AUTO COMPONENTS

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FEBRUARY 2017

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CONTENTS

FEBRUARY 2017

EXECUTIVE SUMMARY

Robust growth in Auto component	• Turnover of the Indian auto component sector stood at USD39 billion in FY15-16; the industry is expected to reach USD115 billion by FY20-21
Rising Indigenisation	• The growth of global OEM sourcing from India and the increased indigenisation of global OEMs is turning the country into a preferable designing and manufacturing base
Growing automobile industry	• The Indian automobile market is estimated to become the third largest in the world by 2016 and will account for more than 5 per cent of the global vehicle sales; India is expected to become the fourth largest automobiles producer globally by 2020 after China, US and Japan
Demographic advantage	• The total working population (between ages 15–64) in India was around 825 million in 2015; it is expected to increase to nearly 900 million by 2030
Expanding middle class	• The middle class population in India will increase from 160 million people (over 50 per cent of the total US population) in 2011 to 267 million by 2016, equivalent to more than three times the population of Germany, the largest economy in Europe
Among top steel producers	• In 2015, India overtook USA to become the third-largest producer of steel in the world and among the lowest-cost ones as well; Steel is a key raw material used in automobiles

Source: ACMA, Make in India, TechSci Research Note: OEM: Original Equipment Manufacturer

AUTO COMPONENTS

ADVANTAGE INDIA

ADVANTAGE INDIA

FY16

Market size: USD39 billion

FY21E

Market size: USD115 billion

Robust demand

- Growing working population and expanding middle class are expected to remain key demand drivers
- India is set to break into the league of top five vehicle producing nations
- Reduction in excise duties in motor vehicles sector to spur the demand for auto components

Export opportunities

- India is emerging as global hub for auto component sourcing
- Relative to competitors, India is geographically closer to key automotive markets like the Middle East and Europe

Advantage India

Competitive advantages

- A cost-effective manufacturing base keeps costs lower by 10-25 per cent relative to operations in Europe and Latin America
- Presence of a large pool of skilled and semi-skilled workforce amidst a strong educational system
- Third largest steel producer globally hence a cost advantage

Policy support

- Continued policy support in the form of Auto Policy 2002 In September 2015, Automotive Mission Plan 2016-26 was unveiled which targets a fourfold growth for the sector
- Strong support for R&D and product development by establishing NATRiP centers
- 100 per cent FDI allowed under automatic route for auto component sector

Notes: NATRiP - National Automotive Testing and R&D Infrastructure Project; FY - Indian Financial Year (April to March); FY21E – Estimated figure for the financial year 2021; Estimates are from Automotive Component Manufacturers Association of India (ACMA); R&D – Research and Development

