of the strategic Organization Effectiveness (OE) program, designed to overhaul and transform the organizational structure of the company. As a result of the OE program, the company has drawn separate strategies for commercial vehicles and passenger vehicles from FY 2018-19.

Consequent to these changes, from April 1, 2018, the operating segments of the Company are as follows as at March 31, 2019 and 2018:

(₹ in crores)

	FY 2018-19		FY 2017-18	
	Revenue	Earnings before Interest and Tax (EBIT)	Revenue	Earnings before Interest and Tax (EBIT)
Commercial vehicles	54,036.54	4,423.50	44,875.54	3,474.29
Passenger vehicles	15,052.30	(1,396.08)	13,644.58	(2,985.13)
Corporate/ Unallocable	113.92	(349.92)	169.69	(265.45)

Cost of materials consumed (including change in stock)

	FY 2018-19	FY 2017-18
	(₹ in crores)	
Consumption of raw materials and components	43,748.77	37,080.45
Purchase of product for sale	6,722.32	4,762.41
Change in inventories of finished goods, Work-in-progress and products for sale	144.69	842.05
Total	**50,615.78**	**42,684.91**

Cost of material consumed increased from 72.7% of total revenue to 73.1% in FY 2018-19, representing an increase of 40 bps, mainly due to product mix.

Excise duty Consequent to the introduction of Goods and Service Tax (GST) with effect from July 1, 2017, Central Excise, Value Added Tax (VAT) etc. have been replaced by GST. Excise duty for FY 2017-18 was ₹793.28 crores.

Employee Costs were ₹4,273.10 crores in FY 2018-19 as compared to ₹3,966.73 crores in FY 2017-18, an increase by 7.7%, mainly due to higher volumes, annual increments, higher bonus and performance payment provisions for FY 2018-19 and wage revisions at some plant locations. The number of employees in TML Standalone only were 27,572 as at March 31, 2019, as compared to 24,922 as at March 31, 2018. The Company has given share based payments to certain employees, resulting in a charge of ₹8.44 crores in FY 2018-19.

Other Expenses includes all works operations, indirect manufacturing expenses, freight cost, fixed marketing costs and other administrative costs. These expenses have increased by 4.8% to ₹9,680.46 crores in FY 2018-19 from ₹9,234.27 crores in FY 2017-18. The breakdown is provided below:

	FY 2018-19	FY 2017-18	Change
		(₹ in crores)	
Processing charges	1,567.89	1,240.88	327.01
Consumption of stores & spare parts	617.67	639.35	(21.68)
Freight, transportation, port charges, etc.	1,865.62	1,703.15	162.47
Power and fuel	598.62	545.12	53.50
Warranty expenses	999.47	766.18	233.29
Information technology/ computer expenses	714.17	711.95	2.22
Publicity	736.13	720.18	15.95
Allowances made/(reversed) for trade and other receivables	170.90	(109.19)	280.09
Assets scrapped/written off	230.28	995.47	(765.19)
Works operation and other expenses	2179.71	2,021.18	158.53
Other Expenses	9,680.46	9,234.27	446.19

The changes are mainly driven by volumes and the size of operations.

i. Freight, transportation, port charges etc., as a percentage to total revenue, were 2.7% in FY 2018-19, as compared to 2.9% in FY 2017-18. The increase in absolute amount is due to higher vehicle sales in FY 2018-19.

ii. Publicity expenses represented 1.1% of total revenues in FY 2018-19 and 1.2% in FY 2017-18. In addition to routine product and brand campaigns, the Company incurred expenses relating to new product introduction campaigns for the Harrier etc.

iii. Warranty expenses represented 1.4% and 1.3%, of the Company's revenues in FY 2018-19 and 2018, respectively. The increase was due to increased volumes of M&HCV. Further, the Company has increased product warranty period for certain vehicles from four years to six years effective from January 1, 2018.

iv. Information technology/computer expenses represented 1% and 1.2% of the Company's revenues in FY 2018-19 and 2018, respectively.

v. Allowances made for trade and other receivables of ₹170.90 crores in FY 2018-19, In FY 2018, there was a reversal due to favorable litigation orders.

vi. Assets written off were ₹230.28 crores in FY 2018-19, as compared to ₹995.47 crores in FY 2017-18.

vi. Works operation and other expenses have decreased to 3.1% of net revenue in FY 2018-19 from 3.4% in FY 2017-18. The Company has run certain impact projects thereby reducing its fixed costs. In absolute terms the expenses increased by ₹158.53 crores in FY 2018-19. The Company has subscribed to the Tata Brand Equity & Brand Promotion Agreement, for which the Company has to pay an annual subscription of 0.25% of the annual net income, subject to a ceiling of 5% of the annual profit before tax. In view of profits in FY 2018-19, there is an accrual for such fees..

