

AUTOMOBILES



MARCH 2017 (As of 31 March 2017)

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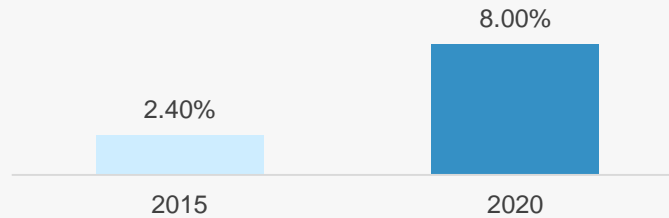
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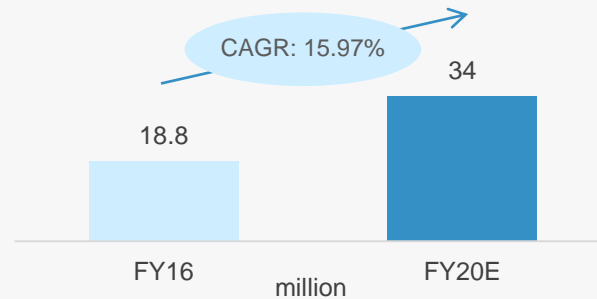
EXECUTIVE SUMMARY(1/3)

Third-largest automobile industry by 2016



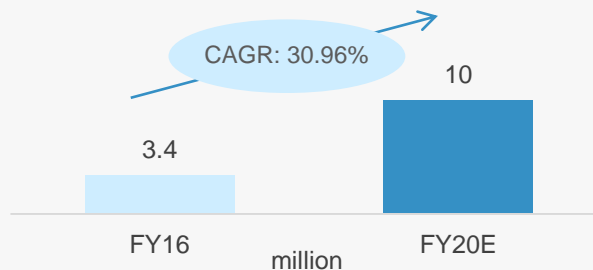
By 2020, India's share in the global passenger vehicle market to touch 8 per cent from 2.40 per cent in 2015

World's second-largest two wheeler manufacturer



Two wheeler production to rise from 18.8 million in FY16 to 34 million by FY20E

Passenger vehicle production to nearly triple by 2020E

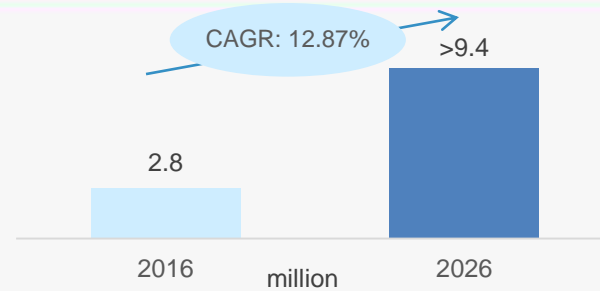


Passenger vehicle production to increase from 3.4 million in FY16 to 10 million in FY20E

Source: SIAM, NEMMP 2020 (National Electric Mobility Mission Plan), TechSci Research;
Note: E – Estimate

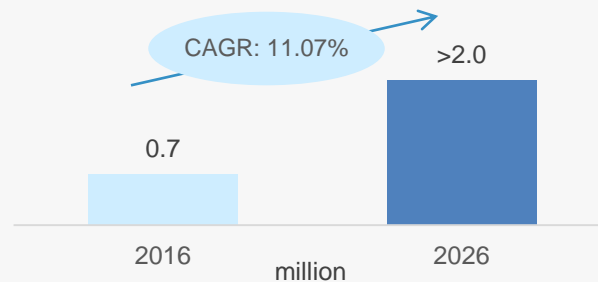
EXECUTIVE SUMMARY(2/3)

Domestic sales of passenger vehicles to grow from 2.8 million in 2016 to 9.4 - 13.4 million by 2026



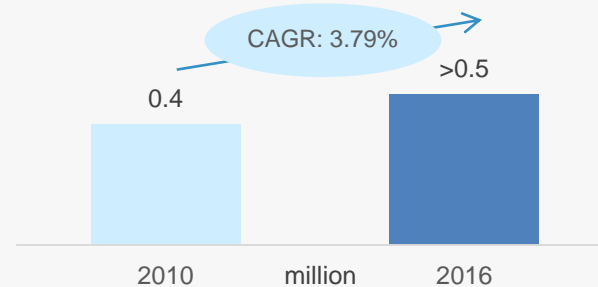
Domestic sales of passenger vehicles in India is expected to increase at a CAGR of 12.87 per cent during 2016-26

Domestic sales of commercial vehicles to grow from 0.7 million in 2016 to 2.0 - 3.9 million by 2026



Domestic sales of commercial vehicles in India is expected to increase at a CAGR of 11.07 per cent during 2016-26

Domestic sales of three wheelers will grow from 0.4 million in 2010 to 0.5 million in 2016

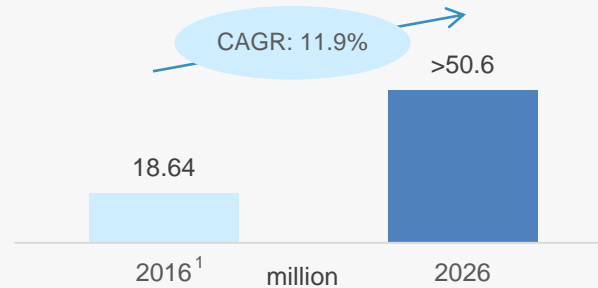


Domestic sale of three wheelers in India increased at a CAGR of 3.79 per cent during 2010-16

Source: SIAM, NEMMP 2020 (National Electric Mobility Mission Plan), TechSci Research;
Note: E – Estimate

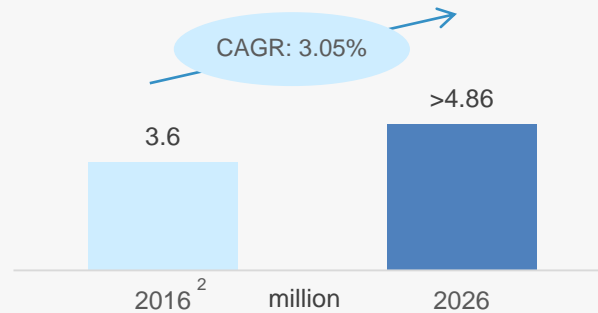
EXECUTIVE SUMMARY(3/3)

Domestic sales of two wheelers is the most growing segment, with domestic two wheeler sales expected to grow from 16.46 million in 2016 to 50.60 - 55.5 million by 2026



Domestic sales of two wheelers in India is expected to increase at a CAGR of 11.9 per cent during 2016-2026

Production of passenger vehicles, commercial vehicles, three wheelers and two wheelers grew at a CAGR of 2.74 per cent, 0.57 per cent, 3.16 per cent and 7.12 per cent, respectively, during FY11-16



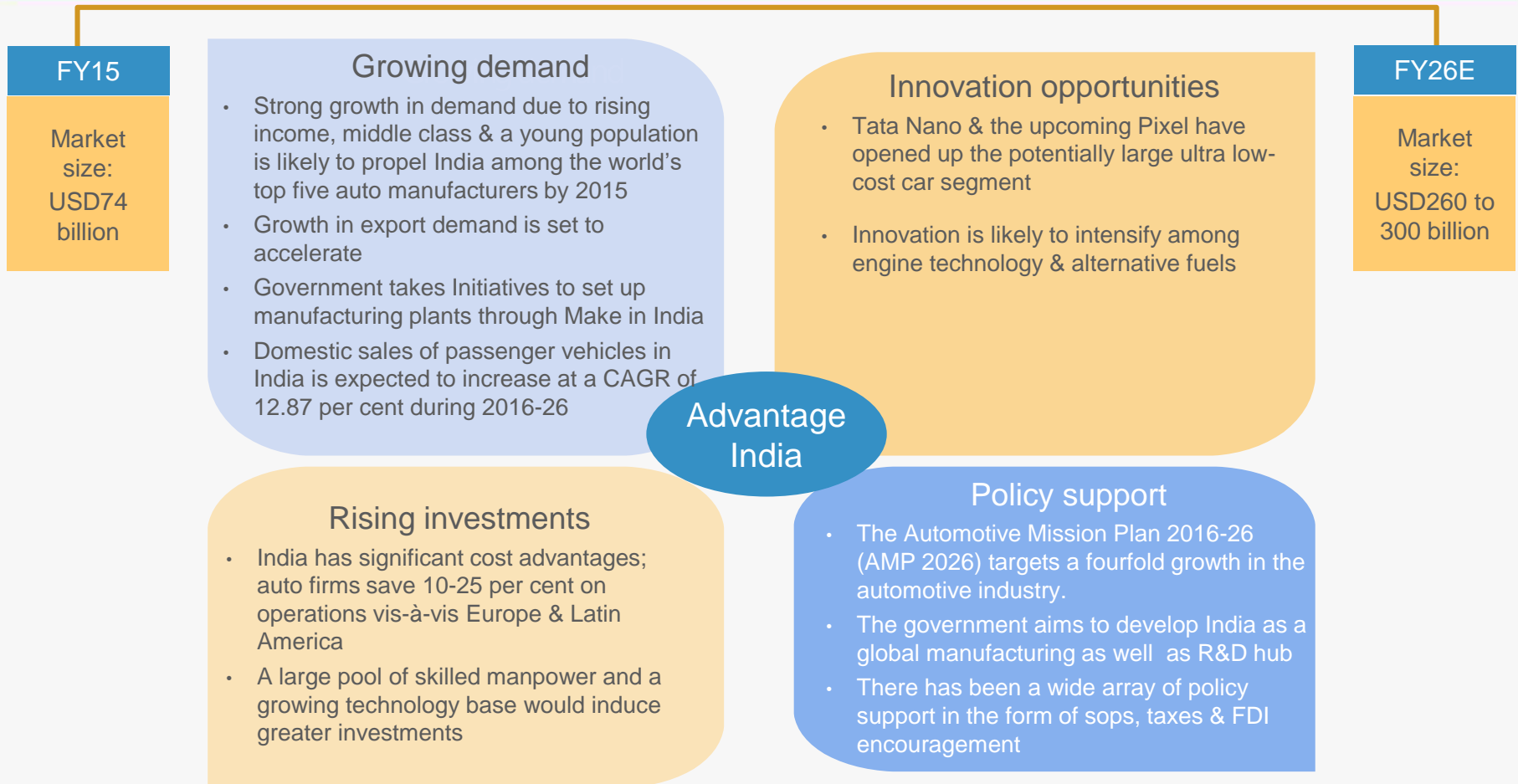
Automobile exports to grow at a CAGR of 3.05 per cent during 2016-2026

Source: SIAM, NEMMP 2020 (National Electric Mobility Mission Plan), TechSci Research;
Note: 2016¹ – Data for CY2016, E – Estimate
2016² – Data for April-March 2016

