

TATA MOTORS: CAN THE TURNAROUND PLAN IMPROVE PERFORMANCE?¹

Shernaz Bodhanwala and Ruzbeh Bodhanwala wrote this case solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

This publication may not be transmitted, photocopied, digitized, or otherwise reproduced in any form or by any means without the permission of the copyright holder. Reproduction of this material is not covered under authorization by any reproduction rights organization. To order copies or request permission to reproduce materials, contact Ivey Publishing, Ivey Business School, Western University, London, Ontario, Canada, N6G 0N1; (t) 519.661.3208; (e) cases@ivey.ca; www.iveycases.com. Our goal is to publish materials of the highest quality; submit any errata to publishcases@ivey.ca.

Copyright © 2020, Ivey Business School Foundation

Version: 2020-01-14

Mounting losses and depleting market share had become challenging issues at Tata Motors Limited (Tata Motors), the India-based leading global automobile manufacturer. In 2017, expressing his concern over the mounting losses, Natarajan Chandrasekaran, the chairman of Tata Sons Limited, the parent company of Tata Motors, said in an interview with the *Economic Times*, “In passenger cars, our cost structures are out of whack. Every single car and model is losing money. It’s important to pick up volumes and try to become profitable.”²

The following year, Guenter Butschek, chief executive officer (CEO) and managing director of Tata Motors, shared the board-approved aggressive turnaround plan for the company in its fiscal year 2017–18 (FY 2018) annual report:

I would regard the [Bharat Stage IV]³ transition as the most difficult part of our journey, eventually dampening the first quarter results. This coupled with the carry forward impact of weak financials from FY17 was enough to bring a sense of urgency within the organisation, building up to the launch of “Business Turnaround” in June 2017.⁴

Nonetheless, despite the organization’s commitment to turnaround, Tata Motors registered a massive aggregated loss in the first three quarters of FY 2019. With a market capitalization of ₹1,109 billion⁵ at the end of fiscal year FY 2018,⁶ the company registered ₹269.6 billion in losses in the third quarter (Q3) of FY 2019, its largest ever quarterly loss.⁷ As a result, Tata Motors’ share price was decreasing and had fallen by more than 60 per cent since the beginning of 2018 (see Exhibit 1).⁸

What strategy should Butschek employ to regain the lost investor confidence and improve value for Tata Motors’ shareholders? What should Butschek do to improve the company’s volume growth in a highly competitive global automobile industry? What areas should he concentrate on improving for a better financial performance?

TATA MOTORS LIMITED

Tata Motors, one of India’s largest automobile companies, was established in 1945 and was part of the Tata Group. In FY 2018, Tata Group was worth US\$100 billion while Tata Motors registered sales of over 1.2 million vehicles, including passenger cars, utility vehicles, and light and heavy commercial vehicles, with

revenue of ₹2,954 billion in FY 2018. As of the end of FY 2018, the company, along with its subsidiaries and business associates, had operations in the United Kingdom, South Korea, Thailand, South Africa, Indonesia, Austria, and Slovakia. It employed 81,090 employees.⁹

In 2018, Tata Motors and its fully owned UK-based subsidiary, Jaguar Land Rover Automotive PLC (JLR), appeared to have approximately 8.5 million vehicles on the road in India. The company held a dominant position with a market share of over 54 per cent of the medium and heavy commercial vehicles segment in India. It had operations in 175 markets around the world with more than 6,600 sales and service touch points.¹⁰

Tata Motors stock was listed on the Bombay Stock Exchange of India, the National Stock Exchange of India, and the New York Stock Exchange. At the end of FY 2018, the company's market capitalization was ₹1,109.9 billion.¹¹

Business Model and Segments

Tata Motors was the only Indian original equipment manufacturer offering an extensive range of integrated, smart, and e-mobility solutions. The company's business model involved development, designs, manufacturing, sales of vehicles and accessories, and the financing of vehicles. The three primary business segments of the company included the automotive sales and associated financing made by Tata Motors and its other international brands, such as Tata Daewoo and Fiat; the sale of premium cars by JLR; and the information technology and machine automation segment.¹²

The company's product segment included vehicles in two main categories: passenger vehicles and commercial vehicles. The passenger car segment consisted of all types of passenger cars, such as hatchbacks, sedans, and sport-utility vehicles. The commercial vehicle segment comprised small commercial and pick-up vehicles, passenger transportation vehicles, intermediate and light commercial vehicles, medium and heavy commercial vehicles, and the cargo range of vehicles (see Exhibits 2 and 3). To tackle aggressive competition in the automobile industry, the company picked up pace by launching more than 60 new vehicles with their variants in FY 2018, an increase from the 31 vehicles launched in FY 2017.¹³

Tata Motors held a strong position in the commercial vehicle segment with a market share of nearly 46.8 per cent in FY 2018.¹⁴ Through its wholly owned subsidiary, JLR, Tata Motors was tapping into the demand for premium cars under the Jaguar and Land Rover brands, with its major markets being the United Kingdom, the United States, China, and the rest of Europe. Both Jaguar and Land Rover vehicles faced tough competition, largely from well-known companies such as Audi AG, Bayerische Motoren Werke AG (BMW), Nissan Motor Company Limited (Infiniti brand), Toyota Motor Corporation (Lexus brand), Daimler AG (Mercedes-Benz brand), Porsche AG, Volvo Cars, and Volkswagen AG.¹⁵ In the passenger vehicle segment in India, the company had lost the majority of its market share to Maruti Suzuki India Limited, which held nearly 50 per cent of the market share, followed by the Hyundai Motor Company and Mahindra & Mahindra Limited (see Exhibit 4).¹⁶

The New CEO: Guenter Butschek

Butschek, former chief operating officer at Airbus SE, joined Tata Motors in February 2016 as CEO and managing director. He brought with him more than 25 years of experience from Daimler in the international automotive management sector.¹⁷

He had to gear up quickly in his role as CEO at Tata Motors to address the critical fall in market share across the company's product segments and to work on its high cost structure (see Exhibit 5). The new CEO needed to address several challenging issues: identify the market gap in product offerings in the commercial and passenger vehicle segments, elevate customer satisfaction, curtail the delay in product launches, and move the company from its conventional manufacturing platforms to new modular platforms to cut cost and gain economies of scale. Former Tata Motors and Tata Group chairman Cyrus Mistry trusted Butschek's abilities, noting, "He brings tremendous global experience and expertise as well as operational insights to lead this transformation."¹⁸

Shortly after arriving at Tata Motors, Butschek faced another problem, when Mistry raised concerns about the group having lax governance standards. He alleged that Tata Motors had followed aggressive accounting practices to substantially capitalize the product development costs. He also alleged that the financing division at Tata Motors was using improper risk assessment methodology that had led to an increase in non-performing assets of more than ₹40 billion, and that the board had continued the operations of an unsustainable Nano (entry-level car) project.¹⁹ Mistry was ousted as the group chairman and resigned from the Tata Motors board in December 2016 with Chandrasekaran taking over the reins.²⁰ The dispute cost Tata Motors a large order for supplying 150,000 cars to the cab aggregators Uber Technologies Inc. and Ola Cabs, losing the order to competitor Maruti Suzuki.²¹