Product development/engineering expenses The Company introduced the factor of "affordability" of investments w.e.f. April 1, 2018 for capitalization of product development costs. Accordingly, the amount written off increased by 20.4% to ₹571.76 crores in FY 2018-19 from ₹474.98 crores in FY 2017-18.

Amount transferred to capital and other account represents expenditure transferred to capital and other accounts allocated out of employee cost and other expenses, incurred in connection with product development projects and other capital items. The expenditure transferred to capital and other accounts has increased by 27.8% to ₹1,093.11 crores in FY 2018-19 from ₹855.08 crores in FY 2017-18, mainly due to various product development projects undertaken by the Company for the introduction of new products, BS6 and the development of engine and products variants.

Other Income increased by 2.5% to ₹ 2,554.66 crores in FY 2018-19 from ₹2,492.48 crores in FY 2017-18. This includes interest income of ₹335.87 crores in FY 2018-19, compared to ₹397.71 crores in FY 2017-18. Dividend income increased to ₹1,526.25 crores in FY 2018-19 from ₹1,054.69 crores in FY 2017-18, whereas profit on sale of investment decreased to ₹69.27 crores in FY 2018-19, compared to ₹103.17 crores in FY 2017-18.

Profit before depreciation and amortization, finance costs, foreign exchange loss, exceptional items and tax is ₹7,709.43 crores in FY 2018-19, representing 11.1% of revenue, compared to ₹4,883.20 crores (8.3% of revenue) in FY 2017-18.

Depreciation and amortization: During FY 2018-19, expenditures decreased marginally to ₹3,098.64 crores from ₹3,101.89 crores in FY 2017-18. The depreciation has increased by 2.2% to ₹2,017.45 crores as compared to ₹1,973.94 in FY 2017-18. The amortization expenses have decreased by 4.1% to ₹1,081.19 crores in FY 2018-19 from ₹1,127.95 crores in FY 2017-18, and are mainly attributable to product development costs.

Finance Cost has increased by 2.8% to ₹1,793.57 crores in FY 2018-19 from ₹1,744.43 crores in FY 2017-18. The increase is attributable to higher interest rates.

Foreign exchange loss of ₹215.22 crores in FY 2018-19 as compared to loss of ₹17.14 crores in FY 2017-18. The loss was due to depreciation on INR as compared to US$.

Exceptional items

	FY 2019	FY 2018	Change
		(₹ in crores)	
Employee separation cost	4.23	3.68	0.55
Provision for impairment of investment in subsidiary companies	241.86	-	241.86
Impairment of capitalized fixed assets	180.66	962.98	(782.32)
Profit on sale of investment in subsidiary co.	(332.95)	-	(332.95)
Others	109.27	-	109.27
Total	**203.07**	**966.66**	**(763.59)**

i. Employee separation cost: The Company has given early retirement to certain employees resulting in expenses in FY 2018-19 and FY 2017-18.

ii. The Company has made provision of ₹241.86 crores during FY 2018-19 for certain of its investments in subsidiary companies, due to continued losses.

iii. In order to make the Company fit for future certain product development programs were reviewed and accordingly an impairment charge of ₹180.66 crores were taken during FY 2018-19, as compared to ₹962.98 crores in FY 2017-18.

iv. In FY 2018-19, the Company has sold investment in TAL Manufacturing Solutions Limited to Tata Advanced Systems Ltd.

iv. The Company has entered into an agreement for transfer of its Defence undertaking, which had a value of ₹209.27 crores as at December 31, 2017 to Tata Advanced Systems Ltd (transferee company), for an upfront consideration of ₹100 crores and a future consideration of 3% of the revenue generated from identified Specialized Defence Projects for upto 15 years from FY 2019-20 subject to a maximum of ₹1,750 crores. The future consideration of 3% of revenue depends on future revenue to be generated from the said projects by the transferee company. On account of the same, the Company has recognized a provision of ₹109.27 crores, which may get reversed in future once projects start getting executed from FY 2019-20 onwards.

Profit before tax was ₹2,398.93 crores in FY 2018-19, compared to a loss of ₹946.92 crores in FY 2017-18. In FY 2017-18, though the Company performed well in terms of sales and revenue and reducing the costs, the losses were due to certain one-time charges to make the Company "fit for future".

Tax Expense represents a net charge of ₹378.33 crores in FY 2018-19, as compared to ₹87.93 crores in FY 2017-18. The increase was mainly due to better performance of the Company including its Joint operations.

Profit after tax was ₹2,020.60 crores in FY 2018-19 as compared loss of ₹1,034.85 crores in FY 2017-18.

Standalone Balance Sheet

Property, plant and equipment and Other Intangible assets.