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ADVANTAGE INDIA



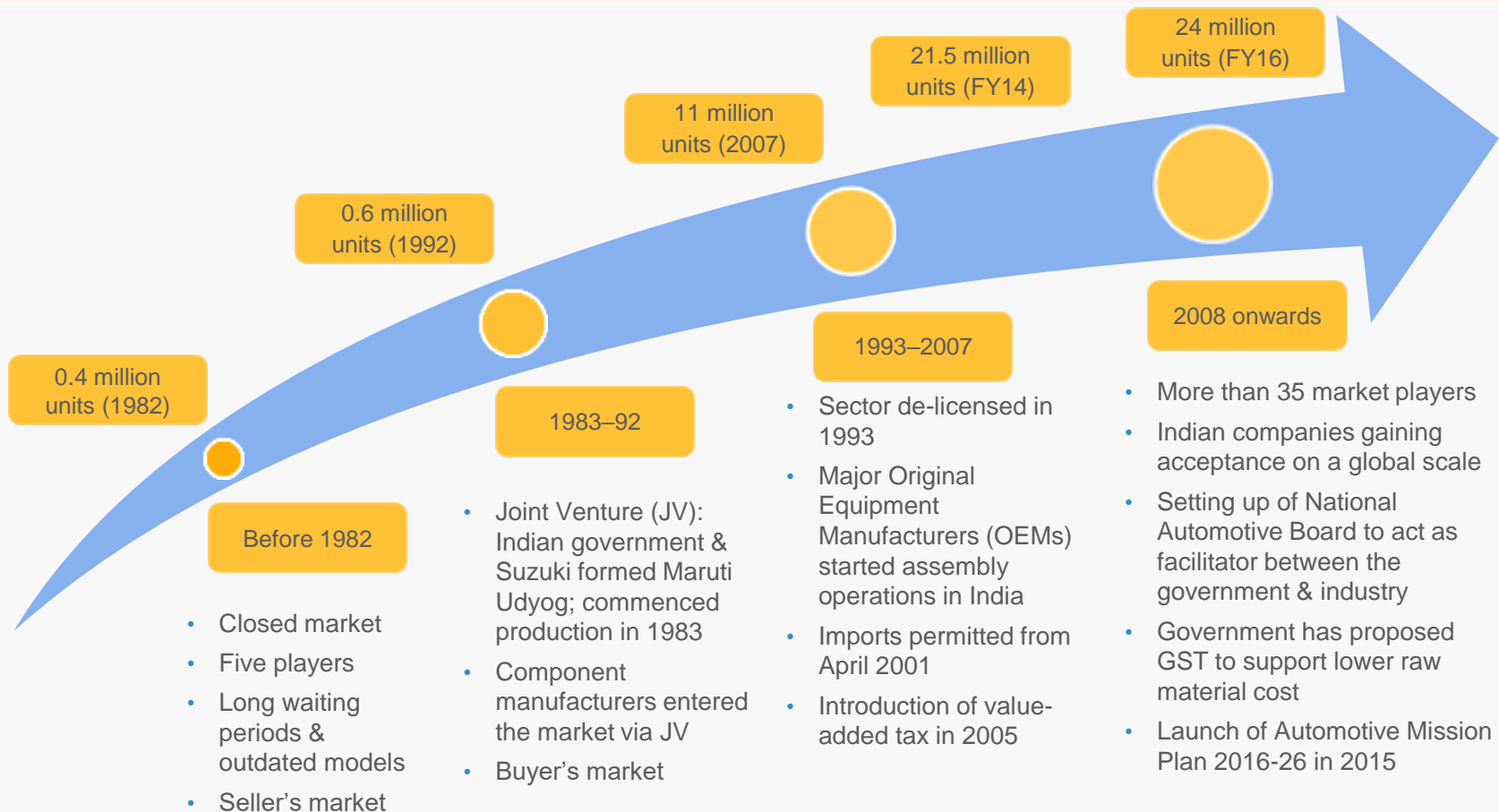
Source: Automotive Mission Plan (2006–2026), Make in India
Notes: R&D – Research and Development; FDI – Foreign Direct Investment; FY – Indian Financial Year (April – March);
FY26E – Estimated figure for Financial Year 2026

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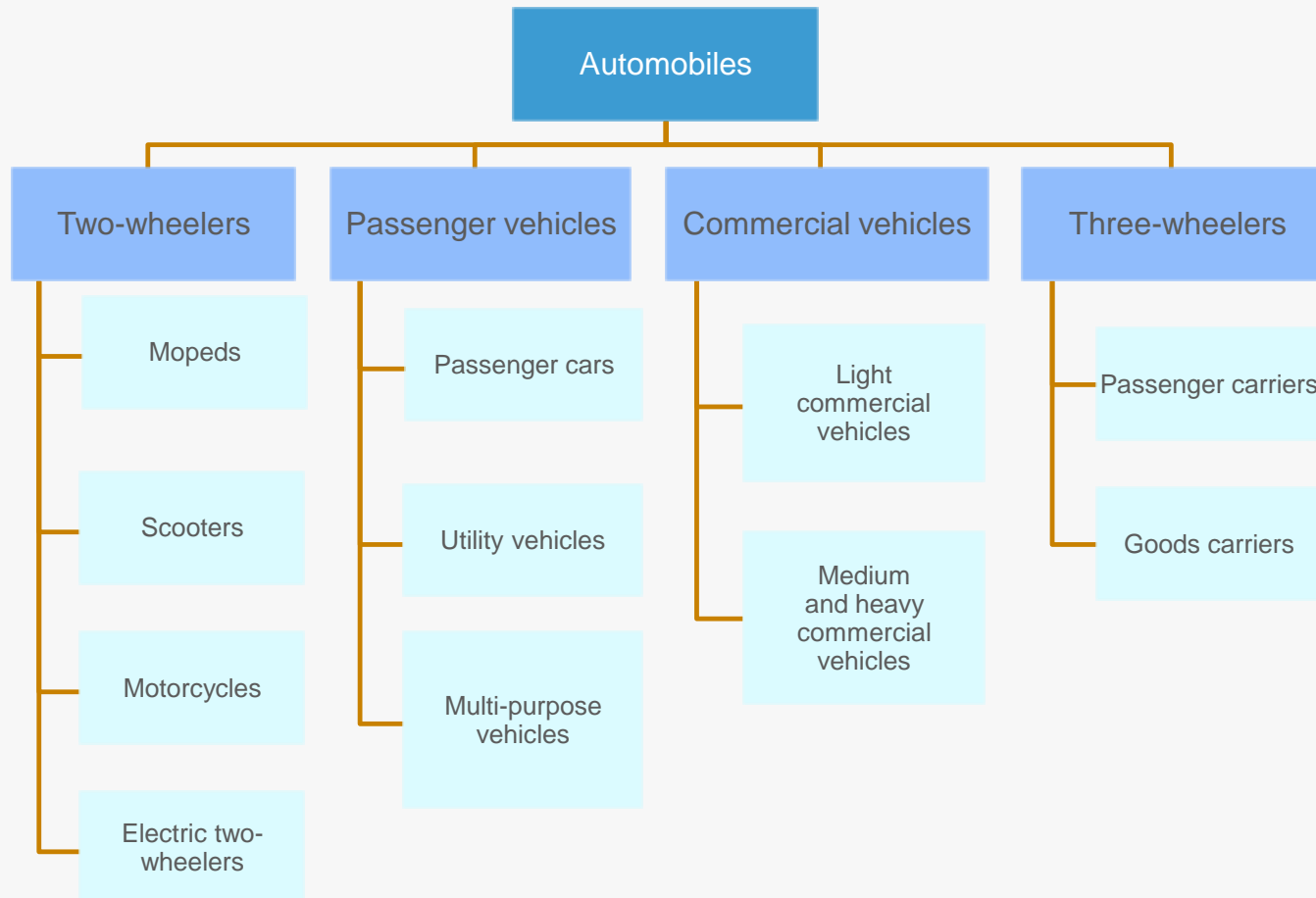
MARKET OVERVIEW AND TRENDS

EVOLUTION OF THE INDIAN AUTOMOTIVES SECTOR



Source: Tata Motors, Society of Indian Automobile Manufacturers (SIAM), TechSci Research
Notes: JV – Joint Venture, GST: Goods and Service Tax

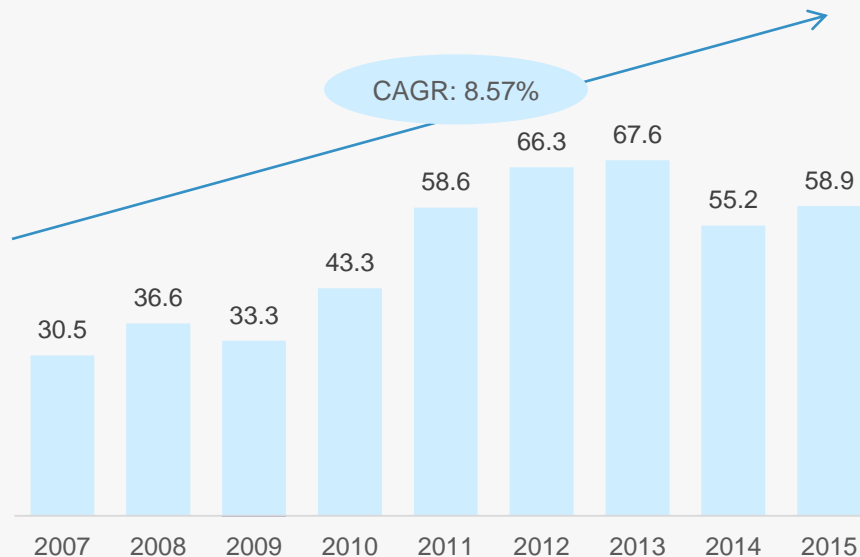
THE AUTOMOTIVES MARKET IS SPLIT INTO FOUR SEGMENTS



ROBUST GROWTH IN REVENUES

- * The gross turnover of automobile manufacturers in India expanded at a CAGR of 11.72 per cent over FY07-15
- * The domestic two wheelers segment accounted for 80.4 per cent of the total domestic market share¹ for the year 2015-16

Gross Turnover over the past few years
(USD billion)