THE AUTOMOBILE INDUSTRY

The automobile industry was categorized as a cyclical industry, and could be negatively affected by several factors such as a slowdown in the gross domestic product (GDP), a bad monsoon, lower disposable incomes, low industrial production, a drop in availability of retail finance, or a liquidity crunch in the economy.²² The industry accounted for 7.1 per cent of India's GDP in FY 2018 and realized a 14.8 per cent growth in annual production, increasing from 25.33 million vehicles in FY 2017 to 29.08 million vehicles in FY 2018.²³

In 2015, the Government of India and the Society of Indian Automobile Manufacturers (SIAM) unveiled an ambitious 10-year roadmap for the industry with the launch of "Automotive Mission Plan 2016–26" (AMP 2026).²⁴ The plan provided a supportive policy framework that envisioned India among the top three automotive manufacturing hubs in the world. According to the plan, India's automobile industry was expected to generate revenue of approximately US\$300 billion by FY 2026—an increase of more than 300 per cent from the revenue of US\$74 billion in FY 2015.²⁵

Over the years, multiple disruptive trends emerged, which led to serious technological concerns and a need for automobile companies to increase their research and development (R&D) budgets. These trends included heightened concern over emission standards, environmental and regulatory compliance, technological developments, a major thrust on electric vehicles across the globe, and changing consumer preferences.²⁶

Countries around the world, including Germany, Norway, the United Kingdom, and others, had set timelines to phase out vehicles powered by fossil fuels.²⁷ Many other countries planned to impose a partial ban on the use of diesel vehicles in some of their cities.²⁸ This move was applauded by environmentalists and green campaigners. Helena Molin Valdés, head of the United Nations' Climate and Clean Air Coalition (CCAC) Secretariat, said, "Soot from diesel vehicles is among the big contributors to ill health and global warming" and noted that "more than nine out of 10 people around the globe live where air pollution exceeds World Health Organisation safety limits."²⁹

The transition was a major concern for many automobile companies because the vehicles needed to be remodified, increasing manufacturers' R&D costs to develop hybrid or electric vehicles. Further, changes in consumer preference for ride-sharing arrangements and use of cab aggregators like Uber and Ola had made the marketplace more competitive.³⁰ At the same time, the demand for automobiles was projected to weaken in 2019. The International Monetary Fund projected a slowdown in global economic growth from 2.9 per cent in 2018 to 2.5 per cent in 2019 due to slowing of advanced economies, tightening of liquidity in emerging markets, increased trade tension as a result of the trade war between the United States and China, and an increase in interest rates by the US Federal Reserve.³¹

FINANCIAL PERFORMANCE OF TATA MOTORS, FY 2016 TO FY 2018

Tata Motors had launched several transformation programs in the past in an effort to restructure the organization. In its restructuring efforts, the company offered voluntary retirement plans and reduced the workforce by 1,500 employees in India.³² The company also announced that it was moving from its conventional platforms to new modular platforms to gain economies of scale in the design and manufacture of vehicles. However, the company's installed capacity was underutilized, leading to a high fixed cost (see Exhibit 6).

Butschek had announced Tata Motors' transformation plan in FY 2016 with a goal of making the organization future ready. The transformation plan addressed issues associated with four main focal points: (1) top-line growth to regain the company's position in the competitive market; (2) cost reduction to improve margins; (3) structural improvements of operations and architectural efficiencies; and (4) improvement in customer centricity efforts.³³

The company's revenue had, for the first time in a decade, registered a negative growth in FY 2017. The revenue from operations decreased from ₹2,776 billion in FY 2016 to ₹2,744 billion in FY 2017 (see Exhibit 7).³⁴ In his address to investors in the company's annual report, Butschek said:

Due to the unexpected and unprecedented changes in the market, we faced a rather hostile business cycle with headwinds in the form of demonetisation and the famous Supreme Court ruling on BSIV transition [the Bharat Stage VI, the new automobile emission standards]. As a matter of fact, it was not only the market volatility which affected our performance, but mainly our sluggishness in reading the market in time, as we were effectively late to respond.³⁵

The transformation program did not reap the full results and had to be terminated when the market situations required immediate attention with more aggressive efforts. A turnaround plan was brought into effect with a renewed focus on the commercial vehicles segment. This plan involved structural cost reductions, sales enhancement, zero tolerance to delay in product launches, optimizing the supply base, and rapid ramp-up of capacity.³⁶

The new approach resulted in a rise of nearly 8 per cent in revenue from ₹2,744 billion in FY 2017 to ₹2,954 billion in FY 2018. Raw material costs had increased by 8 per cent to ₹1,733 billion in FY 2018, which led to a slight dip in gross profit margin from 42 per cent in FY 2016 to 41 per cent in FY 2017 (see Exhibit 7). To address the changing technology and evolving customer expectations, the company continuously incurred capital expenditures of approximately ₹306 billion in FY 2016, ₹312 billion in FY 2017, and ₹415 billion during FY 2018.³⁷ The company's cash flow from operations reduced from ₹302 billion in FY 2017 to ₹236 billion in FY 2018 (see Exhibit 8).³⁸ Moreover, an ambitious capital expenditure plan of ₹461 billion in FY 2019 would further strain the reducing cash flows and lead to a high leverage position (see Exhibit 9).³⁹

THE CHALLENGES

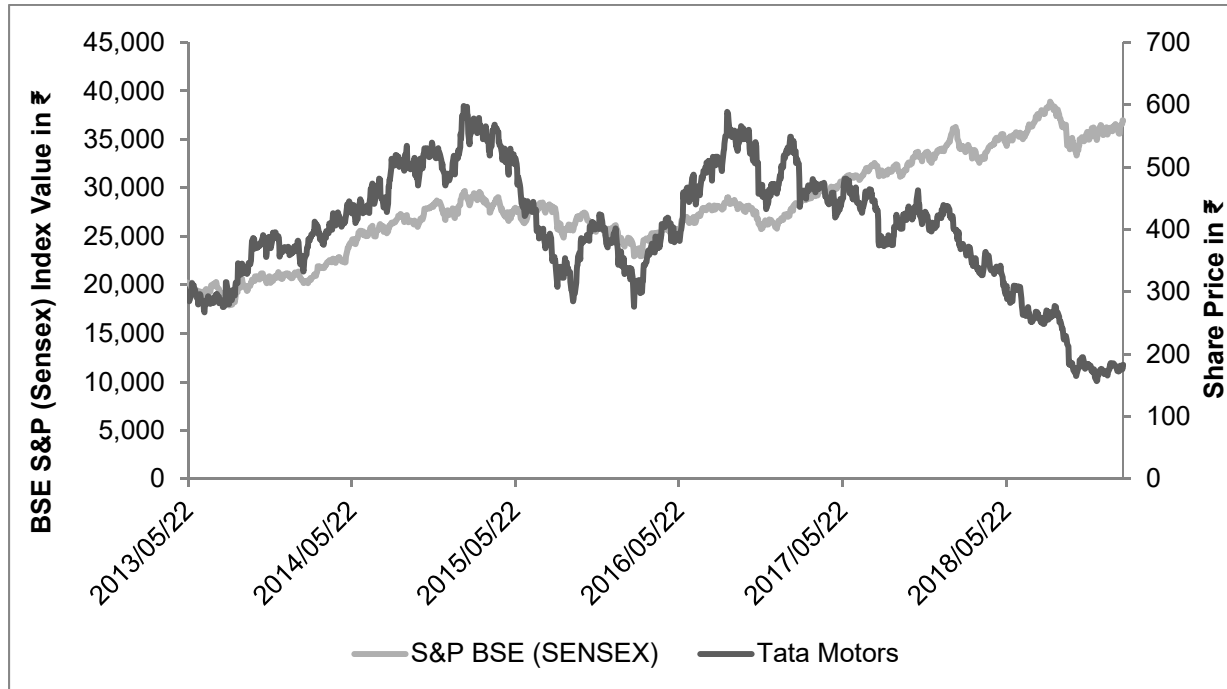
Tata Motors banked on the rise in disposable income, the effectiveness of the turnaround plan, and new product launches to support its financial position. However, another issue that left automobile players grappling for profitability was the announcement by the Indian government that new emission standards—Bharat Stage VI (BS-VI), equivalent to the Euro 6 norms—would become effective as of April 1, 2020. The new standards were a massive change from the existing BS-IV norms.⁴⁰