(₹ in crores)

	As at March 31,		Change
	2019	2018	
Property, plant and equipment (including capital work-in-progress)	20,463.57	19,563.97	899.60
Other intangible assets (including assets under development)	8,010.76	7,137.29	873.47
Total	**28,474.33**	**26,701.26**	**1,773.07**

There is increase (net of depreciation and amortization) in the intangible and tangible assets in FY 2018-19, mainly due to new product introduction.

Investments in subsidiaries, joint ventures and associates were ₹15,028.62 crores as at March 31, 2019, as compared to ₹14,632.51 crores as at March 31, 2018. During FY 2018-19, the Company made additional investments of ₹600 crores in Tata Motors Finance Holdings Ltd.

Investments (Current + Non-current) were ₹1,838.75 crores as at March 31, 2019, as compared to ₹2,131.06 crores as at March 31, 2018. The details are as follows:

(₹ in crores)

	As at March 31,		Change
	2019	2018	
Mutual Funds	1,174.46	1,517.03	(342.57)
Quoted Equity shares	271.08	303.84	(32.77)
Unquoted Equity shares	393.21	310.19	83.03
Total	**1,838.75**	**2,131.06**	**(292.31)**

There was decrease in mutual fund investments in FY 2018-19. Decrease in quoted equity shares were due to decrease in market value as at March 31, 2019. Increase in unquoted equity shares is due to unrealized fair value gains as at March 31, 2019.

Loans and Advances

(₹ in crores)

	As at March 31,		Change
	2019	2018	
Long term loans and advances	143.13	143.96	(0.83)
Short term loans and advances	200.08	140.27	59.81
Total	**343.21**	**284.23**	**58.98**

Loans and advances include advance to suppliers, contractors etc. Advance and other receivables increased to ₹129.55 crores as at March 31, 2019, as compared to ₹68.03 crores as at March 31, 2018.

Other Financial Assets

(₹ in crores)

	As at March 31,		Change
	2019	2018	
Other financial assets - non current	994.39	793.40	200.99
Other financial assets – current	1,279.68	646.31	633.37
Total	**2,274.07**	**1,439.71**	**834.36**

The above includes ₹997.03 crores as at March 31, 2019 on account of accrual of Government grants receivable as compared to ₹878.54 of FY 2017-18. Further, it also consists of ₹392.00 crores of derivative financial instruments, as at March 31, 2019 compared to ₹242.34 crores as at March 31, 2018, reflecting notional asset due to the valuation of derivative contracts. The increase is also due to deposits placed with financial institutions of ₹500.00 crores as at March 31, 2019.

Inventories as at March 31, 2019, were ₹4,662 crores as compared to ₹5,670.13 crores as at March 31, 2018, a decrease of 17.8%. In terms of number of days of sales, finished goods represented 11 inventory days in FY 2018-19 as compared to 15 days in FY 2017-18.

Trade Receivables (net of allowance for doubtful debts) were ₹3,250.64 crores as at March 31, 2019, representing a decrease of 6.6% compared to ₹3,479.81 crores as at March 31, 2018. The allowances for doubtful debts were ₹600.86 crores as at March 31, 2019 compared to ₹543.50 crores as at March 31, 2018. In terms of days of sales, trade receivables represent 18 days in FY 2018-19 as compared to 17 days in FY 2017-18.

Cash and cash equivalents were ₹487.40 crores, as at March 31, 2019, compared to ₹546.82 crores as at March 31, 2018.

Other bank balances were ₹819.21 crores, as at March 31, 2019, compared to ₹248.60 crores as at March 31, 2018. These include earmarked balances with banks of ₹169.21 crores as at March 31, 2019, compared to ₹248.53 crores as at March 31, 2018 & also includes Bank deposits of ₹650 crores, as at March 31, 2019.

Current tax assets (net) (current + non-current) were ₹715.30 crores, as at March 31, 2019, compared to ₹769.63 crores as at March 31, 2018.

Other assets

(₹ in crores)

	As at March 31,		Change
	2019	2018	
Other assets - non current	1,819.90	1,546.39	273.51
Other assets – current	934.87	1,439.73	(504.86)
Total	**2,754.77**	**2,986.12**	**(231.35)**

a) Taxes recoverable, statutory deposits and dues from government decreased to ₹1,561.81 crores as at March 31, 2019, as compared to ₹1,978.74 crores as at March 31, 2018.

The above was offset by:

b) Capital advances which increased to ₹374.95 crores as at March 31, 2019, as compared to ₹285.54 crores as at March 31, 2018.

c) Recoverable form insurance companies increased to ₹354.56 crores as at March 31, 2019 as compared to ₹212.96 crores as at March 31, 2018..

Shareholders' fund was ₹22,162.52 crores and ₹20,170.98 crores as at March 31, 2019 and 2018, respectively, an increase of 9.9%.

Reserves increased by 10.2% from ₹19,491.76 crores as at March 31, 2018 to ₹21,483.30 crores as at March 31, 2019, mainly due to profits for FY 2018-19.