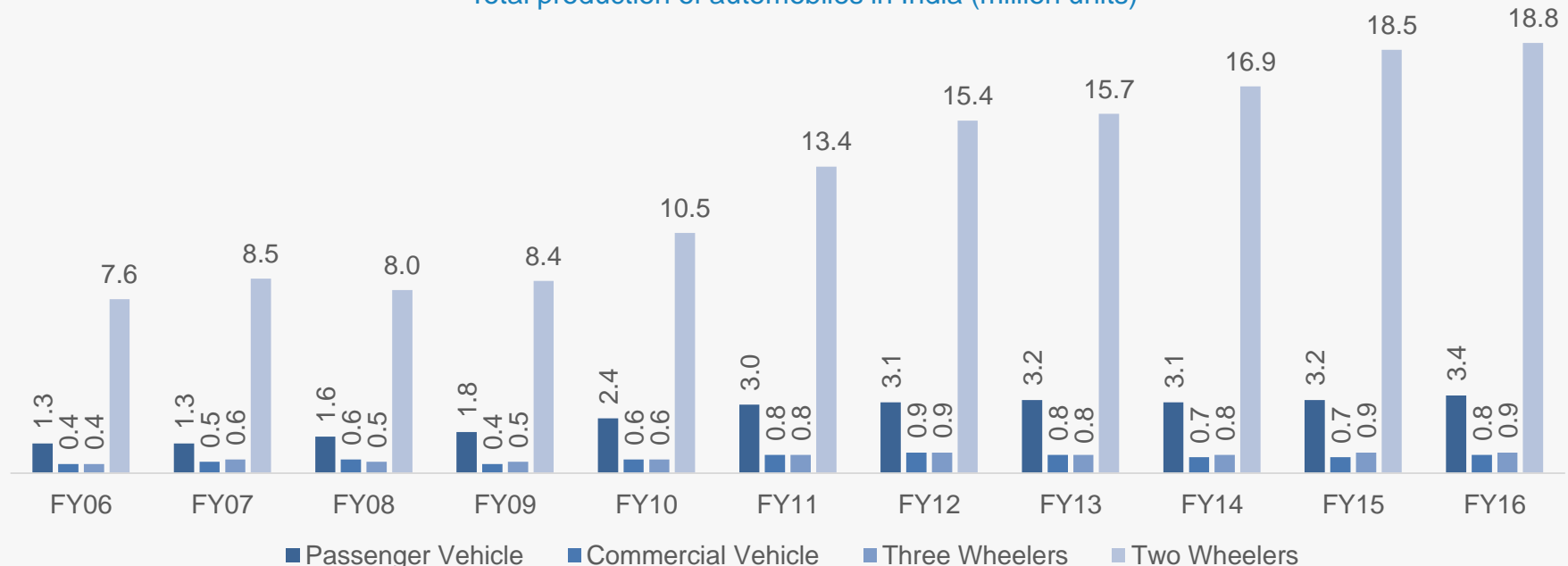


Source: SIAM, TechSci Research
Note: ¹ Does not include three wheelers

GROWTH IN THE SECTOR EVIDENT FROM HIGHER TOTAL PRODUCTION FIGURES

- * Production of automobiles increased at a CAGR of 9.4 per cent over FY06-16
- * During FY06-16, passenger vehicle segment witnessed the fastest growth, at a CAGR of 10.09 per cent, followed by two wheeler segment, which grew at a CAGR of 9.48 per cent during the same time period.
- * During fiscal year 2016-17, passenger vehicle market in India is likely to cross the three million units milestone.
- * By February 2017, Suzuki Motors plans to commence production at its Gujarat plant

Total production of automobiles in India (million units)



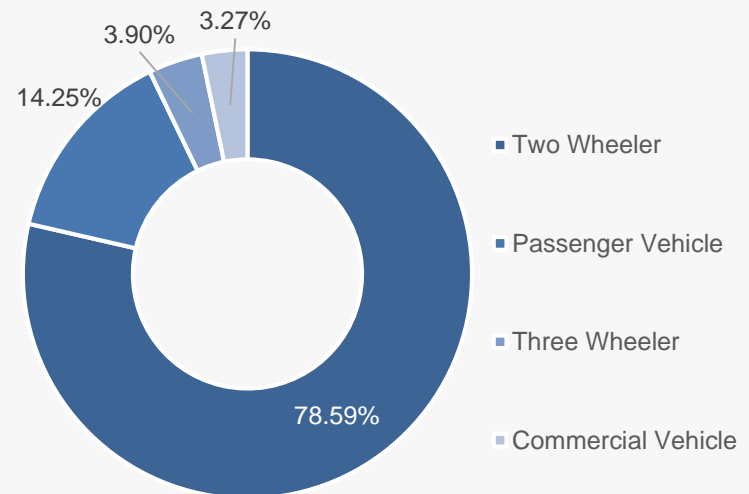
Source: SIAM, TechSci Research

Note: CAGR – Compound Annual Growth Rate

MARKET BREAK-UP BY PRODUCTION VOLUME

- * Two wheelers dominate production volumes; in FY16, the segment accounted for about 78.6 per cent of the total automotive production in the country.
- * India is world's sixth largest vehicles manufacturer globally. Further, India is the Asia's second largest two wheeler manufacturer and fifth largest producer of commercial vehicles, fourth largest manufacturer of passenger car and the largest manufacturer of tractors.
- * The two-wheeler industry recorded sales of 1.42 million units (including exports) during the month of October 2016.

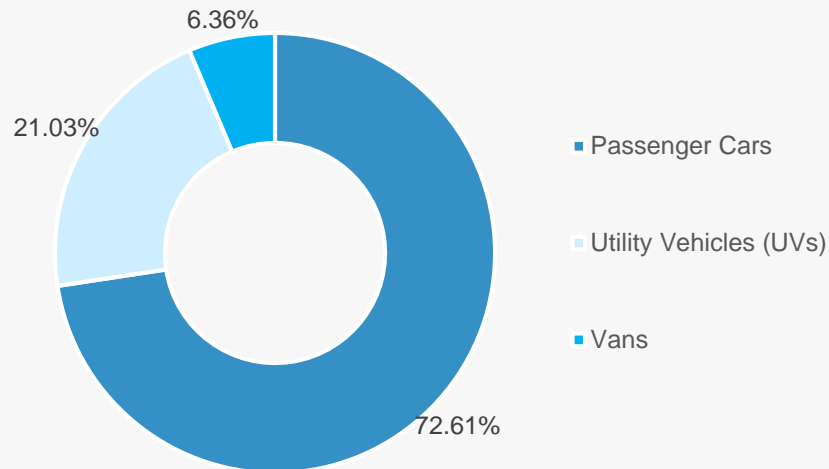
Market share by volume (FY16)



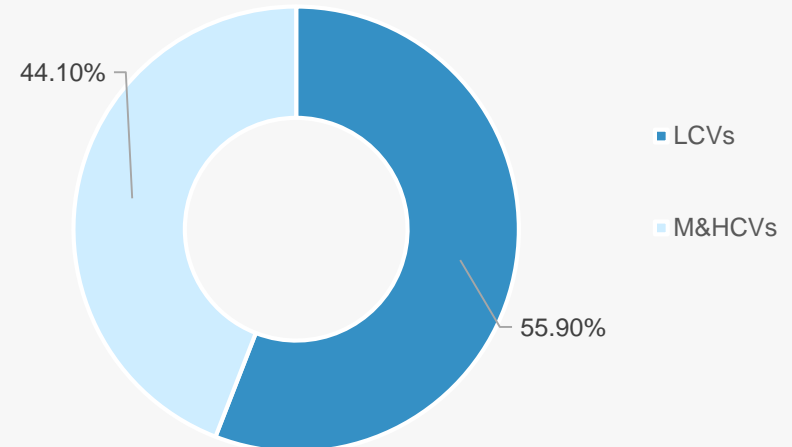
Source: SIAM, TechSci Research

MARKET BREAK-UP OF INDIVIDUAL SEGMENTS BY PRODUCTION VOLUME ... (1/2)

Share in production of passenger vehicles (FY16)



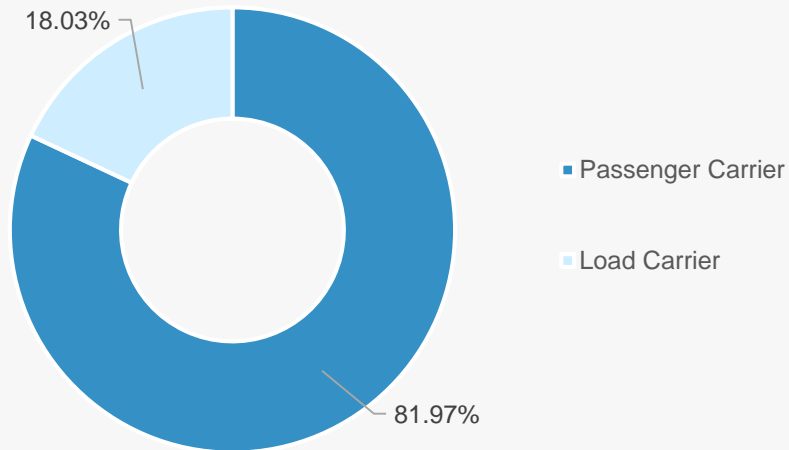
Share in production of commercial vehicles (FY16)



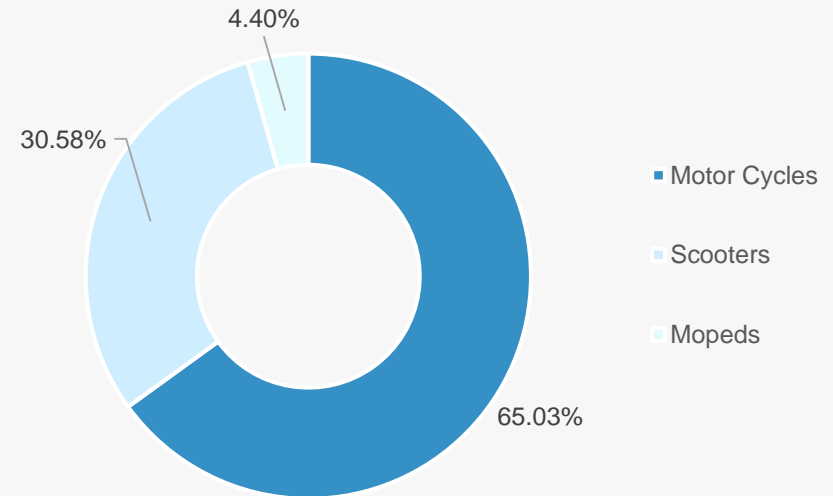
Source: SIAM, TechSci Research
Notes: LCV – Light Commercial Vehicle;
M&HCVs – Medium and Heavy Commercial Vehicles

MARKET BREAK-UP OF INDIVIDUAL SEGMENTS BY PRODUCTION VOLUME ... (2/2)

Share in production of three-wheelers (FY16)



Share in production of two-wheelers (FY16)

