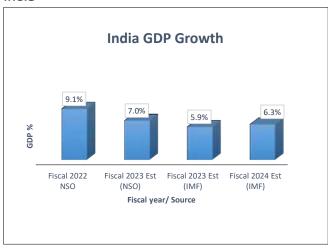
# Management Discussion and Analysis

## **Economy Overview**

#### India



Source: NSO, IMF

GDP Growth: The estimates for the Indian economic growth are as below:

**National Statistical Office ("NSO"):** The growth in the real GDP during FY 2022-23 is estimated at 7.0%, compared to 9.1% in FY 2021-22. This is driven by the accentuated headwinds from prolonged geopolitical tensions, tightening global financial conditions and slowing external demand.

International Monetary Fund ("IMF"): Import and export volumes estimates based on the volumes computed from the current price data, deflated by the WEO price indexes and the NSO price indexes are as below:

Particulars	FY 2022-23	FY 2021-22
Import of goods and services	7.5%	9.6%
Export of goods and services	23.1%	22.1%

**Inflation:** As per the Monetary Policy Committee (the "MPC") of the RBI, the inflation outlook will be influenced by several factors, both global and domestic. While crude oil and

commodity prices have been stabilized in recent months, their future trajectories remain uncertain, given the lingering geopolitical hostilities and the likelihood of a rebound in demand from countries reopening from pandemic-related lockdowns. Global financial markets are exhibiting volatility. Domestically, the expectations of a bumper rabi harvest augur well for the future trajectory of food inflation. On the other hand, adverse weather shocks are becoming more frequent and there is heightened uncertainty about the southwest monsoon rains. Considering the initial conditions, signals from forward-looking surveys and estimates from structural and other time-series models, CPI inflation is projected to average 5.2% in FY 2023-24, assuming a normal monsoon, a progressive normalization of supply chains, and no further exogenous or policy shocks.

Automobile Industry: According to data released by SIAM, the rate of change in industry volumes is depicted in the below table:

Segment	FY 2022-23	FY 2021-22	FY 2022-23	FY 2021-22
Domestic industry	48,51,241	37,86,547	28.1%	15.4%
Commercial vehicle	9,62,347	7,18,155	34.0%	26.0%
Passenger vehicle	38,88,894	30,68,392	26.7%	13.2%

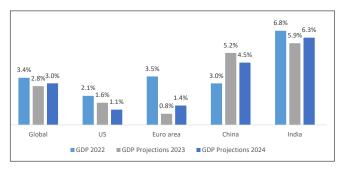
The Passenger Vehicle segment posted its highest ever domestic sales surpassing the previous peak in FY 2018-19 while the Commercial Vehicles segment posted its second highest domestic sales and was close to the previous peak of FY 2018-19. While FY 2022-23 began with supply chain disruptions from the Russia-Ukraine conflict, such disruptions were alleviated by efficient supply chain management. The commodity prices have also moderated. Over the longer term, favorable policy initiatives including significant investments in infrastructure called out in the Budget, the new PLI schemes to accelerate investments by the private sector, forward looking logistic & foreign trade policies and recently announced gas pricing guidelines are expected to further encourage the growth in coming years.

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STATUTORY REPORTS

#### World

#### Global economy GDP



Source: IMF

Economic Growth: The global economy appears to be poised for a gradual recovery from the powerful blows of the pandemic and of Russia's war on Ukraine. China has reopened its economy. Supply-chain disruptions are unwinding, while the dislocations to energy and food markets caused by the war are receding. Simultaneously, the massive and synchronous tightening of monetary policy by most central banks has started to tame inflation. Conversely, the rapid rise in interest rates has contributed to stresses in parts of the financial system raising financial stability concerns. The unanticipated failures of two regional banks in the United States and the collapse of the Credit Suisse have exerted significant pressure on financial markets. The fall in fuel and energy prices, particularly in the United States, Euro area and Latin America has contributed to the decline in global headline inflation.

Commodities: Primary commodity prices declined 28.2% between August 2022 and February 2023. The decrease was led by energy commodities, down 46.4%.