Borrowings

(₹ in crores)

	As at March 31,		Change
	2019	2018	
Long term borrowings	13,919.81	13,155.91	763.90
Short term borrowings	3,617.72	3,099.87	517.85
Current maturities of long term borrowings	1,102.10	2,208.06	(1,105.96)
Total	18,639.63	18,463.84	175.79

Current maturities of long-term borrowings represent the amount of loan repayable within one year.

Other financial liabilities

(₹ in crores)

	As at March 31,		Change
	2019	2018	
Other financial liabilities - non current	180.80	211.28	(30.48)
Other financial liabilities – current	2,237.98	4,091.16	(1,853.18)
Total	2,418.78	4,302.44	(1,883.66)

Financial guarantee contracts is ₹NIL as at March 31, 2019, as compared to ₹977.26 crores as at March 31, 2018. Further, current maturities of long-term borrowings were ₹1,102.10 crores as at March 31, 2019 as compared to ₹2,208.06 crores as at March 31, 2018. Furthermore, interest accrued but not due on borrowings were ₹373.04 crores as at March 31, 2019 as compared to ₹500.06 crores as at March 31, 2018. These decreases were offset by increase in deposits and retention money to ₹397.06 crores as at March 31, 2019, as compared to ₹186.44 crores as at March 31, 2018.

Trade payables were ₹10,408.83 crores as at March 31, 2019, as compared to ₹9,411.05 crores as at March 31, 2018, mainly due to creditors for goods supplied and services received, liabilities for variable marketing expenses etc. The number of day's payable outstanding is 63 days in FY 2018-19 compared to 68 days in FY 2017-18. The cash conversion cycle as at March 31, 2019 is negative 21 days in FY 2018-19 as compared to negative 16 days in FY 2017-18.

Acceptances were ₹3,093.28 crores as at March 31, 2019, as compared to ₹4,814.58 crores as at March 31, 2018.

Provisions (current and non-current) were made towards warranty and employee benefit schemes. Short-term provisions are those, which are expected to be settled during next financial year. The details are as follows:

(₹ in crores)

	As at March 31,		Change
	2019	2018	
Long term provisions (Non-current)	1,281.59	1,009.48	272.11
Short term provisions (Current)	1,148.69	862.92	285.77
Total	2,430.28	1,872.40	557.88

i. Provision for warranty increased to ₹1,612.37 crores as at March 31, 2019, as compared to ₹1,103.47 crores as at March 31, 2018, an increase of ₹508.90 crores, mainly due to increase in volumes, higher warranty cost for BS IV models and also increase of warranty period for certain vehicle models, w.e.f. January 1, 2018.

ii. The provision for employee benefits obligations were at ₹739.53 crores as at March 31, 2019, as compared to ₹655.05 crores as at March 31, 2018.

Other liabilities

(₹ in crores)

	As at March 31,		
	2019	2018	Change
Other liabilities - non current	218.24	291.09	(72.85)
Other liabilities – current	2,356.01	1,917.60	438.41
Total	2,574.25	2,208.69	365.56

These mainly includes

a) Contact liabilities were ₹1,063.36 crores as at March 31, 2019, as compared to ₹1,063.01 crores as at March 31, 2018.

b) Government incentives increased to ₹324.22 crores as at March 31, 2019 as compared to ₹274.66 crores as at March 31, 2018.

c) Statutory dues (GST, VAT, Excise, Service Tax, Octroi etc.) were ₹1,091.92 crores as at March 31, 2019, as compared to ₹781.12 crores as at March 31, 2018.

Deferred tax liability represent timing differences where current benefit in tax will be offset by a debit in the statement of profit and loss. The amount increased to ₹205.86 crores as at March 31, 2019, as compared to ₹154.61 crores as at March 31, 2018.

Standalone Cash Flow

	FY 2019	FY 2018	Change
	(₹ in crores)		
Net cash from operating activities	**6,292.63**	**4,133.94**	**2,158.69**
Profit/(Loss) for the year	2,020.60	(1,034.85)	
Adjustments for cash flow from operations	4,146.39	5,125.70	
Changes in working capital	307.86	51.50	

	FY 2019	FY 2018	Change
	(₹ in crores)		
Direct taxes paid	(182.22)	(8.41)	
Net cash used in investing activities	**(3,820.55)**	**(710.27)**	**(3,110.28)**
Payment for Assets	(4,753.23)	(2,794.80)	
Net investments, short term deposit, margin money and loans given	(963.09)	630.50	
Dividend and interest received	1,895.77	1,454.03	
Net Cash used in financing activities	**(2,529.70)**	**(3,105.63)**	**575.93**
Dividend Paid (including paid to minority shareholders	(2.63)	(2.75)	
Interest paid	(2,354.70)	(2,098.44)	
Net Borrowings (net of issue expenses)	(172.37)	(1,004.44)	
Net increase / (decrease) in cash and cash equivalent	**(57.62)**	**318.04**	
Cash and cash equivalent, beginning of the year	546.82	228.94	
Effect of exchange fluctuation on cash flows	(1.80)	(0.16)	
Cash and cash equivalent, end of the year	**487.40**	**546.82**	

a) Increase in cash from operations reflects better business performance in FY 2018-19. The cash from operations before working capital changes was ₹6,167 crores in FY 2018-19 compared to ₹4,090.85 crores in FY 2017-18. There was a net inflow of ₹307.86 crores in FY 2018-19, as compared to ₹51.50 crores in FY 2017-18 towards working capital changes.