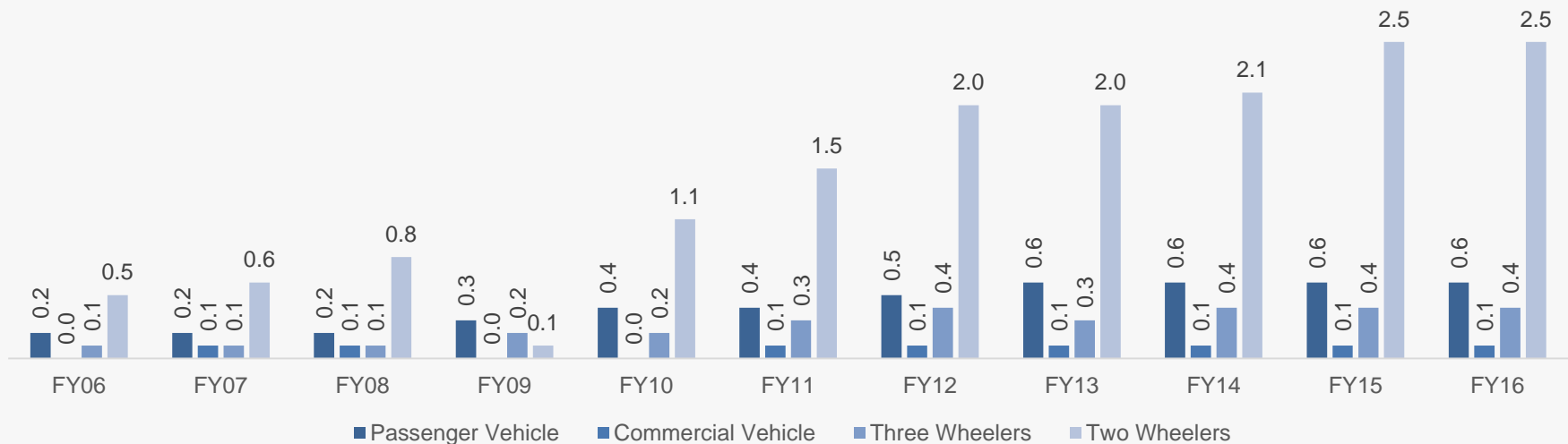


Source: SIAM, TechSci Research

STRONG GROWTH IN EXPORTS ... (1/2)

- * During FY06-16, automobile exports from the country increased at a CAGR of 16.23 per cent.
- * Further, during FY06-16, two wheeler segment reported fastest growth of around 17.5 per cent, followed by three wheelers , which grew at a rate of 14.8 per cent during the same period.
- * The country's largest carmaker Maruti Suzuki India recorded cumulative exports of 1500 thousand vehicles in September, 2016.
- * In January 2017, Suzuki India announced that it will begin exporting its Indian made motorcycle - Gixxer to Japan.
- * Automobile exports from India in 2016, declined by 5 per cent, in comparison with the previous year, due to declining sales of two and three wheelers in Latin America and Africa.

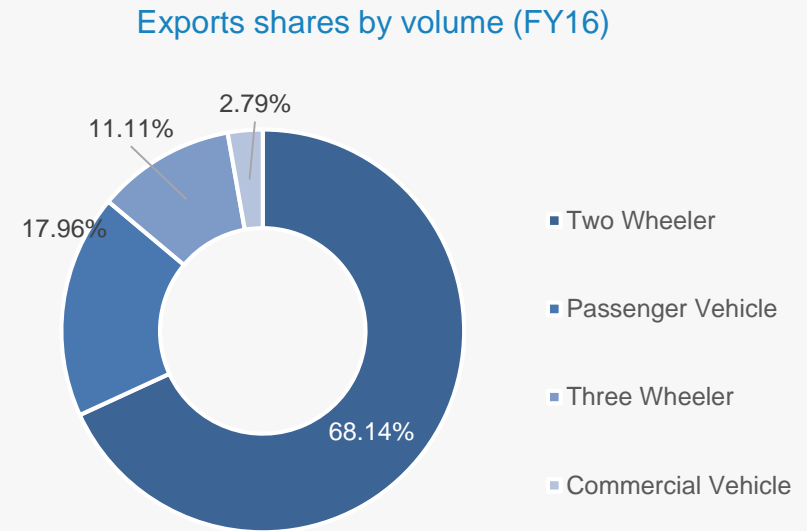
Exports of automobiles from India (million units)



Source: SIAM, TechSci Research

STRONG GROWTH IN EXPORTS ... (2/2)

- * With a volume share of 68.14 per cent, two wheeler segment accounted for the largest share in overall automobile exports in FY16.
- * Passenger vehicle segment accounted for a sizeable share of 17.96 per cent in the overall automobile exports in FY16.
- * Exports of three wheeler vehicles registered a volume share of around 11.11 per cent in exports in FY16.

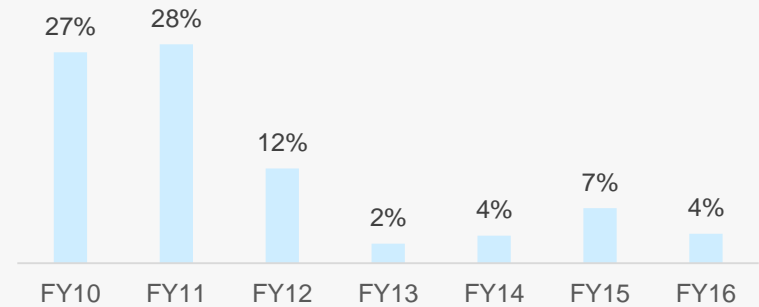


Source: SIAM, TechSci Research

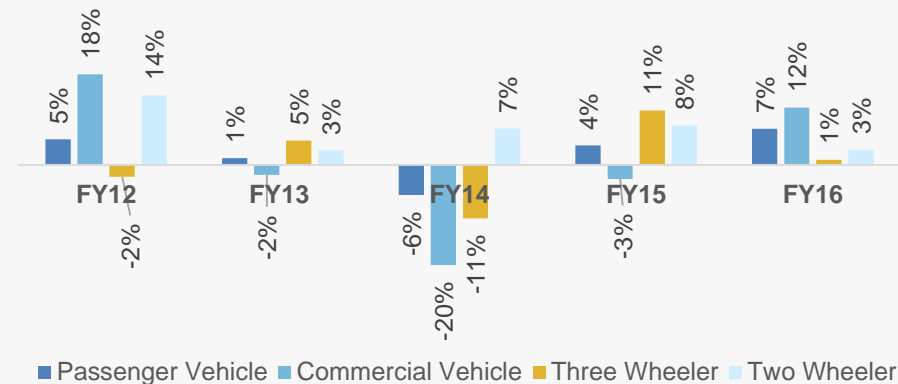
AUTOMOBILE MARKET RECOVERS AFTER A POOR SHOW IN FY14

- * Auto sales across categories domestically rose by 3.78 per cent in FY16 from 19.72 million units in FY15.
- * Sale of passenger vehicles grew by 7.24 per cent in FY16, from 2.6 million units in FY15.
 - * Sale of passenger cars increased by 7.87 per cent in FY16
 - * In FY16, sale of UVs increased by 6.25 per cent
 - * Sale of vans grew by 3.58 per cent in FY16
- * Commercial vehicle sales expanded by 11.51 per cent in FY16
 - * Sale of M&HCVs increased by 30 per cent in FY16
- * In FY16, three wheeler sales grew by 1.03 per cent
- * Two-wheelers registered a growth of 3.01 per cent during FY16

Growth of Volume Sales
(Annual)



Growth in sales of auto segment



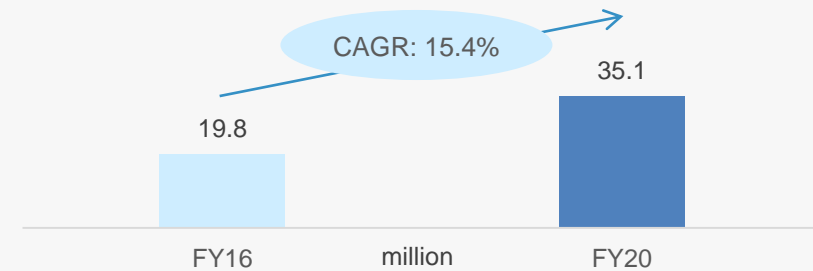
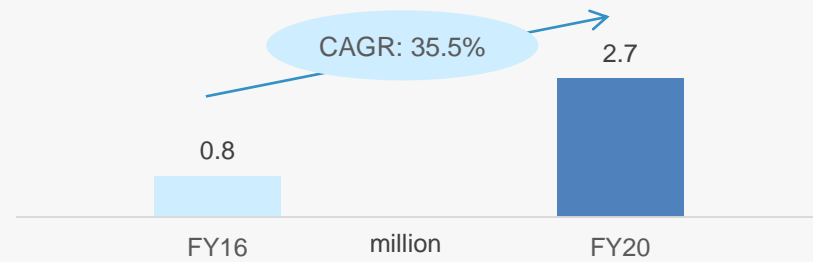
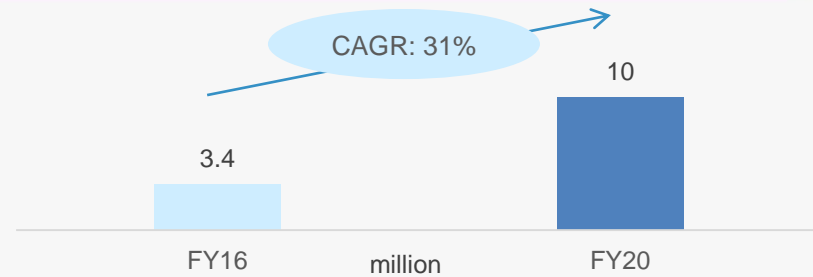
Source: SIAM, TechSci Research, News articles
 Notes: E – Estimate, UV – Utility Vehicle
 LCV – Light Commercial Vehicle
 M&HCV – Medium & Heavy Commercial Vehicle

National Electric Mobility Mission Plan (NEMMP) 2020

Passenger vehicle production to increase at a CAGR of 31 per cent during FY16–20

Commercial vehicle production expected to register a CAGR of 35.5 per cent during FY16–20

Two and Three wheeler production projected to expand at a CAGR of 15.4 per cent during FY16–20



Source: SIAM, NEMMP 2020, TechSci Research
Note: Denomination - Million Units

LUXURY CARS GAINING TRACTION IN INDIA

Scenario

The Indian luxury car market expanded at a CAGR of 37.12 per cent during FY07-15, with sale of 50,000 luxury car units in 2015. The market is dominated by players such as BMW, Mercedes, Audi, Jaguar, etc. In 2015, Audi sold 11,292 units, followed by Mercedes, which sold 11,213 units, while BMW sold 7,000 luxury car units during the same year. The Indian luxury car market is expected to grow from USD14.7 billion in 2015 to USD18.3 billion in 2016.

Key drivers

India has the world's 12th-largest HNI population, with a growth of 20.8 per cent (highest among the top 12 countries)

With expansion in the education & realty sectors & increasing wealth of IT professionals, more consumers aspire to own luxury cars

Affluent class of the country is driving the demand of the luxury cars

Notable trends

The Indian luxury car market is estimated to expand at a CAGR of 25 per cent during 2012–20 and reach 150,000 units by 2020 (accounting for 4 per cent of the estimated 6.8 million unit domestic car market)

The luxury SUV segment is growing at about 50 per cent, while luxury sedans are increasing 25–30 per cent


















Audi to launch Q7 SUV & new sports car TT by second half of 2017.