Crude Oil: Crude oil prices retreated by 15.7% between August 2022 and February 2023 as the slowing global economy weakened demand. European natural gas prices declined by 76.1% amid lower consumption and high storage levels. China experienced its first annual decline in oil consumption in this century. Risks of price spikes remain somewhat elevated, however, for next winter

Metals: Base and precious metal prices rebounded by 19.7% and 3.3%, respectively as compared to FY 2021-22. Prices had surged after the invasion but experienced a broad-based retreat amid slowing Chinese metal demand (accounting for roughly half of global consumption of major metals) and monetary policy tightening. With China's reopening and increased infrastructure spending the prices rebounded.

China: The lifting of COVID restrictions after many months of lockdown resulted in a surge of COVID infections in the last quarter of the year which compounded the headwinds from property market stresses in China. Declining property sales and real estate investment posed a drag on economic activity. In January 2023, high frequency economic indicators started picking up as COVID-19 waves subsided.

United States: The US Federal Reserve has been raising interest rates to restore price stability and to bring balance to the labor market. The demand for new hires is exceeding the supply of available workers in the US, as the unemployment rate has fallen to its lowest level in over 50 years, and this has contributed to higher inflation. To help bring the economy back into balance, IMF analysis shows that staying the course and keeping interest rates elevated this year will tame inflation. Although these higher rates will temporarily increase unemployment, they will pave the way for stable inflation and sustainable economic growth, which will ultimately help create more jobs in the future.

**Europe:** GDP is projected to fall to 0.8% in 2023 and 1.4% in 2024. Headline inflation is forecasted to fall from 9.2% in 2022 to 6.4% in 2023 and 2.8% in 2024 in the EU. In the euro area, it is projected to decelerate from 8.4% in 2022 to 5.6% in 2023 and to 2.5% in 2024. The EU economy has seen several positive developments including the fall in the Europe's main gas benchmark price to pre-war levels, aided by a sharp fall in gas consumption as well as continued diversification of supply sources. Despite the energy shock the economy managed a broad stagnation instead of the expected 0.5% contraction. The unemployment rate remains at its all-time low of 6.1%. However, core inflation increased in January and consumers and businesses continue to face high energy costs and with more than 90% of the core items in the harmonized index of consumer prices ("HICP") basket registering above-average price increases. Domestic demand could turn out higher than projected, if the recent declines in wholesale gas prices pass through to consumer prices more strongly. Risks to inflation remain largely linked to developments in energy markets in the short run, but upside risks dominate in the outer quarters, as a still tight labor market could result in stronger than anticipated wage pressure.

United Kingdom: Following a contraction of 0.4% in 2023, GDP is projected to increase by 0.2% in 2024. Consumer price inflation will peak at around 10% in late 2023 due to high energy prices and continuing labor and goods supply shortages, before gradually declining to 2.7% by the end of 2024. Private consumption is expected to slow, owing to rising living costs, but will be aided by a 9.7% increase in the

# **TATA MOTORS**

## MANAGEMENT DISCUSSION AND ANALYSIS

minimum wage and the usual uprating of welfare benefits and pensions in April 2023

(Source: RBI, World Bank, IMF, DEA, OECD etc.)

## **Automotive Operations**

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

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

The automotive operation is further divided into four reporting segments:

- → Tata and other brand vehicles Commercial Vehicles;
- → Tata and other brand vehicles Passenger Vehicles;
- Jaguar Land Rover; and
- → Vehicle Financing.

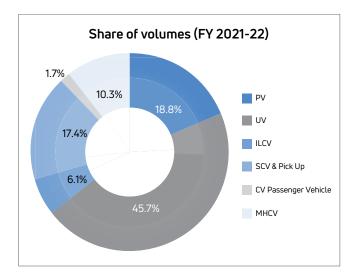
#### Overview of Automotive Operations

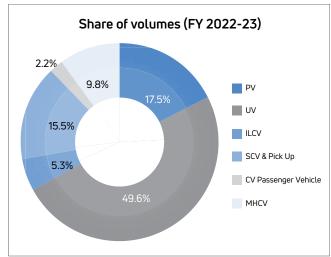
The total vehicle sales (excluding China joint venture) for FY 2022-23 and FY 2021-22 are set forth in the table below:

FY 202	2-23	FY 2021	L-22
Units	%	Units	%
2,24,450	17.5%	1,94,185	18.8%
6,37,877	49.6%	4,72,154	45.7%
68,606	5.3%	63,097	6.1%
1,99,769	15.5%	1,80,222	17.4%
28,374	2.2%	17,699	1.7%
1,25,888	9.8%	1,06,547	10.3%
12,84,964	100.0%	10,33,904	100.0%
	Units 2,24,450 6,37,877 68,606 1,99,769 28,374 1,25,888	2,24,450     17.5%       6,37,877     49.6%       68,606     5.3%       1,99,769     15.5%       28,374     2.2%       1,25,888     9.8%	Units         %         Units           2,24,450         17.5%         1,94,185           6,37,877         49.6%         4,72,154           68,606         5.3%         63,097           1,99,769         15.5%         1,80,222           28,374         2.2%         17,699           1,25,888         9.8%         1,06,547

We sold 9,31,602 units of Tata Commercial Vehicles and Tata Passenger Vehicles and 3,21,362 units (excluding wholesales from the China Joint Venture) of Jaguar Land Rover vehicles in FY 2022-23.

In India, we sold 9,31,429 and 6,93,036 units, during FY 2022-23 and FY 2021-22, respectively (constituting 72.5% and 67.0% of total sales in FY 2022-23 and FY 2021-22, respectively). In North America, we sold 81,629 units and 79,360 units in FY 2022-23 and FY 2021-22, respectively (constituting 6.4% and 7.7% of total sales in FY 2022-23 and FY 2021-22, respectively).







#### Tata and other brand vehicles

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

	EV 202	FY 2022-23 Units %		L-22
				%
Tata Passenger Vehicles	5,40,965	56.1%	3,72,157	50.3%
Tata Commercial Vehicles	4,22,637	43.9%	3,67,565	49.7%
Total	9,63,602	100.0%	7,39,722	100.0%

We sold a total of 9,63,602 units in FY 2022-23, of which 9,31,429 units were sold by Tata and other brand vehicles in India and 32,173 units outside India. There were 7,39,722 units sold overall in FY 2021-22, with 6,93,036 units and 46,686 units, respectively.

We maintained our leadership position in the Commercial Vehicle category in India, which was characterized by increased competition during the year. In the Passenger Vehicle category, the Company is now the third largest automotive company in India.

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

	FY 2022-23	FY 2021-22
	%	%
Passenger Vehicles	13.5%	11.4%
Heavy Goods and Motor Vehicles (HGV+MGV)	49.6%	52.6%
Medium Goods Vehicles	44.2%	48.6%
Light Goods Vehicles	37.8%	41.4%
CV Passenger Vehicles	38.4%	35.9%
Total Commercial Vehicles	41.7%	44.7%

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

The following table sets forth our total domestic wholesales and retails of Tata Commercial Vehicles and Tata Passenger Vehicles:-

	Whole	Wholesale Volume (In Units)		Reta	il Volume (In Units)	
	FY 2022-23	FY 2021-22	% Change	FY 2022-23	FY 2021-22	% Change
Tata Commercial Vehicles	3,92,911	3,22,682	21.7%	3,97,229	3,19,141	24.5%
Tata Passenger Vehicles	5,38,518	3,70,354	45.4%	5,23,547	3,63,061	44.2%
Total	9,31,429	6,93,036	34.4%	9,20,776	6,82,202	35.0%

#### Passenger Vehicles in India

Industry sales of Passenger Vehicles increased by 27% to 37,57,703 units in FY 2022-23 from 29,60,047 units in FY 2021-22. The following table sets forth the breakup of the wholesale sales in various categories.

		Industry Sales			Tata Passengers Vehicles Sales		
Category	FY 2022-23 (In Units)	FY 2021-22 (In Units)	% Change	FY 2022-23 (In Units)	FY 2021-22 (In Units)	% Change	
Passenger Cars	17,47,392	14,67,061	19.1%	1,81,407	1,44,226	25.8%	
Utility Vehicles	20,10,311	14,92,986	34.7%	3,57,111	2,26,128	57.9%	
Total	37,57,703	29,60,047	26.9%	5,38,518	3,70,354	45.4%	

Industry-wide sales of Passenger Cars in India increased by 19.1% in FY 2022-23 as compared to the 4.9% decline in FY 2021-22. While Utility Vehicles sales increased by 34.7% in FY 2022-23, which is lower with respect to the 40.5% increase in FY 2021-22. The overall industry sales are on the rise at an increasing rate since FY 2020-21. Our Passenger Vehicle sales in India increased by 45.4% from 370,354 units in FY 2021-22 to 5,38,518 units this fiscal year, reflecting a strong response for the New Forever Range.