b) The net cash used in investing activities was ₹3,820.55 crores in FY 2018-19 compared to ₹710.27 crores in FY 2017-18, mainly attributable to:

- The cash used for payments for fixed assets was ₹4,753.23 crores (net) in FY 2018-19 compared to ₹2,794.80 crores in FY 2017-18 due to higher BS6 investments.
- Outflow by way of investments in subsidiary companies resulting in cash outflows of ₹837.98 crores in FY 2018-19 as compared to ₹300 crores in FY 2017-18.
- Outflow by way of deposits with financial institution resulting in cash outflow of ₹500 crores in FY 2018-19 as compared to ₹Nil in FY 2017-18.
- There was an outflow (net) of ₹570.64 crores in FY 2018-19 compared to ₹110.96 crores for FY 2017-18 towards Fixed / restricted deposits.
- Increase in Investments in mutual funds in FY 2018-19 was ₹413.74 crores as compared to increase of ₹1,025.59 crores in FY 2017-18.
- Inflow due to dividends and interest in FY 2018-19 was ₹1,895.77 crores as compared to ₹1,454.03 crores in FY 2017-18.

c) The net change in financing activity was an outflow of ₹2,529.70 in FY 2018-19 against inflow of ₹3,105.63 crores in FY 2017-18. The outflow is attributable to:

- Long-term borrowings (net) – outflow of ₹703.98 crores in FY 2018-19 as compared to inflow of ₹1,034.70 crores.
- Short-term borrowings (net) – inflow of ₹531.61 crores in FY 2018-19 as compared to outflow of ₹2,039.14 crores.
- In FY 2018-19, interest payment was ₹2,354.70 crores as compared to ₹2,098.44 crores in FY 2017-18.

d) There has been positive Free cash flows of ₹1,539.40 crores in FY 2018-19 due to improved performance mainly at Tata Motors Ltd.

KEY FINANCIAL RATIOS

The details of significant changes (25% or more) in the key financial ratios in FY 2018-19 compared to 2018 is as follows:

	FY 2018-19	FY 2017-18	Formula used	Reason for change
Inventory Turnover ratio (in times)	11.64	8.97	Cost of goods sold / Average Inventory	The inventory turnover ratio has improved in FY 2018-19 compared to FY 2017-18 as there has been reduction in Inventory and increase in Revenue from operations by 18%
Interest coverage ratio (in times)	1.49	0.13	EBIT as per segment / Interest expense	The interest coverage ratio has turned positive in FY 2018-19 compared to negative 0.42 in FY 2017-18. This is mainly due to better operational performance.
Net profit margin (%)	3	(2)	Net Profit / Revenue from operation	The net profit margin has improved substantially in FY 2018-19 compared to FY 2017-18 due to better operational performance.

FINANCIAL PERFORMANCE OF JAGUAR LAND ROVER (AS PER IFRS)

The financial statements of Jaguar Land Rover are prepared in accordance with International Financial Reporting Standards (IFRS) applicable in the United Kingdom. This information is given to enable the readers to understand the performance of Jaguar Land Rover [on a consolidated basis for the Jaguar Land Rover group.

Revenues for Jaguar Land Rover for FY 2018-19 were GB£24,214 million, a decrease of 6.1% compared to the GB£25,786 million in FY 2017-18, driven primarily by decreased wholesale volumes, primarily in China.

Material and other cost of sales in FY 2018-19 were of GB£15,670 million, down 4.0% compared to the GB£16,328 million in FY 2017-18 (and increased as a proportion of revenue to 64.7% in FY 2018-

19 compared to 63.3% in FY 2017-18) primarily driven by the decrease in sales volumes.

Employee costs increased by 3.6% to GB£2,820 million in FY 2018-19 compared to GB£2,722 million in FY 2017-18, primarily reflecting the higher average number of employees in FY 2018-19 compared to FY 2017-18.

Other expenses (net of income) decreased by 4.1% to GB£5,567 million in FY 2018-19 compared to GB£5,846 million in FY 2017-18.

Product development costs capitalized decreased by 2.1% to GB£1,576 million in FY 2018-19 compared to GB£1,610 million in FY 2017-18 primarily related to the development of future models, technologies and production facilities.