Volvo, which sold 1,423 models in India during 2015, is planning to launch 6 new luxury models in the country during 2016

Source: World Wealth Report (2011) of Merrill Lynch Wealth Management and Capgemini, TechSci Research, News articles
Note: HNI - High Networth Individuals

PRESENCE OF A CLEAR LEADER IN EACH MARKET SEGMENT








- * The automotive industry is majorly commanded by domestic players, with an immense market share in the country during FY16¹.





Passenger Vehicles	Market leader	Others			
Passenger Cars	 52.8%	 21.2%	 9.3%	 5.6%	
Utility Vehicles	 36.4%	 14.7%	 13.6%	 9.9%	
Vans	 81.8%	 12.26%	 5.98%		
Commercial Vehicles	Market leader	Others			
M&HCV	 52.9%	 31.7%	 10%		
LCV	 42.9%	 37%	 7.4%		

Source: SIAM, Company annual report, TechSci Research
Note: ¹ Data is for April 2015 – November 2015

PRESENCE OF A CLEAR LEADER IN EACH MARKET SEGMENT

- * The automotive industry is majorly commanded by the dominance of domestic players, with an immense market share in the country during FY16¹

Three Wheeler	Market leader	Others			
Passenger Carrier	 55.3%	 25.8%	 8.8%	 5.5%	
Load Carrier	 54.3%	 20.6%	 20.1%	 4.9%	

Two Wheeler	Market leader	Others			
Two Wheelers ²	 33.3%	 28.1%	 16.4%	 14.5%	

Source: SIAM, Company annual report, TechSci Research

Notes: ¹ Data is for April 2015 – November 2015

² Two Wheelers include Scooter, Motorcycle and Moped

NOTABLE TRENDS IN THE INDIAN AUTOMOTIVES SECTOR

New product launches

- Large number of products available to consumers across various segments; this has gathered pace with the entry of a number of foreign players
- Reduced overall product lifecycle have forced players to employ quick product launches
- After the success of Maruti S-Cross, Honda City, Hyundai Verna, Toyota Fortuner, Ford EcoSport in 2015, the companies have announced to launch upgraded versions of the same cars in late 2016 or early 2017 in Indian market
- In order to capture the growing market in the under 7 tonne segment, Ashok Leyland is planning to launch couple of light commercial vehicle variants, in every quarter of FY18
- In March 2017, Maruti Suzuki launched Baleno RS, high performance car in the hatchback segment, with a 1.0 litre booster jet engine, at an introductory price of US\$12925.77 (ex factory price)

Improving product-development capabilities

- Increasing R&D investments from both the government and the private sector
- Private sector innovation has been a key determinant of growth in the sector; 2 good examples are Tata Nano & Tata Pixel; while the former has been a success in India, the latter is intended for foreign markets
- Volvo Group signed MoU with Indian Institute of Science to undertake R&D of future automotive technologies. With the agreement, Volvo Group & IISc will collaborate to strengthen the eco-system of innovation while undertaking important research in the automotive sector.

Alternative fuels

- The CNG distribution network in India is expected to increase due to the new geographical areas allocated through 5th & 6th round of CGD bidding by Petroleum and Natural Gas Regulatory Board (PNGRB)
- Number of CNG stations in India increased from 142 stations in 2005 to 1010 stations in FY15, which further increased to 1,081 stations in FY16, across 12 major states of the country.

New financing options

- Carmakers such as BMW, Audi, Toyota, Skoda, Volkswagen & Mercedes-Benz have started providing customised finance to customers through NBFCs
- Major MNC & Indian corporate houses are moving towards taking cars on operating lease instead of buying them

Source: Ministry of Petroleum & Natural Gas
Note: NBFCs - Non-Banking Finance Companies

NOTABLE TRENDS IN THE INDIAN AUTOMOTIVES SECTOR

Investments

Between April 2000 to December 2016, Indian automobile industry attracted foreign direct investment (FDI) of around USD16.51 billion.

Japan based Suzuki Motor Corporation plans to invest USD 970.70 million in 2nd vehicle production line at its new plant in Gujarat.

Honda Cars India Limited is planning to invest around USD59.24 million to increase its production capacity by 50 per cent (to 180,000 units). Also, Honda Motorcycle & Scooter India is planning to invest around USD91.2 million to expand production at the Karnataka plant, by the end of 2016.

In October 2016, under an initiative to promote sustainable manufacturing through green facilities, Hero MotoCorp Ltd., approved an investment of USD 30.62 million for acquiring a 26-30 per cent stake in Bengaluru based electric vehicle (EV) start-up, Ather Energy Pvt. Ltd.

General Motors announced plans to invest about USD1 billion for capacity expansion of Pune plant, with the production expected to increase from 130,000 units to 220,000 units annually, by the end of 2025.

Volvo Group signed MoU with Indian Institute of Science to undertake research & development of future automotive technologies. With the agreement, Volvo Group & IISc will collaborate to strengthen the ecosystem of innovation while undertaking important research in the automotive sector.

Notable trends

Government of India heavily promotes foreign investment in the automobile industry by allowing 100 per cent FDI, under automatic route. The industry is delicensed & allows free import of automotive components. Also, the Indian government does not lay down any minimum investment criteria for this industry.

Under Union Budget 2017-18, the government has announced plans to support & increase the manufacturing of hybrid & electric cars & Faster Adoption of Manufacturing of Electric & Hybrid programme has been launched has got US\$27.25 million as compared US\$19.15 in 2016, make amendments in Motor Vehicle Act to enhance road transport sector, mainly in passenger segment.

The government plans to encourage use of eco friendly automobiles such as hybrid vehicles, electrical vehicles, CNG based vehicles in India.

Source: Department Of Industrial Policy & Promotion, News Articles

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PORTER FIVE FORCES ANALYSIS

PORTERS FIVE FORCES ANALYSIS

Competitive Rivalry

- Competitive rivalry has increased post liberalisation to a great extent
- The competition has turned more intense after the entry of foreign players like Volkswagen and Ford in low- priced hatchback segment
- Foreign firms have aggravated the competition by changing their traditional designs and substituting it to cater Indian needs

Threat of New Entrants

- The threat of new entrants is generally medium because of the brand equity and capital intensive nature of the business
- But, considering India, foreign firms (with capital) have done pretty well

Substitute Products

- The threat from substitute products continues to be low, with public transportation being under developed even in cities
- Changing travel patterns and the convenience give it an edge

Bargaining Power of Suppliers

- Bargaining power of suppliers is low as most of the auto component manufacturers are specialised in some segments related to only one client
- Suppliers, in turn depend on them

Bargaining Power of Customers

- In a market, like India there is lot of bargaining power available to the customers as there are variety of products available in the same range, by different manufacturers
- It still depends on the markets



AUTOMOBILES



STRATEGIES ADOPTED

STRATEGIES ADOPTED

Capacity addition

- Considering low cost of production, prominent auto companies are increasing their production capacity in order to capture a dominant share in Indian automobile industry.
- Most of the automobile companies are eyeing India as an outsourcing hub.
- With the total investment of around USD163.7 million, Honda Motorcycle & Scooter India expanded its production of Activa in 3 variants at Ahmedabad plant.

Launch of new models

- In 2015-16, few of the newly launched cars were Volkswagen Ameo, Mahindra e-Verito, Toyota Land Cruiser 200, Maruti Baleno, Honda BR-V, Tata Tiago, Toyota Innova Crysta & Maruti Ciaz & under premium range Audi Q7, Audi S5 Sportback, Ford Mustang, Rolls-Royce Dawn & Porsche 911.
- Honda is planning to introduce bigger & premium car models in 2017 to uplift its sales & share in the market
- In December 2016, Bajaj Auto launched its most powerful bike in the segment, 'Bajaj Dominar 400'
- Fiat Chrysler Automobiles India, is planning to launch its new Jeep brand Compass by February 2017, which is going to be produced indigenously in Ranjangaon,, Maharashtra. India will be the 4th manufacturing hub, globally, for the brand.
- In March 2017, Tata Motors' sports car is planned to be unveiled, under its new sub brand – TAMO, at the Geneva International Motor Show. The show will display niche segment models with advanced technologies

Marketing & advertisement

- Each & every firm is now focusing on shelling out a chunk of their profits on advertisement
- The idea is to make the customers more brand conscious & increasing brand positioning
- This is giving the firms differential advantage. Success today lies in structuring & restructuring strategies

Catering Indian needs

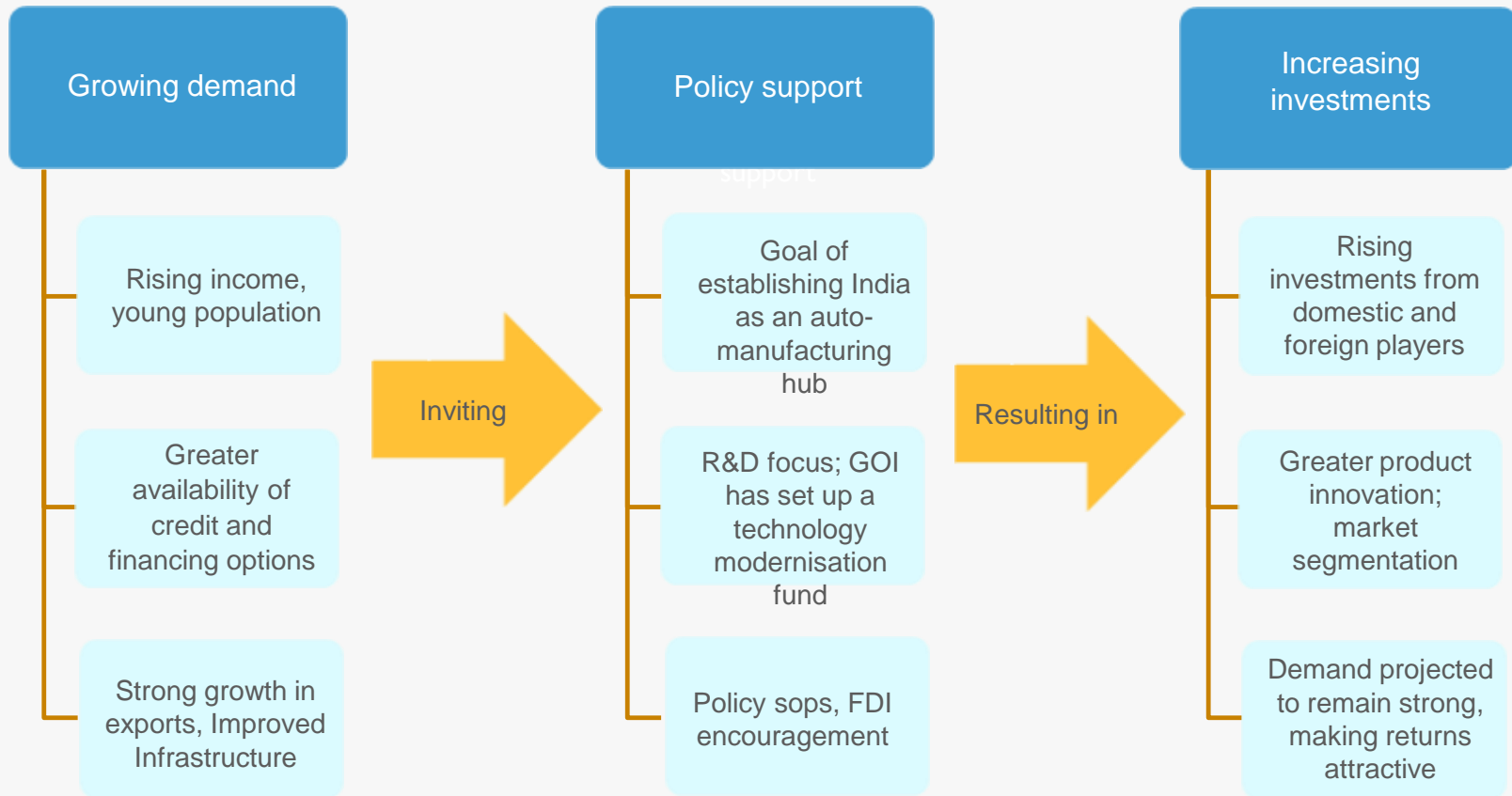
- India boasts a large population of middle class
- Most of the firms including Ford & Volkswagen have adapted themselves to cater to this class by dropping their traditional structure and designs
- This allows them to compete directly with domestic firms making the sector highly competitive