We sold 1,81,407 units in the Passenger Car category (Tata-brand vehicles in India) in FY 2022-23, compared to the 1,44,226 units in FY 2021-22, representing a strong demand of Tiago, Altroz and Tigor. Our market share for Passenger Cars in India rose to 10.4% in FY 2022-23, as compared to 9.8% in FY 2021-22.

#### TATA MOTORS

## MANAGEMENT DISCUSSION AND ANALYSIS

In the Utility Vehicles category, we sold 3,57,111 units in FY 2022-23, an increase of 57.9% from 226,128 units in FY 2021-22, representing a strong demand for Tata Nexon, Punch and Tata Harrier. Our market share of Utility Vehicles in India has increased to 16.7% in FY 2022-23, as compared to 14.1%. in FY 2021-22.

At Auto Expo in January 2023, we displayed promising future products which include Curvy, Altroz and Punch CNG with twin cylinder technology, and Altroz racer. In February 2023, we launched #DARK (Red Hot Dark) version for Nexon, Harrier and Safari. Extending the lineage of the iconic #DARK

philosophy and already established strong design, these SUVs exude dynamism through the newly added Carnelian Red highlights, giving its customers an exclusive feel of premium-ness combined with a bold look. Harrier and Safari are further enhanced with a desirable larger infotainment screen and new ADAS features.

#### Commercial Vehicles in India

Industry sales of commercial vehicles rose by 34.0% to total 962,347 units in FY 2022-23 compared to the sales of 718,155 units in FY 2021-22. The following table sets forth the breakup of the wholesale sales in various categories.

		Industry Sales			Tata Commercial Vehicles Sales		
Category	FY 2022-23 (In Units)	FY 2021-22 (In Units)	% Change	FY 2022-23 (In Units)	FY 2021-22 (In Units)	% Change	
Medium and Heavy Commercial Vehicles (MHCV)	2,30,720	1,51,546	52.2%	1,22,440	88,191	38.8%	
Intermediate and Light Commercial Vehicles (ILCV)	1,24,388	1,09,997	13.1%	54,636	53,847	1.5%	
SCVs and Pickups	5,23,923	4,23,560	23.7%	1,81,715	1,65,822	9.6%	
CV Passenger Vehicles	83,316	33,052	152.1%	34,120	14,822	130.2%	
Total	9,62,347	7,18,155	34.0%	3,92,911	3,22,682	21.8%	

#### MHCVs in India

Industry saw a significant increase of 52.2% in the sale of medium and heavy commercial vehicles in FY 2022-23 compared to FY 2021-22. We sold 1,22,440 units in FY 2022-23, compared to 88,191 units in FY 2021-22 in this segment, a growth of 38.8%. The quarter-on-quarter improvement was observed, due to increase in infrastructure projects, housing construction and the mining segments in India.

#### ILCVs in India

Our sales in the ILCVs in India increased to 54,636 units in FY 2022-23, compared to the 53,847 units in FY 2021-22, representing an increase of 1.5%.

#### SCVs and Pickups in India

Our sales in SCVs and Pickups segment in India increased by 9.6% from 1,65,822 units in FY 2021-22 to 1,81,715 units in FY 2022-23. Among all segments in commercial vehicles, the SCV and pickup category has experienced increased demand from e-commerce players primarily due to the necessity for lastmile distributions to retail consumers by such companies.

#### CV Passenger Vehicles in India

Our sales in CV Passenger Vehicles segment in India increased by 130.2% in FY 2022-23 compared to FY 2021-22,

from 14,822 units in FY 2021-22 to 34,120 units in FY 2022-23, largely due to increased demand for public transport due to the recommencement of face-to-face learning in school and colleges and return to office work.