EBITDA was GB£1,981 million (8.2% margin) in FY 2018-19, compared to the EBITDA of GB£2,794 million (10.8% margin) in FY 2017-18, primarily reflecting the lower wholesales, particularly in China, higher incentive and warranty costs, partially offset by Project Charge cost efficiencies and favourable realized foreign exchange movements.

The loss before interest tax and exceptional charges (EBIT) was negative GB£180 million (0.7% margin) in FY 2018-19, compared to the EBIT of GB£971 million (3.8% margin) in FY 2017-18 due to the lower EBITDA as well as an increase in depreciation and amortization and lower profits from the China joint venture.

The loss before tax ("PBT") before exceptional item of GB£358 million in FY 2018-19 compared to profit of GB£1,074 million in FY 2017-18, as the lower EBIT, explained by higher interest costs and unfavourable revaluation of foreign currency debt and hedges in FY 2018-19 compared to favourable revaluation in the previous year. In Q3 of FY 2018-19, JLR concluded that the carrying value of assets should be written down, resulting in a GB£3,105 million pre-tax exceptional charge. In Q4 FY 2018-19, JLR implemented a redundancy programme to deliver ongoing cost savings and to capture the one-time separation costs an exceptional charge of GB£149 million was recognized. After these exceptional items the loss before tax was GB£3,629 million in FY 2018-19 compared to PBT of GB£1,512 million (including GB£437 million exceptional pension credit) in FY 2017-18.

The loss after tax was GB£3,321 million in FY 2018-19 compared to PAT of GB£1,114 million in FY 2017-18. The losses incurred in FY 2018-19 resulted in a GB£308 million tax credit compared to GB£398 million tax charge in FY 2017-18 (26.3% effective tax rate).

Net cash generated from operating activities was GB£2,253 million in FY 2018-19 compared to GB£2,958 million in FY 2017-18, primarily reflecting the loss in FY 2018-19, partially offset by GB£405 million of working capital inflows (GB£81 million working capital inflow in FY 2017-18), and GB£22 million of dividends received from the China joint venture compared to GB£206 million of dividends received in FY 2017-18. In addition GB£227 million was paid in tax in FY 2018-19 compared to GB£312 million in FY 2017-18.

After GB£3,389 million of investment spending (excluding GB£421 million of expensed Research and Development), GB£178 million of net interest (including the payment of lease obligations) expense and GB£47 million of other inflows and adjustments, free cash flow was negative GB£1,267 million. The net increases in debt of GB£613 million reflects the issuance of a EUR500 million bond in September 2018, the completion and draw down of the US$1 billion loan in October 2018, partially offset by the maturity of the US$700 million bond in December 2018 and a GB£54 million reduction in drawings under an uncommitted invoice discounting facility wound down ahead of its expiry in April and replaced with a newly established US$700 million committed invoice discounting facility. A dividend of GB£225 million was paid to Tata Motors in June 2018 and GB£3 million of other distributions were paid during the year. As a result Jaguar Land Rover had a total cash balance of GB£3,775 million (comprising GB£2,747 million of cash and cash equivalents and GB£1,028 million of financial deposits) as at March 31, 2019 compared to GB£4,657 million of total cash as at March 31, 2018 (comprising GB£2,626 million of cash and cash equivalents and GB£2,031 million of financial deposits). With total cash of GB£3,775 million and an undrawn revolving credit facility of GB£1,935 million (maturing in July 2022), total liquidity available to Jaguar Land Rover was GB£5,710 million as at March 31, 2019, compared to GB£6,592 million as at March 31, 2018.

FINANCIAL PERFORMANCE OF TMF HOLDINGS LTD AT CONSOLIDATED BASIS (AS PER IND AS)

Consolidated revenue for TMF Holdings during FY 2018-19 increased 36.7% to ₹3,974.57 crores, compared to ₹2,908.47 crores in FY 2017-18. The Profit before tax was ₹122.64 crores in FY 2018-19 compared to ₹30.69 crores in FY 2017-18. The Profit after tax was ₹163.97 crores in FY 2018-19, as compared to ₹76.34 crores in previous year. The GNPA reduced by 139 bps to 2.57% (measured on 90 days basis). NNPA at 1.37%.