Tata Motors reported a net loss in three consecutive quarters of FY 2019 with a slowdown in the revenue growth from 12 per cent in Q1 FY 2019 to a meagre 4 per cent in Q3 FY 2019 (see Exhibit 10).⁴¹ Management cited the primary reasons for the loss as the challenging market conditions in China, the muted demand scenario in other markets, and a one-time exceptional item of asset impairment in JLR in Q3 FY 2019.⁴² Nonetheless, despite continuous quarterly losses and a drop in stock prices, Butschek sounded optimistic in the Q3 FY 2019 press release:

Fiscal year 2019 so far has been a challenging period for the industry. Despite the muted growth, Tata Motors has delivered strong results, registered an impressive profitable growth this year on the back of exciting products, renewed brand positioning and aggressive cost reduction. Our business performance is well on track—thanks to the turnaround momentum in the Company. We are committed to our core objectives of winning decisively in CVs [commercial vehicles], sustainably in PVs [passenger vehicles] and proactively in EVs [electric vehicles]. Our aspirations for the future will only grow to surpass customers' expectations.⁴³

Still, many investors fretted because Tata Motors' stock was trading at a price-to-book ratio of 0.6, compared with the peer average ratio of 2.51, and its price to earnings ratio was low at 6.91, compared with the peer average ratio of 14.42 (see Exhibits 11 and 12). Tata Motors also needed to improve its average revenue realization per vehicle (see Exhibit 13).

After everything Tata Motors had done, was there more that Butschek could do to maintain market share and improve earnings? Could he win back the confidence of investors, deliver sustainable returns, and ensure cash dividends for the investors as envisioned by Tata Motors' board?

EXHIBIT 1: TATA MOTORS' SHARE PRICE, FROM FY 2015–Q3 FY 2019

Note: FY = fiscal year; ₹ = INR = Indian rupee; ₹1 = US\$0.015 on March 30, 2018; S&P BSE Sensx = S&P Bombay Stock Exchange Sensitive Index; Q = quarter.

Source: Created by the case authors based on Tata Motors Limited, "Stock Prices of Shares for Tata Motors Limited," Thomson Reuters Eikon, accessed February 3, 2019.

EXHIBIT 2: TATA MOTORS' CONSOLIDATED SALES BY SEGMENT (IN UNITS), FY 2017–FY 2018

Product Segment	FY 2017	FY 2018
Passenger cars	310,171	319,492
Utility vehicles	385,480	445,080
Light commercial vehicles	216,222	285,857
Medium and heavy commercial vehicles	179,875	170,695
Total	1,091,748	1,221,124

Note: FY = fiscal year.

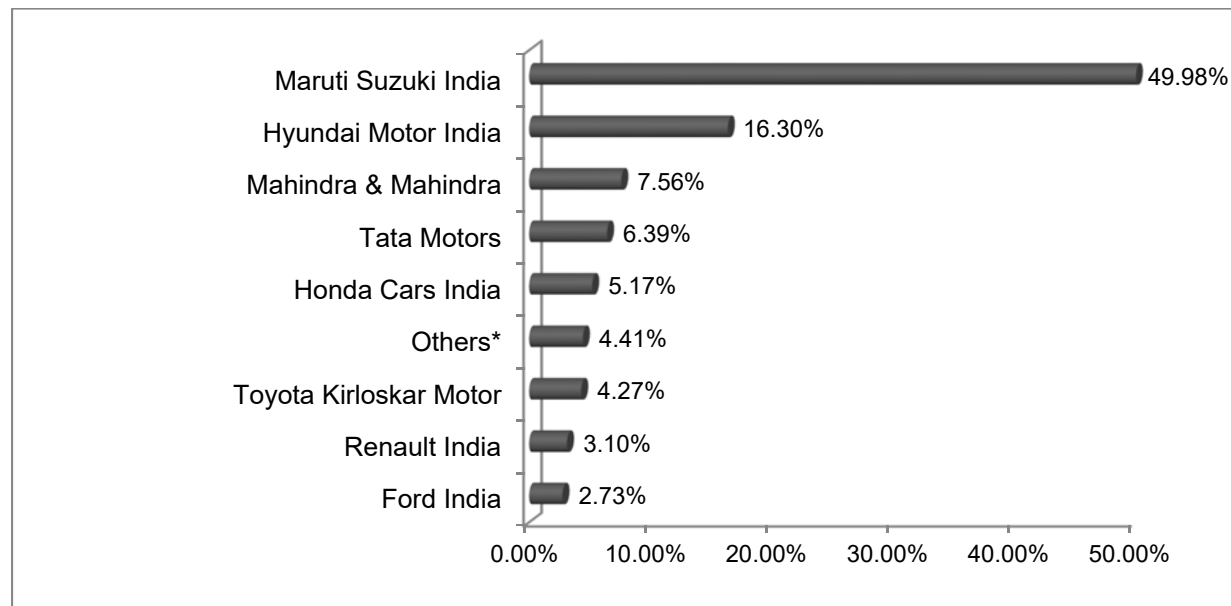
Source: Created by the case authors based on Tata Motors Limited, Tata Motors Limited, *73rd Annual Report (Integrated) 2017–18*, May 23, 2018, 109, accessed January 31, 2019, <http://investors.tatamotors.com/financials/73-ar-html/index.html>.