# Tata Commercial Vehicles and Tata Passenger Vehicles — Exports

With a global presence in 39 countries, including most South Asian Association for Regional Cooperation ("SAARC") countries, South Africa, Africa, Middle East and Southeast Asia, we offer a range of products, including M&HCV trucks, LCV trucks, buses, pickups and small commercial vehicles. As international business is an integral part of our business portfolio, since our inception in 1961, we strive to maintain, improve and expand our relations with the nations of the world.

Our overall sales in these International Markets dropped by 42% to 20,222 units in FY 2022-23 compared to 34,791 units in FY 2021-22. A major drop was witnessed in SAARC region (down by 62%) driven by total industry volumes softening, forex shortages and liquidity crunch in the latter half of the year. MENA and ASEAN regions witnessed 6% year on year growth in shipments. Non-SAARC markets contributed to 57% of total shipments in FY 2022-23 as compared to 34% in



FY 2021-22. Democratic Republic of Congo achieved highest ever shipments of 1,005 units in FY 2022-23; Saudi Arabia hits highest ever shipments of 1,292 units and retails of 1,401 units in FY 2022-23; Vietnam achieves highest ever retails of 998 units in FY 2022-23.

TDCV, a subsidiary company engaged in the manufacturing of MHCVs and LCVs, reported an increase of 0.4%, with total units sold reaching 9,493, in FY 2022-23. This is almost flat compared to 9,454 units in FY 2021-22. Domestic volume witnessed a degrowth of 13.8% from 7,400 units in FY 2021-22 to 6,381 units in FY 2022-23, mainly due to a downturn in the domestic economy during the second half of the year. However, this decline in domestic was compensated by strong export growth of 51.5% from 2,054 units in FY 2021-22 to 3,112 units in FY 2022-23. During the year, TDCV launched LCV range of product "DEXEN" to strengthen its portfolio.

## Tata Commercial Vehicles and Tata Passenger Vehicles — Sales and Distribution

Our sales and distribution network in India as at March 2023 comprised over 6,800 touch points for sales and service for our Passenger Vehicles and Commercial Vehicles businesses. We use a network of service centre's on highways and a tollfree customer assistance centre to provide 24-hour roadside assistance, including replacement of parts, to vehicle owners.

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

With a global presence in 39 countries, including most South Asian Association for Regional Cooperation ("SAARC") countries, South Africa, Africa, Middle East and Southeast Asia, we offer a range of products, including M&HCV trucks, LCV trucks, buses, pickups and small commercial vehicles. Such distributors have created a network of dealers and branch offices and facilities for sales and after-sales servicing of our products in their respective markets. We have also stationed overseas resident sales and service representatives in various countries to oversee our operations in the respective territories.

# Tata Commercial Vehicles and Tata Passenger Vehicles—Competition

We face competition from various domestic and foreign automotive manufacturers in the Indian automotive market. Improving infrastructure and robust growth prospects compared to other mature markets have attracted strong international companies to India that have either formed joint ventures with local partners or have established independently owned operations in India. Global competitors bring with them their international experience, global scale, advanced technology, and significant financial resources, and as a result, competition is likely to further intensify in the future. We have designed our products to suit the requirements of the Indian market based on specific customer needs, such as safety, driving comfort, fuel efficiency and durability. By moving to Bharat Stage 6 ("BS6") successfully and subsequently the BS6 Phase 2 norms, we have demonstrated our ability to compete with the global players successfully. We believe that our vehicles are suited to the general conditions of Indian roads and the local climate. We also offer a wide range of optional configurations to meet the specific needs of our customers. We intend to develop and are developing products to strengthen our product portfolio in order to meet the increasing customer expectation of owning world-class vehicles.

# Tata Commercial Vehicles and Tata Passenger Vehicles—Seasonality

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

# Tata Commercial Vehicles and Tata Passenger Vehicles—Challenges

Tata Commercial Vehicles - Elevated levels of inflation continue to be a challenge with commodity prices increasing and impacting margins. Other macroeconomic factors, such as fuel price increases and rate hikes, are also a key concern as these play an important role in determining freight rates and therefore transporter profitability. While freight rates have been improving, going forward, too, it would need to keep pace with the fuel price increases and impending rate hikes.