FINANCIAL PERFORMANCE OF TATA DAEWOO COMMERCIAL VEHICLES (AS PER KOREAN GAAP)

During FY 2018-19, TDCV, registered revenues of KRW 651.36 billion (₹4,090 crores), a drop of 25.0% over the previous year revenues of KRW 868.26 billion (₹5,035 crores), mainly due to lower domestic sales and market slowdown. The loss after tax was KRW 28.02 billion (₹179 crores) compared to profit after tax of KRW 33.66 billion (₹203 crores) of FY 2017-18. Lower absorption of fixed cost due to lower production and lower sales has resulted into lower profitability during the year as compared to previous year which was partially offset the impact of lower sales which was partially set off by material cost reduction

FIANNCIAL PERFORMANCE OF TATA TECHNOLOGIES LTD

The consolidated revenue of TTL in FY 2018-19 increased by 9.3% to ₹2,942.21 crores, compared to ₹2,691.48 crores in FY 2017-18. The profit before tax increased by 39.9% to ₹470.94 crores in FY 2018-19, compared to ₹336.53 crores in FY 2017-18. The profit after tax increased by 43.3% to ₹352.60 crores in FY 2018-19, as compared to ₹245.81 crores in FY 2017-18. The Company witnessed increase in revenue due to favourable currency movement which helped in growth of revenue in UK & Europe and North America, the growth in APAC Revenue was primarily driven by strong revenue growth in India & China in key accounts and growth in educational product sales. There has been increase in purchase of traded products, employee costs and other expenses partially offset by outsourcing and consultancy charges, leading to an increase in profits.

INTERNAL CONTROL SYSTEMS AND THEIR ADEQUACY

The Company has an adequate system of internal controls in place. It has documented policies and procedures covering all financial and operating functions. These controls have been designed to provide a reasonable assurance with regard to 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. The Company has continued its efforts to align all its 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 the Company's different locations, dealers and vendors for efficient and seamless information exchange. The Company also maintains a comprehensive information security policy and undertakes continuous upgrades to its 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, the Company's business units and corporate functions address risks through an institutionalized approach aligned to the Company's objectives. 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.

During FY 2018-19, the Company conducted an assessment of the effectiveness of the Internal Control over Financial Reporting and has determined that the Company's Internal Control over Financial Reporting for Tata Motors Limited, its subsidiary companies, its joint operation companies, its associates and joint ventures which are companies incorporated in India as at March 31, 2019 is effective.

The Company identified certain control weaknesses in its subsidiary Jaguar Land Rover during FY 2018-19. The management has performed additional procedures and confirmed that there are no material misstatements in the financial statement. However, the Company's annual report in Form 20-F to be submitted to Securities Exchange Commission, USA is being finalized and hence the final assessment and reporting of internal control over financial reporting, for Jaguar Land Rover is pending.

HUMAN RESOURCES / INDUSTRIAL RELATIONS

The Company considers its human capital a critical factor to its 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 Company human resource strategy, it has implemented various initiatives in order to build better organizational capabilities that the Company believe will enable it 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:

- Development of an agile organization through process modification, delayering and structure alignment and increase in customer facing roles;
- Changed organization structure has empowered teams, across each product lines, which will manage the product lifecycle and be accountable for the Profit and Loss;
- Extensive process mapping exercises to benchmark and align the human resource processes with global best practices;
- Outsource transactional activities to an in house back office (Global Delivery Center), thereby reducing cost and time of transaction;
- Talent management process redesigned with a stronger emphasis on identifying future leaders;
- 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;
- Functional academies setup for functional skills development;
- 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 cyclicity of demand as well.

The Company employed approximately 82,797 and 81,090 permanent employees as at March 31, 2019 and 2018, respectively. The average number of flexible (temporary, trainee and contractual) employees for FY 2018-19, was approximately 31,647 (including joint operations) compared to 38,017 in FY 2017-18.

The following table set forth a breakdown of persons employed by the Company's business segments and by geographic location as at March 31, 2019 and 2018.

	As at March 31,	
	2019	2018
Segment	**No. of Employees**	
Automotive	73,394	72,151
Other	9,403	8,939
Total	**82,797**	**81,090**
Location	**No. of Employees**	
India	41,655	41,295
Abroad	41,142	39,795
Total	**82,797**	**81,090**

Training and Development The Company has committed to the development of its employees to strengthen their functional, managerial and leadership capabilities. The Company has a focused approach with the objective of addressing all capability gaps and preparing its employees to adopt to fast changing external environment in order to meet its strategic objectives.

To achieve this, the Company has established the Tata Motors Academy, which addresses development needs of various segments of its workforce through a structured approach. The Tata Motors Academy focuses on three functional pillars – customer excellence, product leadership, and operational excellence – and one pillar on 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, and the emphasis of management education is 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.

As an integral part of the Tata Motors Academy, the Company's Learning Advisory Council, which includes senior leaders from different parts of organization, aims to align its learning and development efforts, more closely with its business needs and priorities. The Learning Advisory Council is responsible for providing guidance and strategic direction to the Academies to design, implement and review the learning agenda.

The Company is 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 learned at training institutes. These skills are very specific and not currently taught at the training institutes. To accomplish this, the Company is 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.