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GROWTH DRIVERS

CAPITALISING ON STRONG DEMAND AND PRODUCT INNOVATION



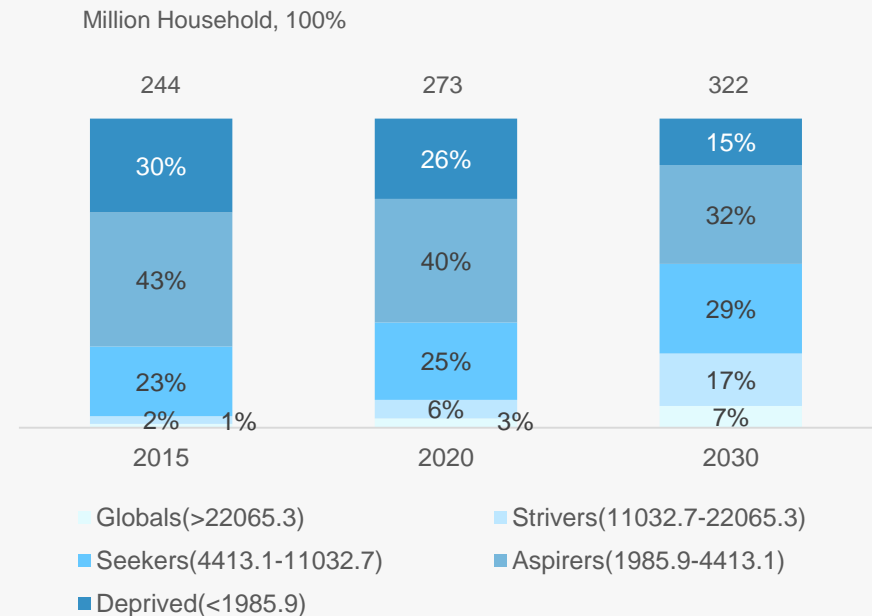
Note: GOI – Government of India

RISING INCOME AND MIDDLE-CLASS POPULATION DRIVING GROWTH IN DOMESTIC DEMAND

Increasing income and middle-class population

- GDP per capita has grown from USD1,430.19 in 2010 to USD1,805.57 in 2015, & is expected to reach USD2,128.78 by 2018(E)
- Apart from the impact of rising incomes, widening of the consumer base will also be aided by expansion of the middle class, increasing urbanisation, and changing lifestyles
- A young population is boosting demand for cars
- Demand for commercial vehicles increased due to the development of roadways & greater market access

Changing income dynamics of India's population



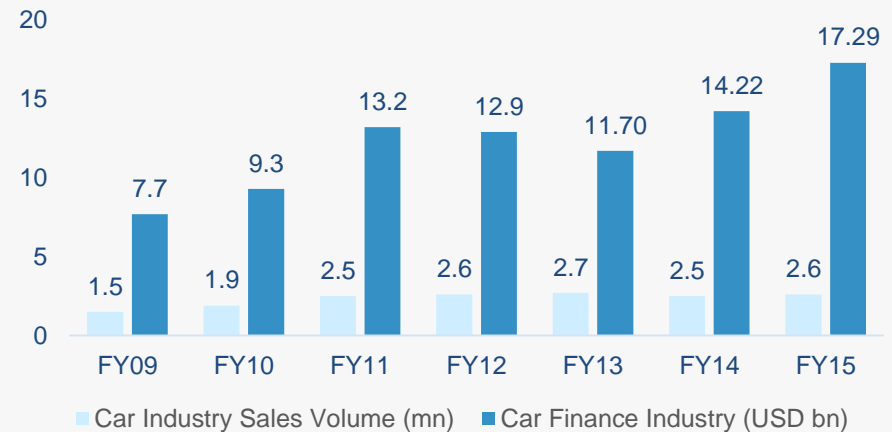
Source: IMF, World Bank, McKinsey Quarterly, TechSci Research
Note: E-Expected

EASIER ACCESS TO CREDIT A KEY DETERMINANT OF GROWTH IN AUTOMOTIVES

Easy availability of credit

- Greater access to credit eases the purchase of passenger and commercial vehicles
- The Indian car finance market is growing at a CAGR of 13.20 per cent from the year 2010-15 and it is expected to grow to USD30.43 billion by 2020.
- BMW, Audi, Toyota, Skoda, Volkswagen and Mercedes-Benz have started providing customised finance to customers, dealers and suppliers through dedicated Non-Banking Finance Companies (NBFCs)

Indian car finance market size



Source: Kotak Mahindra Prime, TechSci Research

Note: Greater distributional efficiencies, increasing demand (especially from rural areas) due to rising disposable incomes have created new markets for products within the country
mn – million; bn - billion

INDIA HAS A SIGNIFICANT COMPETITIVE ADVANTAGE VIS-À-VIS PEERS(FY15)

		Design and engineering skills	Manufacturing skills	Manpower costs	Supplier base	Raw materials
East Asia	Korea	In competition with India	In competition with India	Less competitive than India	Less competitive than India	In competition with India
	China	In competition with India	Less competitive than India	In competition with India	Less competitive than India	In competition with India
	Thailand	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India
	Indonesia	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India
	Vietnam	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India
Central & Eastern Europe	Czech Republic	In competition with India	In competition with India	Less competitive than India	In competition with India	In competition with India
	Romania	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India
	Poland	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India
	Slovakia	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India	In competition with India
	Russia	In competition with India	Less competitive than India	Less competitive than India	Less competitive than India	In competition with India
	Hungary	In competition with India	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India
	Turkey	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India	In competition with India
Latin America	Brazil	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India
	Mexico	Less competitive than India	Less competitive than India	Less competitive than India	Less competitive than India	In competition with India

 Less competitive than India  In competition with India

Source: ACMA, TechSci Research

STRONG POLICY SUPPORT HAS BEEN CRUCIAL IN DEVELOPING THE SECTOR

Auto Policy 2002

- Automatic approval for foreign equity investment up to 100 per cent; no minimum investment criteria
- Encourage R&D by offering rebates on R&D expenditure

NATRiP

- Setting up of R&D centers at a total cost of USD388.5 million to enable the industry to be on par with global standards
- Nine R&D centers of excellence with focus on low-cost manufacturing and product development solutions
- The government has extended the timeline of NATRiP from 2014 to 2017.

Dept. of Heavy Industries & Public Enterprises

- Worked towards reduction of excise duty on small cars and increase budgetary allocation for R&D
- Weighted increase in R&D expenditure to 200 per cent from 150 per cent (in-house) and 175 per cent from 125 per cent (outsourced)

Union Budget FY16-17

- Certain amendments in Motor Vehicle Act to enhance the passenger segment under road transport sector
- Applicability of 1 per cent Infrastructure cess on small petrol, LPG, CNG cars; 2.5 per cent cess on diesel cars (to a certain capacity); 4 per cent cess on other higher engine capacity vehicles and SUVs.

The Automotive Mission Plan 2016-26 (AMP 2026)

- AMP 2026 targets a fourfold growth in the automobiles sector in India which includes the manufacturers of automobiles, auto components and tractor industry over the next ten years

FAME (April, 2015)

- Planning to implement Faster Adoption & Manufacturing Of Electric Hybrid Vehicles (FAME) till 2020 which would cover all vehicle segments, all forms of hybrid & pure electric vehicles

Notes: SME – Small and Medium Enterprises, R&D - Research and Development, NATRiP – National Automotive Testing and R&D Infrastructure Project, AMP - Automotive Mission, JNNURM - Jawaharlal Nehru National Urban Renewal Mission

STRONG POLICY SUPPORT HAS BEEN CRUCIAL IN DEVELOPING THE SECTOR

- * Indian government is negotiating FTAs/PTAs with following countries:-
 - China, Korea, Japan
 - Agreement on South Asian Trade Free Trade Area (SAFTA), Sri Lanka, Mauritius
 - The Economic and Social Commission for Asia and the Pacific (ESCAP) / Generalized System of Preferences (GSP)
 - Southern African Customs Union (SACU), Egypt
 - India-Singapore Comprehensive Economic Cooperation Agreement (CECA)
 - India-Sri Lanka Bilateral Free Trade Area and the Proposal for Comprehensive Economic Partnership Agreement
 - Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) - FTA
 - Thailand / Association of Southeast Asian Nations (ASEAN) / Singapore / Malaysia
 - Framework Agreement on Comprehensive Economic Co-operation between the Association of South East Asian Nations (ASEAN) and India