Tata Passenger Vehicles - Business environment continues to be challenging, with inflation and commodity price increases impacting profitability, consumer spending power

## MANAGEMENT DISCUSSION AND ANALYSIS

and competitive nature of the industry. We aim to mitigate these risks by innovating, ensuring the portfolio remains "NEW FOREVER" by means of introducing exciting new variants, multiple powertrain options and fast tracking our cost reduction efforts to improve profitability.

## Vehicle Financing

Through our wholly-owned subsidiary TMF Holdings Ltd and its step-down subsidiaries Tata Motors Finance Ltd ("TMFL") and Tata Motors Finance Solutions Ltd ("TMFSL"), we provide financing services to purchasers of our vehicles through independent dealers, who act as our agents for financing transactions, and through our branch network.

TMF group disbursed ₹18,334 crores and ₹16,329 crores in vehicle financing during FY 2022-23 and FY 2021-22, respectively. Approximately 17% and 27% of our commercial vehicle unit sales in India were made by the dealers through financing arrangements with the Company's captive financing subsidiary during FY 2022-23 and FY 2021-22, respectively.

TMF group's customer finance receivable portfolio comprised over seven lakhs, contracts as at March 31, 2023.

During FY 2022-23 TMF group revenue stood at ₹4,927 crores as compared to ₹4,827 crores in FY 2021-22, The profit before tax for FY 2022-23 was a loss of ₹993 crores as compared to a profit to ₹101 crores in FY 2021-22. The reason for increase in loss in Fiscal 2023 was due to an increased provision for finance receivable.

Our portfolio contains ways to follow specified internal procedures, including quantitative guidelines, for selection of our finance customers and assist in managing default and repayment risk. We originate all the contracts through our authorized dealers and direct marketing agents with whom we have agreements. All our marketing, sales and collection activities are undertaken through dealers or by the TMF group.

## Jaguar Land Rover's Performance Analysis

Total wholesale and retail volume of Jaguar Land Rover vehicles (excluding Chery Jaguar Land Rover) with a breakdown between Jaguar and Land Rover brand vehicles, in FY 2022-23 and FY 2021-22 are set forth in the table below:

	Wholesale Vol	ume (in units exclu	ding CJLR)	Retail Volum	ne (in units excludin	g CJLR)
	FY 2022-23	FY 2021-22	% change	FY 2022-23	FY 2021-22	% change
Jaguar	42,720	49,510	(13.7)	62,521	77,381	(19.2)
UK	11,239	13,822	(18.7)	12,076	17,016	(29.0)
North America	11,930	11,469	4.0	10,755	13,785	(22.0)
Europe	12,350	15,178	(18.6)	12,832	17,841	(28.1)
China	2,374	2,887	(17.8)	22,370	21,858	2.3
Overseas	4,827	6,154	(21.6)	4,488	6,881	(34.8)
Land Rover	278,642	244,672	13.9	292,141	299,000	(2.3)
UK	50,903	43,371	17.4	51,935	46,422	11.9
North America	69,699	67,881	2.7	66,771	77,520	(13.9)
Europe	61,999	49,983	24.0	58,874	54,227	8.6
China	42,544	38,529	10.4	68,628	73,927	(7.2)
Overseas	53,497	44,908	19.1	45,933	46,904	(2.1)
Jaguar Land Rover	321,362	294,182	9.2	354,662	376,381	(5.8)
UK	62,142	57,193	8.7	64,011	63,438	0.9
North America	81,629	79,350	2.9	77,526	91,305	(15.1)
Europe	74,349	65,161	14.1	71,706	72,068	(0.5)
China	44,918	41,416	8.5	90,998	95,785	(5.0)
Overseas	58,324	51,062	14.2	50,421	53,785	(6.3)
CJLR	50,855	53,468	(4.9)	50,904	54,035	(5.8)



#### Jaguar Land Rover's performance on a wholesale basis:

Wholesales (excluding our China Joint Venture) for the FY 2022-23 were 3,21,362 up 9.2%, compared to FY 2021-22. Compared to the prior year, wholesale volumes were higher in all markets led by Overseas 14.2%, Europe 14.1%, UK 8.7%, China 8.5% and North America 2.9%. This increase was driven by the gradual improvement in the supply of semiconductor during the year though constraints on the supply of commercial semiconductor was not completely removed. Given these restrictions on availability of [our products], we have been able to increase our revenue per unit reflecting the prioritisation of higher margin products giving us a strong mix, particularly in the Range Rover and Defender families.