Union Wage Settlements The Company has labour unions for operative grade employees at all its plant across India, except Dharwad plant. The Company has generally enjoyed cordial relations with its employees at its factories and offices and have 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, 2019
Mumbai	December 31, 2018
Lucknow	March 31, 2020
Pantnagar	March 31, 2019
Jaguar Land Rover – UK Plants	Negotiations ongoing

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 attendance. The Company has generally received union support in its implementation of reforms that impact quality, cost erosion and productivity improvements across all locations in addition to this this time we have signed settlement with a variable as part of wage cost and stagger payment instead of one time pay to be bring more cost effectiveness on account of fixed pay.

JAGUAR LAND ROVER

Automotive apprenticeships

Jaguar Land Rover has always focused on the safety, security, wellbeing and development of the people. The Company nurture and retain talent through the Jaguar Land Rover Academy, an environment offering accredited learning for the employees at every stage of their career. Actively shaping education and contributing to the skills development available to our communities is part of our long-term recruitment strategy. So too is continuing JLR's successful apprentice and graduate programme, working closely with academic partners such as Warwick Manufacturing Group.

Closing the gender gap and a digital call for the worlds brightest and best

Jaguar Land Rover has focus on attracting women into engineering and advanced manufacturing through programmes such as JLR's Young Women in the Know initiative for female students aged 15 to 18. With fewer women than men in senior roles and a majority of men in production operations in factories, the gender gap was hard to close. Traditionally, lower numbers of women coming into the industry and flourishing within it has made this even harder. However, the Company is committed both to equality and encouraging a diverse workforce, and things are changing for the better. The proportion of female managers at Jaguar Land Rover has trebled to 17% since 2011 and our female workforce has increased by 18.5% since 2017. 15% of Jaguar Land Rover's engineering apprentices are female, compared to the national average of just 4%. In 2017, 36% of total apprenticeship recruits were female and, for the first time, JLR recruited more women (55%) than men to JLR's advanced apprenticeship programme. In addition, more early career females have been recruited, however there has been a 1.3% increase to the gender pay gap and a 0.6% increase to the gender bonus gap in 2018.

Human Rights

The Human Rights Policy sets out the commitment to respect and comply will 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. The Company has refreshed the assessment of slavery and human trafficking risk risks and continue to deem the risk to be low.

OUTLOOK

The Indian automotive sector has the potential to generate upto US$300 billion in annual revenue by 2026, create 65 million additional jobs and contribute over 12% to India's GDP. Increased urbanization is firmly placed in the center of this progress. As per World Bank study, by 2031, some 600 million people are expected to live in India's cities. Therefore, automakers are slated to be one of the greatest contributors to this futuristic plan of 100 smart cities by 2020. The Company has recently supplied Hybrid electric buses, which runs both on diesel and electric, and is economically viable, safe and environment-friendly.

The Company is looking to be the major beneficiary for the increased infrastructure spending on roads, airports and expected high GDP. The lower interest regime also bodes well for the sector as more than 80% of the vehicles in India are financed. In Passenger vehicle, there has been a shift in the trend of buying from small passenger vehicles towards Utility Vehicles (UV). This shift will lead to more profitable growth for the Automobile sector. The Company is preparing for the shift to BS6 standards and National Electric Mobility Mission 2017.

The demand for Heavy Commercial Vehicle (HCV) is expected to grow by 7% to 8% over the long term. The privatization of select State Transport undertakings bodes well for the bus segment. Auto industry has witnessed multiple tailwinds in last two to three years like multi-year low interest rates, subdued metal prices, and low oil prices, however, many of these factors are showing early signs of reversal. This can result in an adverse impact to volumes and profitability.

There is an increasing buzz for e-mobility by 2030. The Company acknowledges the importance to environment risk and is prepared for the electric vehicles which is visible from the recent orders received from EESL and Government of Maharashtra. The Company has already started delivery of the vehicles to EESL. In addition to Electric vehicles, the Company is preparing itself to be efficient in not only BS6, but also plans to take a holistic approach towards environment regulations and stay ahead in Industry.

Jaguar Land Rover have invested intensively to prepare for the move from the internal combustion engine to autonomous, connected, electrified and shared mobility or "ICE" to "ACES". From 2020, all of the new vehicle models of Jaguar and Land Rover brands, will offer a choice of varying degrees of electrification, from mild and plug-in-hybrid to battery electric, as well as advanced electronic architectures and ACES product features. Jaguar Land Rover have a defined vision to shape future mobility - "Destination Zero" - zero emission, zero accidents and zero congestion.

Continued investment, by Jaguar Land Rover, in new products and technologies as well as expanding its production capacity in appropriate strategic locations, while balancing production with sales, is key for the success of the Company.

CAUTIONARY STATEMENT

Statements in the Management Discussion and Analysis describing the Company's 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 the Company operations include, among others, economic conditions affecting demand/supply and price conditions in the domestic and overseas markets in which the Company operates, changes in government regulations, tax laws and other statutes and incidental factors.