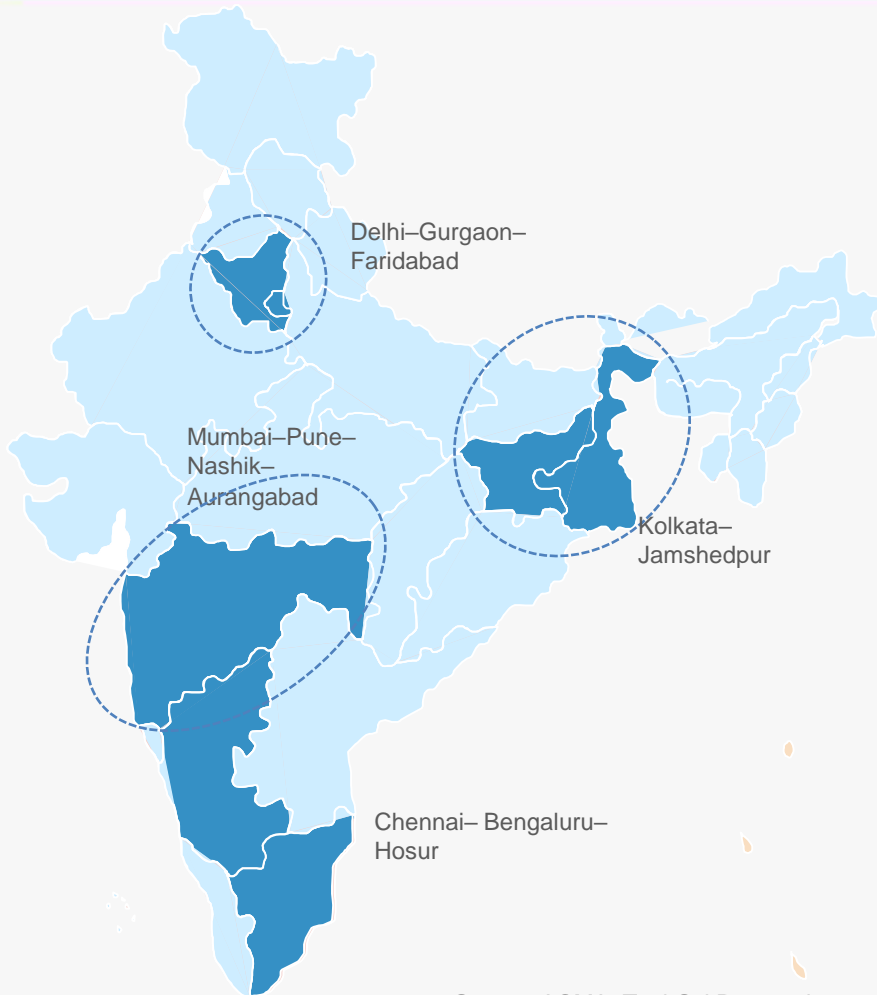
Source: Society of Indian Automobile Manufacturers (SIAM)

Notes: FTAs – Free Trade Agreements, PTAs – Preferential Trade Agreements, SAFTA – South Asian Trade Free Trade Area, ESCAP – Economic and Social Commission for Asia and the Pacific, GSP – Generalized System of Preferences, SACU – Southern African Customs Union, CECA – Comprehensive Economic Cooperation Agreement, BIMSTEC – Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, ASEAN – Association of Southeast Asian Nations

BOOST TO R&D IN THE AUTO COMPONENTS SECTOR - NATRIP CENTRES

	Business description
Vehicles Research & Development Establishment (VRDE), Ahmednagar	<ul style="list-style-type: none"> • Research, design, development and testing of vehicles • Centre of excellence for photometry, Electromagnetic Compatibility (EMC) and test tracks
Indore — National Automotive Test Tracks (NATRAX)	<ul style="list-style-type: none"> • Complete testing facilities for all vehicle categories • Centre of excellence for vehicle dynamics and tyre development • In October 2014, Powertrain LAB facility has been inaugurated to support R&D
Automotive Research Association of India (ARAI), Pune	<ul style="list-style-type: none"> • Services for all vehicle categories • Centre of excellence for power-train development and material
Chennai Centre, Tamil Nadu	<ul style="list-style-type: none"> • Complete homologation services for all vehicle categories • Centre of excellence for infotronics, EMC and passive safety
Rae Bareilly Centre	<ul style="list-style-type: none"> • Services to agri-tractors, off-road vehicles and a driver training centre • Centre of excellence for accident data analysis
International Centre for Automotive Technology (iCAT), Manesar	<ul style="list-style-type: none"> • Services to all vehicle categories • Centre of excellence for component development, Noise Vibration and Harshness (NVH) testing • Setting up of Vehicle and Engine Test Cells in 2015
Silchar Centre, Assam	<ul style="list-style-type: none"> • Research, design, development and testing of vehicles • Centre of excellence for photometry, EMC and test tracks • First batch of driving training project has been completed in August, 2015

EMERGENCE OF LARGE AUTOMOTIVE CLUSTERS IN THE COUNTRY



Source: ACMA, TechSci Research

List of companies

North

- Ashok Leyland
- Force Motors
- Piaggio
- Swaraj
- Mazda
- Amtek Auto
- Eicher
- Honda SIEL
- Maruti Suzuki
- Tata Motors
- Bajaj Auto
- Hero Group
- Escorts
- ICML
- JCB
- Yamaha
- Mahindra
- Suzuki Motorcycles

West

- Ashok Leyland
- Bajaj Auto
- FIAT
- GM
- M&M
- Eicher
- Skoda
- Bharat Forge
- Tata Motors
- Volkswagen
- Renault-Nissan
- John Deere
- Mercedes Benz
- Tata Hitachi
- Volvo
- Eicher

East

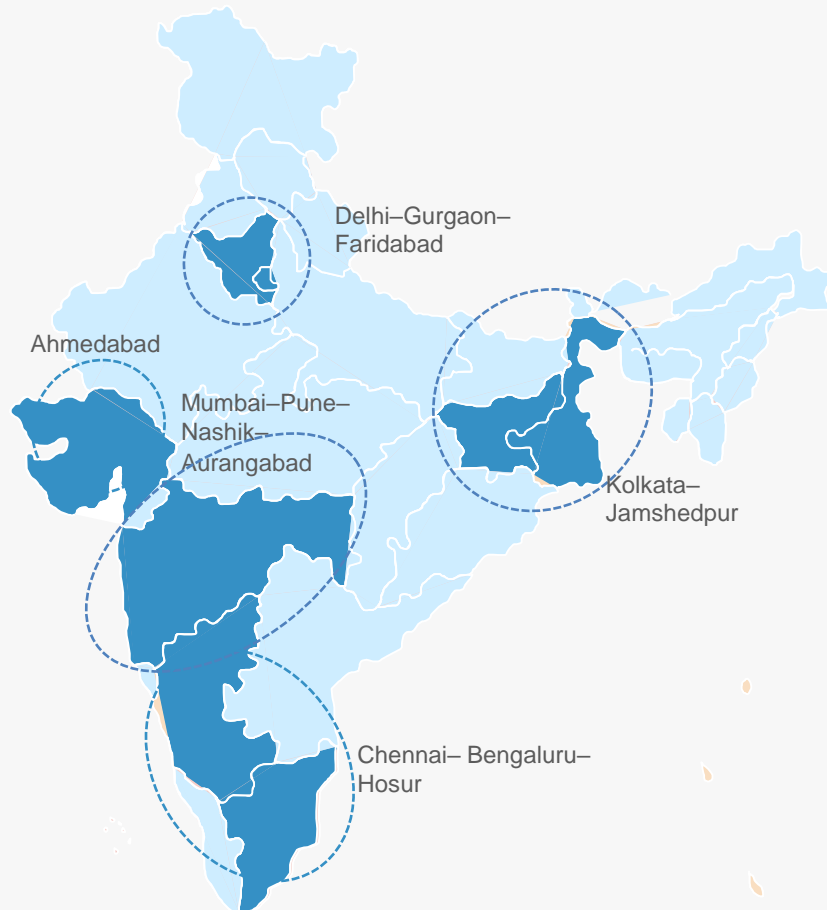
- Tata Motors
- Hindustan Motors
- Simpson & Co
- International Auto Forgings
- JMT
- Exide

South

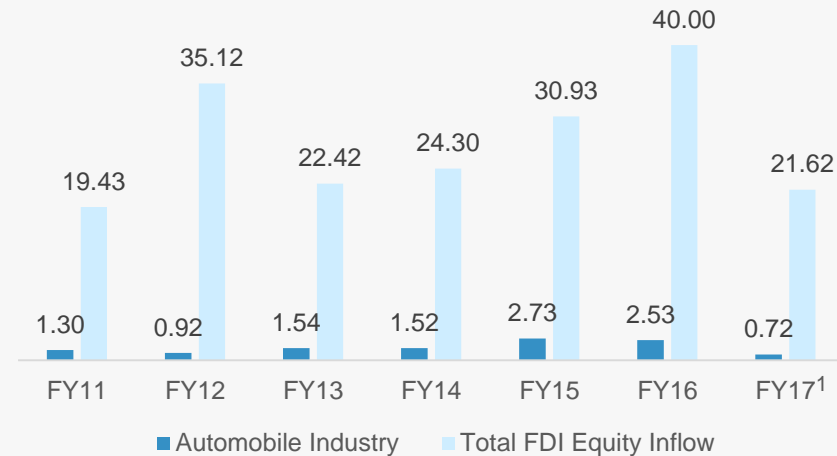
- Ashok Leyland
- Ford
- M&M
- Toyota Kirloskar
- Volvo
- Sundaram Fasteners
- Enfield
- Hyundai
- BMW
- Bosch
- TVS Motor Company
- Renault-Nissan
- TAFE
- Daimler
- Caterpillar
- Hindustan Motors

STRONG FDI EQUITY INFLOW IN THE AUTOMOTIVES SECTOR

- * FDI equity inflows in the automobile industry aggregated to USD16.51 billion over FY2010-16. Whereas, in FY17, FDI inflow automobile industry accounted for 5.09 per cent of total FDI equity inflow in country.



FDI trends over the past few years (USD billion)



Source: Department of Industrial Policy & Promotion (India), TechSci Research FY17¹ Till September 2016

INCREASING INVESTMENTS BY GLOBAL CAR MANUFACTURERS

- * Global car majors have been ramping up investments in India to cater to the growing domestic demand. Also, these manufacturers plan to leverage India's competitive advantage to set up export-oriented production hubs



- Planning to double its current investment level of about USD2.5 billion over the next five years
- Aims to raise its market share from 1.5 per cent in FY13 to 10 per cent by FY19
- To increase the Chennai Plant capacity to 400,000 units a year in a few years time
- The company plans to launch 8 new car models in India by 2021



- On 10th September 2015, Ford has signed a MoU with the Tamil Nadu government for increasing the manufacturing capacity of its plant & for establishing new engineering & technology center at Chennai.
- As of November 2016, Ford announced its plans to invest USD193.36 million for setting up technical & business centre in India



- Volkswagen announced launch of its first Made-in-India & Made-for-India compact sedan, Ameo in June 2016
- The company plans to increase its production volume by 15 percent in 2016 over 123000 units in 2015 at Pune



- Plans to launch up to eight models over the next 5–6 years. The company plans to export over 70,000 vehicles this year to various markets.



- Honda is planning to invest USD160 million in India to expand its capacity for cars and bike by the end of 2016
- This will include a new diesel engine component production and a forging plant
- Toyota is planning invest USD165 million on its new engine plants and projects



- Expects to invest another USD163 million at Bidadi plant near Bengaluru



HYUNDAI

- Plans to invest USD552-737million over the next two to three years to develop new products



- Increased the plant capacity of 20,000 units per year in Chakan Plant, which is the largest for any luxury car manufacturer in India.
- Expansion of MIDC and MoU, and to invest USD244 mn for capacity expansion in Chakan, Pune
- Mercedes-Benz will introduce 15 products in 2015, including products without any predecessors in India. These 15 new products are Mercedes-Benz India's biggest product initiative till date.