EXHIBIT 3: TATA MOTORS' MARKET SHARE IN INDIA, FY 2016–FY 2018, BY SEGMENT

Product Segment	FY 2016	FY 2017	FY 2018
Passenger cars	5.30%	6.50%	6.20%
Utility vehicles	2.70%	2.00%	4.60%
Intermediate and light commercial vehicles	46.40%	42.40%	44.90%
Medium and heavy commercial vehicles	58.50%	55.10%	54.30%
Small commercial vehicles and pickups	37.30%	37.50%	39.60%
Commercial vehicle passenger	47.60%	46.00%	45.30%
Total Four-Wheel Vehicles	13.10%	12.70%	14.20%

Note: FY = fiscal year.

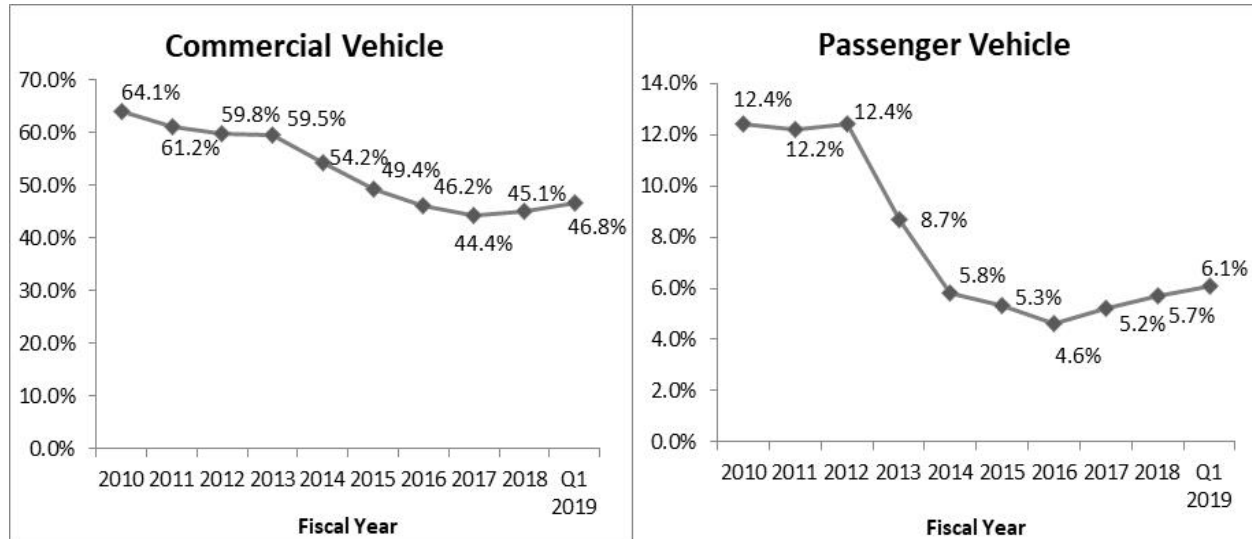
Source: Created by the case authors based on Tata Motors Limited, Form 20-F for the Fiscal Year Ended March 31, 2018, filed with the United States Securities and Exchange Commission, July 31, 2018, accessed February 1, 2019, www.tatamotors.com/wp-content/uploads/2015/09/22043312/20F-for-2018.pdf.

EXHIBIT 4: MARKET SHARE OF AUTOMOBILE COMPANIES IN THE PASSENGER CAR MARKET IN INDIA (FY 2018)

Note: FY 2018 = fiscal year 2017–2018; Others* = Nissan Motor Company, Volkswagen, Škoda Auto, and Isuzu Motors.

Source: Created by the case authors based on Ronak Shah, "Top-10 Carmakers in India and Their Market Share: Maruti Suzuki Owns Half of the Indian Market," *Financial Express*, April 11, 2018, accessed February 2, 2019, www.financialexpress.com/auto/car-news/top-10-carmakers-in-india-and-their-market-share-maruti-suzuki-owns-half-of-the-indian-market/1129193.

EXHIBIT 5: MARKET SHARE OF TATA MOTORS' MARKET SHARE IN INDIA'S COMMERCIAL AND PASSENGER VEHICLE SEGMENTS, FY 2010–Q1 FY 2019



Note: FY = fiscal year; Q = quarter.

Source: Created by the case authors based on Tata Motors Limited, "Results Data Bank: Q1 FY'19," July 31, 2018, 16, accessed February 1, 2019, www.tatamotors.com/investors/download-library.

**EXHIBIT 6: TATA MOTORS' INSTALLED CAPACITY AND PRODUCTION, FY 2017–FY 2018
(NUMBER OF VEHICLES)**

	Installed Production Capacity	Production (units)	
		FY 2017	FY 2018
Tata Motors' plants in India			
Medium and heavy commercial vehicles, light commercial vehicles, utility vehicles, and passenger vehicles	1,622,920	529,927	601,695
Jaguar Land Rover			
Utility vehicles, passenger cars	841,000	620,287	618,000
Other subsidiary companies' plants (excluding Jaguar Land Rover)			
Medium and heavy commercial vehicles, buses, bus bodies, and pickup trucks	52,000	21,858	21,036
Joint operations (passenger vehicles)	100,000	12,234	30,655
Total	2,615,920	1,184,306	1,271,386

Note: FY = fiscal year.

Source: Created by the case authors based on Tata Motors Limited, Form 20-F for the Fiscal Year Ended March 31, 2018, filed with the United States Securities and Exchange Commission, July 31, 2018, 71, accessed February 1, 2019, www.tatamotors.com/wp-content/uploads/2015/09/22043312/20F-for-2018.pdf.

**EXHIBIT 7: CONSOLIDATED INCOME STATEMENTS OF TATA MOTORS AND SUBSIDIARIES,
2013–2018**

Fiscal year ended March 31 (in ₹ million except per share data)	2013	2014	2015	2016	2017	2018
Revenue	1,887,927	2,328,337	2,631,590	2,776,606	2,744,921	2,954,093
Cost of Revenue	1,138,471	1,339,531	1,484,710	1,534,433	1,593,453	1,742,884
Gross Profit	749,456	988,805	1,146,880	1,242,173	1,151,468	1,211,209
Selling/General/Administrative Expenses	478,948	630,911	682,237	813,697	780,936	854,120
Selling/General/Administrative Expense	246,555	334,706	341,734	437,203	410,620	461,433
Labour and Related Expense	166,322	215,564	255,490	288,809	283,329	303,001
Advertising Expense	66,071	80,641	85,014	87,685	86,987	89,686
Research and Development	20,216	25,652	28,752	34,688	34,136	35,319
Depreciation and Amortization	76,013	110,782	133,886	167,108	179,050	215,536
Unusual Expense (Income)	6,027	9,854	1,847	18,504	(11,146)	(19,751)
Other Operating Expense			43,110			
Total Operating Expense (including Cost of Revenue)	1,719,675	2,116,730	2,374,542	2,568,430	2,576,429	2,828,108
Operating Income	168,252	211,607	257,048	208,176	168,492	125,985
Interest Income (Expense), Net	(24,828)	(16,367)	8,540	(59,230)	(67,810)	(4,617)
Other Expense/Income, Net	(6,952)	(6,551)	(8,126)	(7,690)	(7,534)	(9,820)
Net Income before Taxes	136,472	188,689	257,462	141,256	93,148	111,548
Provision for Income Taxes	37,767	47,648	76,429	30,251	32,512	43,419
Net Income after Taxes	98,705	141,041	181,033	111,005	60,636	68,129
Minority Interest	(837)	(595)	(868)	(989)	(1,022)	(1,025)
Equity in Affiliates	1,056	(537)	134	5,775	14,930	22,783
Net Income	98,924	139,909	180,299	115,791	74,544	89,887
Basic Weighted Average Shares	3,222	3,249	3,253	3,379	3,396	3,396
Basic EPS Excluding Extraordinary Items	30.70	43.06	55.43	34.27	21.95	26.47
Basic EPS Including Extraordinary Items	30.70	43.07	55.43	34.27	21.95	26.47

Note: ₹ = INR = Indian rupee; ₹1 = US\$0.015 on March 30, 2018; EPS = earnings per share

Source: Compiled by the case authors from Tata Motors Limited, "Consolidated Income Statements," Thomson Reuters Eikon, accessed January 30, 2019.