#### Jaguar Land Rover's performance on a retail basis:

Retail sales for FY 2022-23 were 3,54,662 down 5.8% compared to FY 2021-22. Compared to the prior year, retail volumes were higher in the UK 0.9% and down in North America 15.1%, Europe 0.5%, China 5.0% and Overseas 6.3%. This reduction reflected the impact of the chip shortages during FY 2022-23 while retail volumes in FY 2021-22 were supported by destocking of inventories. Demand remains strong with the client order book at around 200,000 units as at March 31, 2023.

## Retails by powertrain

The electrified mix, which includes mild hybrid, plug-in hybrid and battery electric vehicles ("BEV"), increased slightly from 66% in FY 2021-22 to 67% in FY 2022-23. Within this, plug-in hybrid sales increased from 8% to 10%. During FY 2022-23, JLR commenced handover to customers of the new Range Rover and Range Rover Sport PHEV models while we are planning to launch a new Range Rover BEV model in 2024.

## Jaguar Land Rover's Sales and Distribution

In FY 2022-23, Jaguar Land Rover distributed its vehicles in 123 markets globally. Sales locations for vehicles are operated as independent franchises. Jaguar Land Rover is represented in its key markets through its National Sales Company's ("NSC's") as well as third party importers. Jaguar Land Rover has regional offices in certain select countries that manage customer relationships and vehicle supplies and provide marketing and sales support to its regional importer markets. The remaining importer markets are managed from the United Kingdom.

Jaguar Land Rover products are sold through a variety of sales channels: through its dealerships for retail sales; for

sale to fleet customers, including daily rental car companies, commercial fleet customers, leasing companies and governments. Jaguar Land Rover does not depend on a single customer or small group of customers to the extent that the loss of such a customer or group of customers would have a material adverse effect on its business.

#### Jaguar Land Rover — Competition

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

#### Jaguar Land Rover — Seasonality

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

## Jaguar Land Rover — Challenges

#### Semiconductors and general supply constraints

The ongoing supply chain challenges, particularly around semiconductors, continued to limit our ability to build cars in line with customer demand during FY 2022-23. We saw significant volatility in raw material commodity markets during the year leading to abnormal pricing levels and elements of scarcity in some markets. Supply constraints were caused by various external factors, namely Covid-19 recovery, the conflict in Russia-Ukraine and energy inflation.

In response to these challenges, we focused production on higher margin products and improved our organisational

## TATA MOTORS

#### MANAGEMENT DISCUSSION AND ANALYSIS

capabilities and processes to more proactively manage our supply chain. We put in place long-term supply agreements directly with a number of semiconductor manufacturers to protect both current and future product programs. As a result of our actions, our wholesale volumes for the year were 3,21,362 up 9.2% compared to the prior year. Whilst general supply chain challenges are likely to continue in the coming year, we anticipate that the actions we have taken this year will minimise the impacts on our volumes.

#### Global inflation

Inflationary pressures have increased during the past year with energy prices in Europe, where we produce the majority of our cars, rising as a result of the Russian invasion of Ukraine. We have seen cost increases coming from higher commodity prices, energy costs, labour rates and semiconductor prices.

We have taken steps to offset these impacts under our Refocus program which has delivered over £1 billion of value to the business through actions taken to optimise sales, lower costs and to prioritise investment spending.

#### Geopolitics

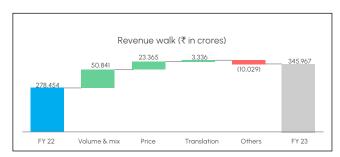
Geopolitical challenges including increasing geopolitical tensions and regulatory and legislative changes such as the US inflation reduction act have a global reach and can impact global of supply chains. While we have not observed any direct impacts on our business in the last year as a result of specific events, we proactively scenario plan against a range of outcomes to ensure we remain well balanced as a business.