AUTOMOBILES



OPPORTUNITIES

OPPORTUNITIES

India is fast emerging as a global R&D hub

- Strong support from the government; setting up of NATRiP centres
- Private players, such as Hyundai, Suzuki, GM, keen to set up R&D base in India
- Strong education base, large skilled English-speaking manpower
- Comparative advantage in terms of cost
- Firms both National & Foreign are increasing their footprints with over 1,165 R&D centers
- Indian automobile industries invest USD100 billion for R&D sector, annually

Opportunities for creating sizeable market segments through innovations

- Mahindra & Mahindra targeting on implementing digital technology in the business
- Bajaj Auto, Hero Honda & M&M plan to jointly develop a technology for 2-wheelers to run on natural gas
- Considering the potential of auto market, new models of hybrid & electric cars launched at Auto Expo 2016
- Tata Motors to launch MiniCAT, a car running on compressed air, thereby stepping into the next era where cars would not require any fossil fuel & emissions would be almost nil
- By 2018, Hyundai is planning to enter the hybrid vehicles segment, to explore alternative fuel technology & to avail the government incentives.

Small-car manufacturing hub

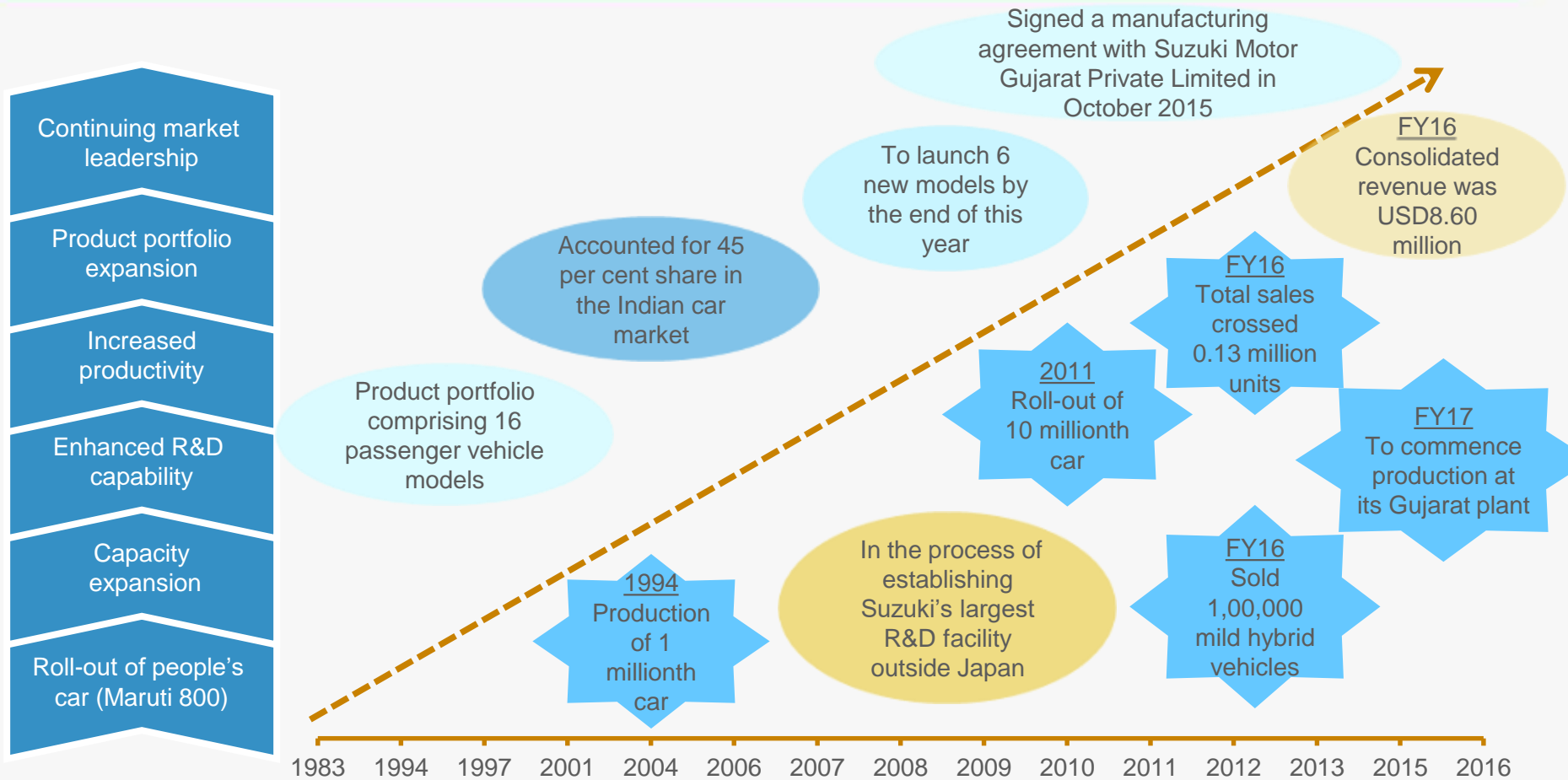
- General Motors, Nissan & Toyota announced plans to make India their global hub for small cars
- Passenger vehicle market is expected to touch 10 million units by 2020
- Strong export potential in ultra low-cost cars segment (to developing & emerging markets)
- After the successful execution of Tata Nano, the company is testing the electric variant of the small car, Nano in India
- Maruti Suzuki launched facelift version of Alto 800, after the success of earlier model

AUTOMOBILES



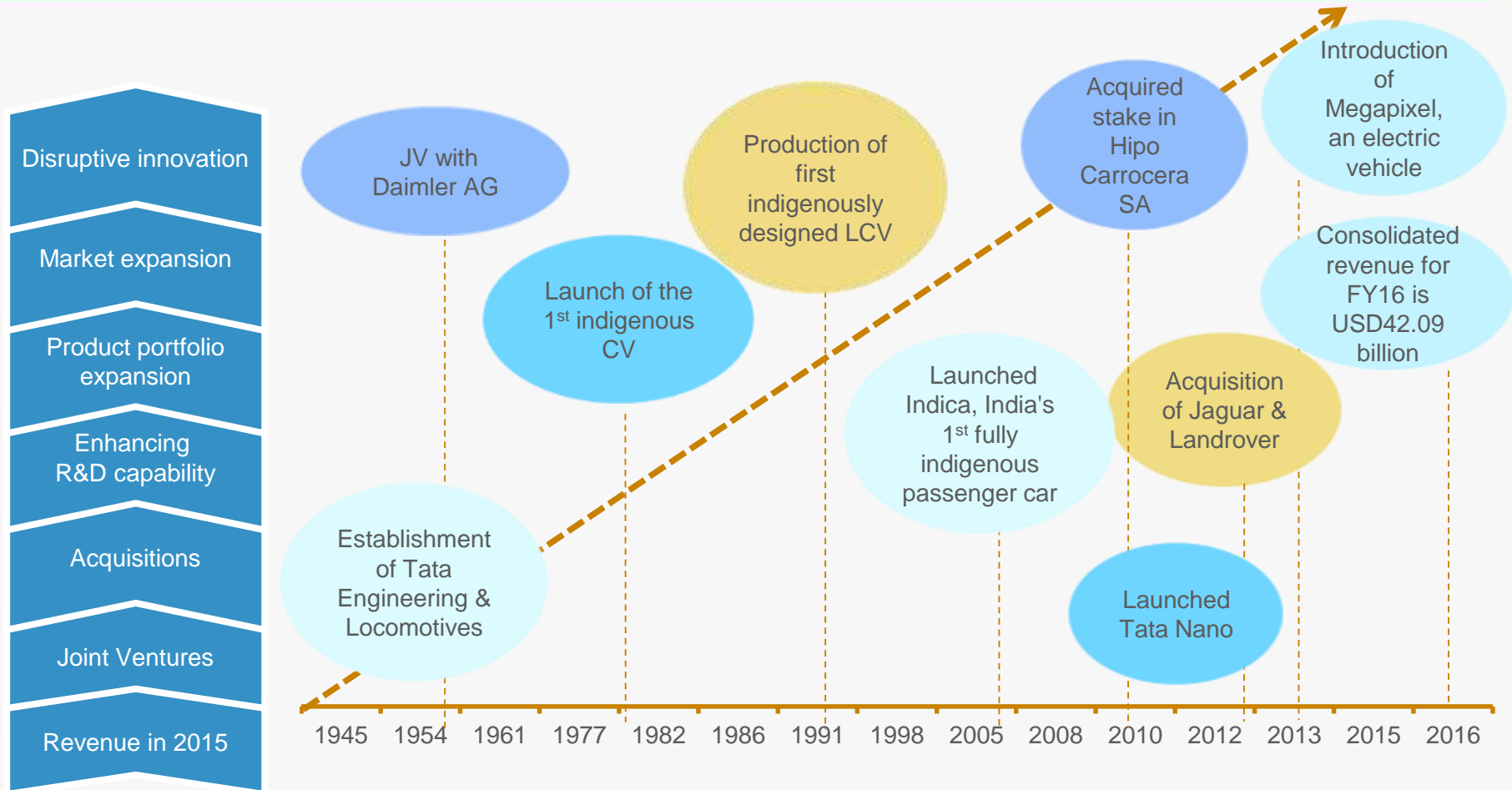
SUCCESS STORIES

MARUTI SUZUKI: CONTINUING TO REMAIN MARKET LEADER



Source: Company website, TechSci Research

TATA MOTORS: LEADING IN TERMS OF INNOVATION AND GLOBAL PRESENCE



Source: Company website, TechSci Research

AUTOMOBILES



USEFUL INFORMATION

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India

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E-mail: siam@siam.in

- * **CAGR:** Compound Annual Growth Rate
- * **CV:** Commercial Vehicle
- * **FDI:** Foreign Direct Investment
- * **FY:** Indian Financial Year (April to March)
 - * So FY10 implies April 2009 to March 2010
- * **GOI:** Government of India
- * **HCV:** Heavy Commercial Vehicle
- * **INR:** Indian Rupee
- * **LCV:** Light Commercial Vehicle
- * **OEM:** Original Equipment Manufacturers
- * **PV:** Passenger Vehicle
- * **SIAM:** Society of Indian Automobile Manufacturers

- * **ULCC:** Ultra Low Cost Car
- * **USD:** US Dollar
- * Wherever applicable, numbers have been rounded off to the nearest whole number

EXCHANGE RATES

Exchange rates (Fiscal Year)

Year	INR equivalent of one USD
2004–05	44.81
2005–06	44.14
2006–07	45.14
2007–08	40.27
2008–09	46.14
2009–10	47.42
2010–11	45.62
2011–12	46.88
2012–13	54.31
2013–14	60.28
2014-15	61.06
2015-16	65.46
2016-17 (E)	67.23

Exchange rates (Calendar Year)

Year	INR equivalent of one USD
2005	43.98
2006	45.18
2007	41.34
2008	43.62
2009	48.42
2010	45.72
2011	46.85
2012	53.46
2013	58.44
2014	61.03
2015	64.15
2016 (Expected)	67.22

Source: Reserve bank of India,
Average for the year

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