EXHIBIT 8: CONSOLIDATED CASH FLOW STATEMENTS OF TATA MOTORS AND SUBSIDIARIES, 2013–2018

Fiscal year ended March 31 (in ₹ millions)	2013	2014	2015	2016	2017	2018
Cash Flow, Operating Activities						
Net Income/Starting Line	98,926	139,910	139,863	116,782	75,566	90,914
Depreciation/Depletion	75,968	110,736	133,864	167,108	179,050	215,536
Non-Cash Items	69,162	96,204	160,245	102,372	33,786	26,673
Unusual Items	(1,069)	16	4,016	33,380	(7,270)	(7,976)
Equity in Net Earnings (Loss)	(1,056)	537	(134)	(5,775)	(14,930)	(22,783)
Other Non-Cash Items	71,287	95,651	156,363	74,766	55,985	57,432
Changes in Working Capital	(22,429)	15,066	(78,654)	(7,266)	13,591	(96,988)
Accounts Receivable	(51,767)	20,626	(31,790)	(27,434)	(37,724)	(140,312)
Inventories	(26,558)	(28,526)	(36,924)	(57,434)	(66,207)	(35,604)
Other Assets	(9,990)	11,239	(6,246)	549	(12,750)	1,513
Accounts Payable	81,322	46,939	35,978	39,475	93,006	73,203
Other Liabilities	6,965	7,465	2,264	57,976	56,217	36,863
Other Operating Cash Flow	(22,401)	(42,678)	(41,936)	(20,398)	(18,951)	(32,651)
Cash from Operating Activities	221,626	361,917	355,317	378,995	301,993	236,135
Cash Flow, Investing Activities						
Capital Expenditures	(188,626)	(269,751)	(319,622)	(315,030)	(304,669)	(350,789)
Purchase of Fixed Assets	(188,626)	(269,751)	(319,622)	(161,359)	(160,718)	(198,654)
Purchase/Acquisition of Intangibles	—	—	—	(153,671)	(143,951)	(152,135)
Other Investing Cash Flow Items	(46,288)	(29,179)	(29,051)	(60,014)	(76,130)	88,773
Acquisition of Business	0	(1,846)	0	(1,114)	0	—
Sale of Business	—	—	—	—	—	145
Sale of Fixed Assets	367	499	742	588	534	303
Sale/Maturity of Investment	8,495	10,669	306,156	470,882	342,834	525,766
Investment, Net	2,071	(4,111)	(53,930)	(47,147)	19,144	23,611
Purchase of Investments	(69,777)	(54,938)	(289,208)	(491,835)	(452,755)	(485,930)
Other Investing Cash Flow	12,556	20,547	7,189	8,612	14,114	24,879
Cash from Investing Activities	(234,914)	(298,930)	(348,672)	(375,044)	(380,799)	(262,016)
Cash Flow, Financing Activities						
Financing Cash Flow Items	(76,335)	(73,120)	(71,477)	(58,236)	(53,839)	(55,066)
Total Cash Dividends Paid	(15,272)	(6,886)	(6,811)	0	(730)	0
Issuance (Retirement) of Stock, Net	2	1	0	74,332	46	0
Issuance (Retirement) of Debt, Net	74,685	41,173	130,302	(54,048)	116,577	75,183
Cash from Financing Activities	(16,921)	(38,832)	52,014	(37,951)	62,053	20,117
Foreign Exchange Effects	5,219	18,616	(13,656)	8,105	(14,915)	13,064
Net Cash, Beginning Balance	148,499	123,510	166,280	197,431	171,536	139,868
Net Cash, Ending Balance	123,510	166,280	211,283	171,536	139,868	147,168
Cash Interest Paid	46,656	61,706	63,070	57,157	53,363	54,106
Cash Taxes Paid	22,401	43,083	41,940	20,398	18,951	30,212
Free Cash Flow	33,000	92,165	35,696	63,966	(2,676)	(114,654)

Note: ₹ = INR = Indian rupee; ₹1 = US\$0.015 on March 30, 2018.

Source: Compiled by the case authors from Tata Motors Limited, "Consolidated Cash Flow Statements," Thomson Reuters Eikon, accessed January 30, 2019.