## A. Operating Results

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

#### Overview

In FY 2022-23 consolidated income from operations including finance revenues increased by 24.2% to ₹345,967 crores from ₹278,454 crores in FY 2021-22. This increase was mainly attributable to increased vehicle volumes, mainly for Tata Commercial and Passenger vehicles and Jaguar Land Rover.



The net profit (attributable to shareholders of our Company) was ₹2,414 crores in FY 2022-23, compared to a loss of ₹11,441 crores in FY 2021-22. Tata Motors on a standalone basis recorded deferred tax asset of ₹1,615 crores in FY 2022-23, on carry forward losses (unabsorbed depreciation), as it is probable, profits will be available against which these will be utilized in coming years. The profit before tax was ₹3,058 crores in FY 2022-23 as against the loss before tax of ₹7,003 crores in FY 2021-22. Excluding the exceptional items, profit before tax was ₹1,467 crores in FY 2022-23, as compared to loss before tax of ₹6,374 crores in FY 2021-22. Increase in volumes, better management of costs, softening of commodity prices, have resulted in profits for the year.

#### Automotive operations

Automotive operations are our most significant segment, accounting for 99.0% of our total revenues in FY 2022-23 and FY 2021-22. In FY 2022-23, revenue from automotive operations before inter-segment eliminations was ₹342,641 crores compared to ₹275,780 crores in FY 2021-22.

Particulars	FY 2022-23	FY 2021-22	Change (%)
Total Revenues (₹ in crores)	3,42,641	2,75,780	24.2%
Earnings before other income, interest & Tax (₹ in crores)	9,041	1,424	535.0%
Earnings before other income, interest & Tax (% of revenue)	2.6%	0.5%	

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



Category	Total Revenues	(₹ in crores)	EBIT (₹ in cr	EBIT (₹ in crores)		EBIT (% of revenue)	
	FY 2022-23	FY 2021-22	FY 2022-23	FY 2021-22	FY 2022-23	FY 2021-22	
CV	70,816	52,287	3,693	210	5.2%	0.4%	
PV	47,868	31,515	542	(660)	1.1%	(2.1%)	
JLR	2,22,860	1,87,697	3,482	(439)	1.6%	(0.2%)	
Financing	4,595	4,585	1,499	2,466	32.6%	53.8%	
Unallocable	360	314	(158)	(62)	(43.8%)	(19.9%)	
Inter-Segment eliminations	(3,858)	(618)	(18)	(90)	0.5%	14.6%	
Total	3,42,641	2,75,780	9,041	1,424	2.6%	0.5%	

In FY 2022-23, Jaguar Land Rover contributed 64% of our total automotive revenue compared to 68% in FY 2021-22 (before intra-segment elimination) and the remaining 36% was contributed by Tata and other brand vehicles and Vehicle Financing in FY 2022-23, compared to 32% in FY 2021-22. This is reflecting higher growth of Tata branded vehicles as compared to Jaguar Land Rover.

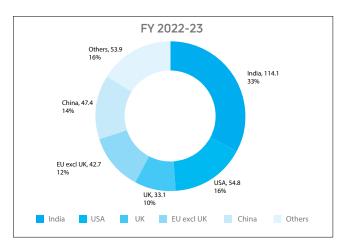
#### Other operations

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

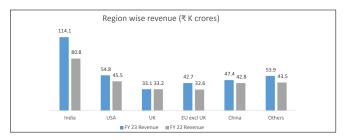
Particulars	FY 2022- 23	FY 2021-22	Change (%)
Total Revenues (₹ in crores)	4,809	3,809	26.2%
Earnings before other income, interest & Tax (₹ in crores)	826	625	32.5%
Earnings before other income, interest & Tax (% of revenue)	17.2%	16.4%	

#### Geographical Breakdown

In FY 2022-23, volume and percentage of revenues in India have improved from FY 2021-22 levels. The revenue of Jaguar Land Rover increased across most geographical markets in FY 2022-23. Jaguar Land Rover wholesale volumes increased in all regions including in China (increased 8.5% year-onyear), Europe (increased 14.1%), North America (increased 2.9%) and in the UK (increased 8.7%) in FY 2022-23. Further we are present across the Globe with well diversified product portfolio.



The following chart sets forth our revenue from key geographical markets:



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

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