EXHIBIT 9: CONSOLIDATED BALANCE SHEET OF TATA MOTORS AND SUBSIDIARIES, 2012–2018

Fiscal year ended March 31 (in ₹ millions)	2012	2013	2014	2015	2016	2017	2018
Assets							
Cash and Short-Term Investments	244,345	223,163	298,170	442,570	491,676	508,807	492,811
Cash	64,191	78,779	77,295	370	401	139,868	147,168
Cash and Equivalents	84,139	0	0	197,061	171,135	0	0
Short-Term Investments	96,014	144,385	220,875	245,139	320,140	368,939	345,644
Accounts Receivable	190,722	226,822	237,965	185,209	202,629	211,810	289,383
Accounts Receivable, Trade, Gross	85,631	112,813	111,959	137,485	148,452	154,530	211,550
Provision for Doubtful Accounts	(3,262)	(3,217)	(6,217)	(7,757)	(12,743)	(13,774)	(12,617)
Notes Receivable, Short Term	108,353	64,382	85,624	51,523	63,397	68,820	84,247
Receivables, Other		52,844	46,599	3,958	3,523	2,234	6,203
Total Inventory	182,160	210,368	272,709	296,433	335,865	357,697	443,981
Inventories, Finished Goods	140,131	166,711	225,108	229,415	254,870	287,694	344,909
Inventories, Work in Progress	19,248	21,640	26,570	33,645	42,589	36,426	40,432
Inventories, Raw Materials	21,900	21,021	19,701	25,224	26,259	23,757	32,280
Inventories, Other	881	997	1,330	8,149	12,147	9,820	26,361
Prepaid Expenses	4,499	15,206	18,652	10,584	11,174		
Other Current Assets, Total	22,890	65,976	130,959	60,773	57,892	82,885	133,553
Restricted Cash, Current	13,299	63,408	95,046	2,347	5,308	2,384	4,939
Discontinued Operations, Current Asset						0	25,852
Other Current Assets	9,591	2,568	35,912	58,426	52,584	80,502	102,762
Total Current Assets	644,615	741,536	958,453	995,569	1,099,237	1,161,198	1,359,728
Property/Plant/Equipment, Net	302,401	370,741	508,316	631,173	714,780	697,814	900,108
Buildings, Gross	89,677	82,679	109,465	98,656	121,642	120,143	164,929
Land/Improvements, Gross	16,975	16,936	20,280	66,531	71,615	67,620	73,386
Machinery/Equipment, Gross	585,532	642,165	804,579	663,011	813,923	816,179	1,023,635
Construction in Progress, Gross	31,215	43,451	101,373	88,527	65,510	101,868	161,429
Leases, Gross	3,959	4,022	4,043	234	797	667	930
Other Property/Plant/Equipment, Gross	10,702	12,234	15,394	23,243	26,204	23,904	21,884
Accumulated Depreciation, Total	(435,660)	(430,746)	(546,817)	(309,029)	(384,910)	(432,566)	(546,086)
Goodwill, Net	40,937	41,024	49,788	7,320	7,598	6,733	1,165
Intangibles, Net	259,724	327,889	465,438	530,637	609,129	591,882	713,201
Intangibles, Gross	319,189	414,369	606,775	716,431	841,307	834,997	1,085,067
Accumulated Intangible Amortization	(59,465)	(86,480)	(141,337)	(185,795)	(232,178)	(243,115)	(371,866)
Long-Term (LT) Investments	13,915	12,224	11,144	39,434	45,350	52,968	56,517
LT Investment, Affiliate Companies	6,686	4,517	3,830	37,575	37,640	46,060	48,879
LT Investments, Other	7,230	7,707	7,314	1,860	7,710	6,908	7,638

EXHIBIT 9 (CONTINUED)

Fiscal year ended March 31 (in ₹ millions)	2012	2013	2014	2015	2016	2017	2018
Note Receivable, Long Term	136,580	149,547	124,634	111,096	114,418	141,709	186,799
Other Long-Term Assets, Total	51,140	60,823	82,210	66,209	80,900	85,240	95,987
Deferred Charges	0	10,339	15,092	19,836	23,090	9,573	11,443
Deferred Income Tax, Long Term Asset	45,393	44,289	23,471	40,494	39,570	44,573	41,587
Restricted Cash, Long Term	0	0	0	3,268	2,327	1,318	1,739
Other Long-Term Assets	5,747	6,195	43,647	2,611	15,913	29,776	41,219
Total Assets	1,449,312	1,703,782	2,199,983	2,381,437	2,671,412	2,737,544	3,313,505
Liabilities and Equities							
Liabilities							
Accounts Payable	0	449,124	573,157	561,715	615,618	625,326	769,398
Accrued Expenses	44,795	57,999	44,611	30,510	36,284	10,122	12,024
Notes Payable/Short Term Debt	40,787	116,202	96,959	131,547	114,508	138,599	167,949
Current Portion of LT Debt/Capital Leases	191,865	99,402	56,878	49,490	73,988	41,149	109,561
Other Current Liabilities	455,233	142,730	151,956	220,674	230,097	341,100	373,263
Dividends Payable	12,807	6,452	6,486				
Customer Advances	23,688	21,833	22,937	30,671	36,819		
Income Taxes Payable	11,638	17,920	13,969	8,201	7,235	13,926	15,591
Other Payables	335,696	19,624	25,802	46,052	35,031	31,204	44,236
Discontinued Operations, Current Liability						0	10,702
Other Current Liabilities	71,404	76,901	82,762	135,750	151,012	295,970	302,735
Total Current Liabilities	732,681	865,457	923,561	993,936	1,070,494	1,156,295	1,432,195
Total Long-Term Debt	279,625	321,553	452,586	546,071	505,104	606,292	611,995
Long-Term Debt	279,625	321,553	452,430	545,164	504,414	605,752	611,528
Capital Lease Obligations	0	0	156	908	690	540	468
Deferred Income Tax	21,651	20,482	15,723	26,859	45,449	11,740	61,258
Minority Interest	3,071	3,705	4,207	4,298	4,328	4,532	5,251
Other Long-Term Liabilities	85,300	116,213	147,872	257,547	256,512	378,066	248,528
Total Liabilities	1,122,327	1,327,409	1,543,949	1,828,711	1,881,887	2,156,925	2,359,226

EXHIBIT 9 (CONTINUED)

Fiscal year ended March 31 (in ₹ millions)	2012	2013	2014	2015	2016	2017	2018
Shareholders' Equity							
Common Stock, Total	6,348	6,381	6,438	6,438	6,792	6,792	6,792
Additional Paid-In Capital	111,868	113,286	116,831	114,896	188,874	188,919	188,919
Retained Earnings (Accumulated Deficit)	250,898	342,854	476,756	455,627	609,838	617,960	746,948
Unrealized Gain (Loss)	929	396	229	(52,783)	(61,522)	(179,116)	(36,260)
Other Equity, Total	(43,057)	(86,544)	55,781	28,548	45,542	(53,936)	47,880
Translation Adjustment	(2,740)	(8,516)	77,469	29,459	46,522	(53,001)	46,212
Other Equity	0	0	0	(911)	(1,027)	(193)	228
Minimum Pension Liability Adjustment	(38,706)	(62,247)	(75,684)	0	0	0	0
Other Comprehensive Income	(1,612)	(15,781)	53,996	0	47	(742)	1,440
Total Equity	326,985	376,373	656,035	552,726	789,524	580,619	954,279
Total Liabilities and Shareholders' Equity	1,449,312	1,703,782	2,199,984	2,381,437	2,671,411	2,737,544	3,313,505

Note: ₹ = INR = Indian rupee; ₹1 = US\$0.015 on March 30, 2018.

Source: Compiled by the case authors from Tata Motors Limited, "Consolidated Balance Sheet," Thomson Reuters Eikon, accessed January 30, 2019.

EXHIBIT 10: TATA MOTORS AND SUBSIDIARIES, CONSOLIDATED QUARTERLY RESULTS, FY 2018–FY 2019 (IN ₹)

	FY 2018			FY 2019		
	Q1	Q2	Q3	Q1	Q2	Q3
Net Revenue	599,723.3	703,447.6	743,377.0	673,060.6	727,293.0	775,827.1
Net Profit	31,999.3	25,016.7	12,146.0	(18,625.7)	(10,094.9)	(269,608.0)

Note: ₹ = INR = Indian rupee; ₹1 = US\$0.015 on March 30, 2018; Q = quarter.

Source: Created by the case authors based on Tata Motors Limited, "Statement of Consolidated Unaudited Financial Results for the Quarter and Nine Months Ended December 31, 2018," 1; Tata Motors Limited, "Statement of Consolidated Unaudited Financial Results for the Quarter and Six Months ended September 30, 2018," 1; Tata Motors Limited, "Statement of Consolidated Unaudited Financial Results for the Quarter Ended June 30, 2018," 1; all accessed February 10, 2019, www.tatamotors.com/investors/download-library.

EXHIBIT 11: PEER DATA IN THE AUTOMOBILE INDUSTRY

	Maruti Suzuki India	Mahindra & Mahindra	Tata Motors	Ashok Leyland	Force Motors	Peer Average (Mean)	Peer Median
Share Price (₹)	7,196.65	689.05	149.05	86.35	1,385.85		
P/E	27.99	10.18	6.91	14.52	12.49	14.42	13.46
EPS (₹)	260.86	68.86	26.46	6.04	111.66	94.78	81.82
DPS (₹)	80	7.5	–	2.43	10	24.98	10
Dividend Yield (%)	1.1	1.07	–	2.77	0.72	1.41	1.1
ROE (%)	19.79	22.58	11.71	25.67	8.48	17.65	18.72
P/B	5.18	2.26	0.6	3.47	1.02	2.51	2.38
P/S	2.69	0.89	0.19	0.86	0.52	1.03	0.88
MCAP (₹ billions)	2,198.25	828.87	573.94	256.69	18.31	775.21	674.58

Note: ₹ = INR = Indian rupee; ₹1 = US\$0.015 on March 30, 2018; P/E = price-to-earnings ratio; EPS = earnings per share; DPS = dividends per share; ROE = return on equity; P/B = price-to-book ratio; P/S = price-to-sales ratio; MCAP = market capitalization; share price data as on February 8, 2019.

Source: Created by the case authors based on Tata Motors Limited, "Sector Competitors," Thomson Reuters Eikon, accessed February 8, 2019.

EXHIBIT 12: INDUSTRY MEDIAN RATIOS OF PEERS IN THE AUTOMOBILE INDUSTRY

Financial Ratios	Industry Median
Profitability Ratios	
Gross Margin	23.90%
EBITDA Margin	10.90%
Operating Margin	7.30%
Net Margin	8.10%
Liquidity Ratios	
Quick Ratio	1.01
Current Ratio	1.20
Working Capital Cycle	
Average Accounts Receivable Days	51.10
Average Inventory Days	31.20
Average Accounts Payable Days	68.00
Cash Cycle (Days)	29.90

EXHIBIT 12 (CONTINUED)

Leverage Ratios	
Assets to Equity	2.25
Debt to Equity	0.12
Long-Term Debt to Total Capital	6.10%
Net Debt to EBITDA	0.71
Times Interest Earned/ Interest Coverage Ratio	11.10
Efficiency Ratios	
Fixed Asset Turnover	4.12
Accounts Receivable Turnover	7.10
Inventory Turnover	11.70

Note: Industry peers include Mahindra & Mahindra Limited, Eicher Motors Limited, Tata Motors Limited, Ashok Leyland Limited, Force Motors Limited, Maruti Suzuki India Limited, Bajaj Auto Limited, VCCL Limited, Automobile Products of India Limited, Pricol Limited, Atul Auto Limited, Hindustan Motors Limited, and Premier Limited. EBITDA = earnings before interest, taxes, depreciation, and amortization.

Source: Compiled by the case authors from Tata Motors Limited, "Ratios—Key Metrics," Thomson Reuters Eikon, accessed January 30, 2019.

EXHIBIT 13: AVERAGE REVENUE PER VEHICLE FOR TATA MOTORS AND JAGUAR LAND ROVER, FY 2016–FY 2018

	FY 2016	FY 2017	FY 2018
Units Sold			
Tata Motors			
Passenger Cars and Utility Vehicles	129,558	160,905	219,274
Commercial Vehicles	390,953	396,097	456,552
Total	520,511	557,002	675,826
Jaguar Land Rover			
Jaguar	102,106	169,284	150,484
Land Rover	441,979	365,462	394,814
Total	544,085	534,746	545,298
Tata Motors Group (Consolidated)	1,064,596	1,091,748	1,221,124
Revenue			
Tata Motors (in ₹ millions)	511,314	538,624	638,564
Jaguar and Land Rover (in ₹ millions)	2,228,229	2,163,888	2,269,649

Note: ₹ = INR = Indian rupee; ₹1 = US\$0.015 on March 30, 2018.

Source: Compiled by the case authors from Tata Motors Limited, Form 20-F for the Fiscal Year Ended March 31, 2018, filed with the United States Securities and Exchange Commission, July 31, 2018, accessed February 1, 2019, www.tatamotors.com/wp-content/uploads/2015/09/22043312/20F-for-2018.pdf.

ENDNOTES

- ¹ This case has been written on the basis of published sources only. Consequently, the interpretation and perspectives presented in this case are not necessarily those of Tata Motors Limited or any of its employees.
- ² Deepanshu Taumar, "Every Car Made by Tata Motors Is Losing Money: N Chandrasekaran," *Economic Times*, October 10, 2017, accessed January 30, 2019, <https://auto.economictimes.indiatimes.com/news/industry/every-single-car-is-losing-money-at-tata-motors-n-chandrasekaran/61004017>.
- ³ Bharat Stage IV (BS-IV) were emission norms that were in line with the acceptable emissions standards, as established in Europe (Euro 4), for different types of vehicles, fuels, machineries, and other components; ET Online, "Bharat Stage VI Norms: Know How They Will Impact You," *Economic Times*, October 25, 2018, accessed September 20, 2019, <https://economictimes.indiatimes.com/industry/auto/cars-uvs/bharat-stage-vi-norms-know-how-they-will-impact-you/articleshow/66362907.cms?from=mdr>.
- ⁴ Guenter Butschek, "TML CEO & MD's Message" in Tata Motors Limited, *73rd Annual Report (Integrated) 2017–18*, May 23, 2018, 20, accessed January 31, 2019, <http://investors.tatamotors.com/financials/73-ar-html/index.html>.
- ⁵ ₹ = INR = Indian rupee; ₹1 = US\$0.015 on March 30, 2018.
- ⁶ Market capitalization was calculated based on outstanding shares multiplied by closing share price on March 30, 2018.
- ⁷ Tata Motors Limited, "Key Highlights for Q3FY19," press release, February 7, 2019, accessed February 8, 2019, www.tatamotors.com/investors/results-press-releases.
- ⁸ Aseem Thapliyal, "Tata Motors Shares Fall 63% Since January 9; Should You Buy the Stock?," *Business Today*, December 7, 2018, accessed January 31, 2019, www.businesstoday.in/markets/company-stock/tata-motors-falls-should-you-buy-the-stock-jaguar-land-rover/story/297880.html.
- ⁹ Tata Motors Limited, *73rd Annual Report (Integrated) 2017–18*, May 23, 2018, 20, accessed January 31, 2019, <http://investors.tatamotors.com/financials/73-ar-html/index.html>.
- ¹⁰ Ibid.
- ¹¹ Market capitalization was calculated based on outstanding shares multiplied by closing share price on March 30, 2018.
- ¹² Tata Motors Limited, *73rd Annual Report*, op. cit.
- ¹³ Ibid.
- ¹⁴ Tata Motors Limited, "Results Data Bank: Q1 FY'19," July 31, 2018, accessed February 1, 2019, www.tatamotors.com/investors/download-library.
- ¹⁵ Tata Motors Limited, Form 20-F for the Fiscal Year Ended March 31, 2018, filed with the United States Securities and Exchange Commission, July 31, 2018, accessed February 1, 2019, www.tatamotors.com/wp-content/uploads/2015/09/22043312/20F-for-2018.pdf.
- ¹⁶ Ronak Shah, "Top-10 Carmakers in India and Their Market Share: Maruti Suzuki Owns Half of the Indian Market," *Financial Express*, April 11, 2018, accessed February 2, 2019, www.financialexpress.com/auto/car-news/top-10-carmakers-in-india-and-their-market-share-maruti-suzuki-owns-half-of-the-indian-market/1129193.
- ¹⁷ Tata Motors Limited, *Towards Tomorrow: 71st Annual Report 2015–2016*, May 30, 2016, accessed February 4, 2019, <http://investors.tatamotors.com/financials/71-ar-html/index.html>.
- ¹⁸ Ibid.
- ¹⁹ "Full Text of Cyrus Mistry's Letter to Tata Sons Board," *Business Standard*, October 27, 2016, accessed February 3, 2019, www.business-standard.com/article/companies/full-text-of-cyrus-mistry-s-letter-to-tata-sons-board-116102601571_1.html.
- ²⁰ Tata Motors Limited, *72nd Annual Report 2016–17*, May 23, 2017, accessed February 3, 2019, <http://investors.tatamotors.com/financials/72-ar-html/index.html>.
- ²¹ Dev Chatterjee, "Tata Motors Lost Orders from Ola and Uber Due to Mistry–Tata Tiff," *Business Standard*, July 13, 2018, accessed February 20, 2019, www.business-standard.com/article/companies/tata-mistry-tiff-tata-motors-lost-sizeable-orders-from-both-ola-uber-118071201349_1.html.
- ²² Henry Kallstrom, "Why GDP and Automotive Industry Growth Are Related," *Market Realist*, February 5, 2019, accessed September 20, 2019, <https://articles2.marketrealist.com/2015/02/gdp-automotive-industry-growth-related/>.
- ²³ Production figures included passenger vehicles, commercial vehicles, three wheelers, two wheelers, and quadricycles. Darshini Kansara, "Automobile Industry on Fast-Track! Review FY18 & Outlook FY19," CARE Ratings, November 21, 2018, accessed February 6, 2019, www.careratings.com/upload/NewsFiles/Studies/Auto%20Industry%20Update%20November%202018.pdf.
- ²⁴ Government of India and Society of Indian Automobile Manufacturers, *Automotive Mission Plan: 2016–26 (A Curtain Raiser)*, n.d., accessed September 12, 2019, www.siamindia.com/uploads/filemanager/47AUTOMOTIVEMISSIONPLAN.pdf.
- ²⁵ Economic Times Auto Bureau, "Automotive Mission Plan 2016-26 Unveiled: Here Are the Key Highlights," *Economic Times*, September 2, 2015, accessed January 25, 2019, <https://auto.economictimes.indiatimes.com/news/industry/automotive-mission-plan-2016-26-unveiled-here-are-the-key-highlights/48772090>.
- ²⁶ T E Narasimhan, "Automobile R&D investments soar on new regulations, emerging technologies," *Business Standard*, July 13, 2019, accessed September 30, 2019, www.business-standard.com/article/companies/automobile-r-d-investments-soar-on-new-regulations-emerging-technologies-119071100597_1.html; Paul Gao, Hans-Werner Kaas, Detlev Mohr, and Dominik Wee, "Disruptive trends that will transform the auto industry", McKinsey & Company, January 2016, accessed February 5, 2019, www.mckinsey.com/industries/automotive-and-assembly/our-insights/disruptive-trends-that-will-transform-the-auto-industry.
- ²⁷ Alanna Petroff, "These Countries Want to Ban Gas and Diesel Cars," *CNN Money*, September 11, 2017, accessed February 6, 2019, <https://money.cnn.com/2017/09/11/autos/countries-banning-diesel-gas-cars/index.html>.

²⁸ C40 Cities, *Green and Healthy Streets: Fossil-Fuel-Free Streets Declaration: Planned Actions to Deliver Commitments*, 2017, accessed February 6, 2019, https://c40-production-images.s3.amazonaws.com/other_uploads/images/1924_FFF_ACTION_010219.original.pdf?1549039541; Fiona Harvey, "Four of World's Biggest Cities to Ban Diesel Cars from Their Centres," *Guardian*, December 2, 2016, accessed February 7, 2019, www.theguardian.com/environment/2016/dec/02/four-of-worlds-biggest-cities-to-ban-diesel-cars-from-their-centres.

²⁹ Harvey, op. cit. Paul Gao, Hans-Werner Kaas, Detlev Mohr, and Dominik Wee, op. cit.

³⁰ T E Narasimhan, op. cit.

³¹ Charles Riley, "Global Slowdown: 3 of the Top 4 Economies Are Suffering," CNN Business, November 14, 2018, accessed February 8, 2019, <https://edition.cnn.com/2018/11/14/economy/economy-global-slowdown/index.html>.

³² Shalini Sengupta, "Tata Motors Cuts 1500 Managerial Workforce," People Matters, May 24, 2017, accessed February 4, 2019, www.peoplesmatters.in/news/talent-management/tata-motors-cuts-1500-managerial-workforce-15511?utm_source=peoplesmatters&utm_medium=interstitial&utm_campaign=learnings-of-the-day.

³³ Tata Motors Limited, *72nd Annual Report 2016–17*, May 23, 2017, accessed February 3, 2019, <http://investors.tatamotors.com/financials/72-ar-html/index.html>.

³⁴ *Ibid.*, F-75.

³⁵ *Ibid.*, 12.

³⁶ Tata Motors Limited, *73rd Annual Report 2017–18*, op. cit.

³⁷ Tata Motors Limited, Form 20-F for the Fiscal Year Ended March 31, 2018, filed with the United States Securities and Exchange Commission, July 31, 2018, accessed February 1, 2019, www.tatamotors.com/wp-content/uploads/2015/09/22043312/20F-for-2018.pdf.

³⁸ Tata Motors Limited, *73rd Annual Report 2017–18*, op. cit.

³⁹ *Ibid.*

⁴⁰ "Bharat Stage VI Norms: Know How They Will Impact You," *Economic Times*, October 25, 2018, accessed January 25, 2019, <https://economictimes.indiatimes.com/industry/auto/cars-uvs/bharat-stage-vi-norms-know-how-they-will-impact-you/articleshow/66362907.cms>.

⁴¹ Tata Motors Limited, "Key Highlights for Q3FY19," press release, February 7, 2019, accessed February 8, 2019, www.tatamotors.com/investors/results-press-releases.

⁴² *Ibid.*

⁴³ Tata Motors Limited, "Tata Motors Q3FY19 Financial Results," press release, February 7, 2019, accessed September 12, 2019, www.tatamotors.com/press/tata-motors-q3fy19-financial-results.