AUTO COMPONENTS

MARKET OVERVIEW AND TRENDS

THE AUTO COMPONENTS MARKET IS SPLIT INTO SIX PRODUCT SEGMENTS

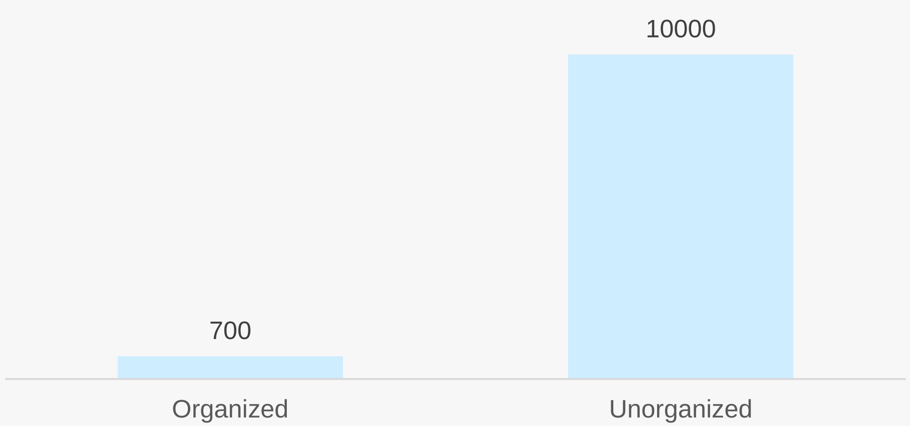
- Auto Components
  - Engine Parts
    - Pistons and piston rings
    - Engine valves and parts
    - Fuel-injection systems and carburettors
    - Cooling systems and parts
    - Power train components
  - Drive Transmission & Steering Parts
    - Gears
    - Wheels
    - Steering systems
    - Axles
    - Clutches
  - Body & Chassis
  - Suspension & Braking Parts
    - Brake and brake assemblies
    - Brake linings
    - Shock absorbers
    - Leaf springs
  - Equipments
    - Headlights
    - Halogen bulbs
    - Wiper motors
    - Dashboard instruments
    - Other panel instruments
  - Electrical Parts
    - Starter motors
    - Spark plugs
    - Electric Ignition Systems (EIS)
    - Flywheel magnetos
    - Other equipment
  - Others
    - Sheet metal parts
    - Hydraulic pneumatic instruments
    - Fan belts
    - Pressure die castings

Source: *ACMA*, TechSci Research

ORGANISED SECTOR DOMINATES PRODUCTION DESPITE LARGE NUMBER OF UNORGANISED PLAYERS

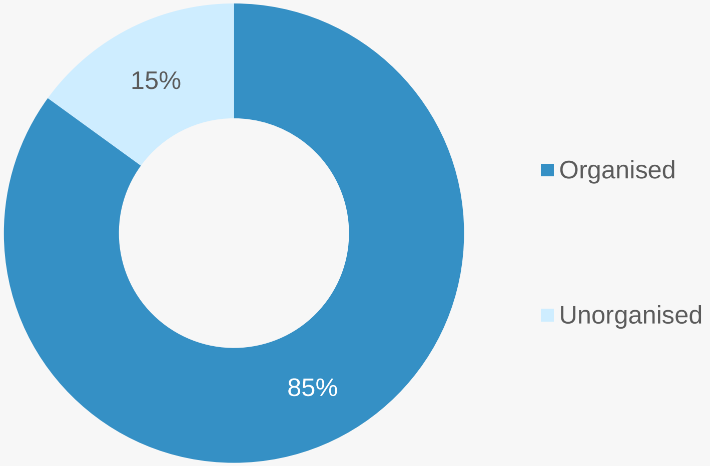
- The number of manufacturing units in the unorganised sector are far higher than those in the organised one
- Although lesser in number, the organised sector accounts for 85 per cent of total industry turnover (FY15)

Number of players: organised vs. unorganised (FY15)



Source: ACMA, TechSci Research

Turnover breakup: organised vs. unorganised (FY15)

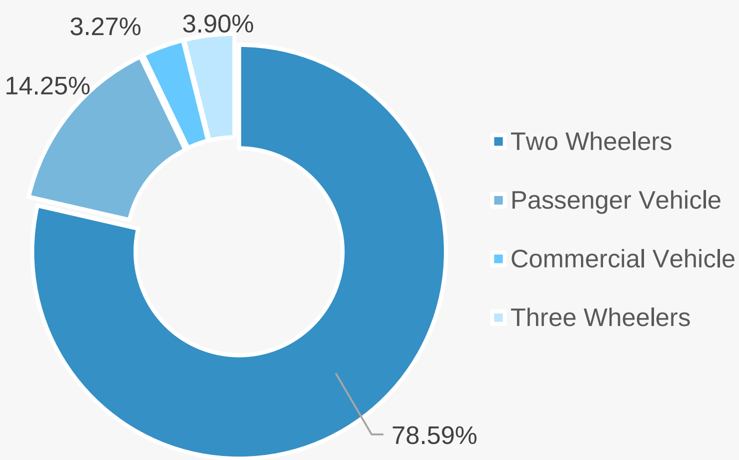


Source: ACMA, TechSci Research

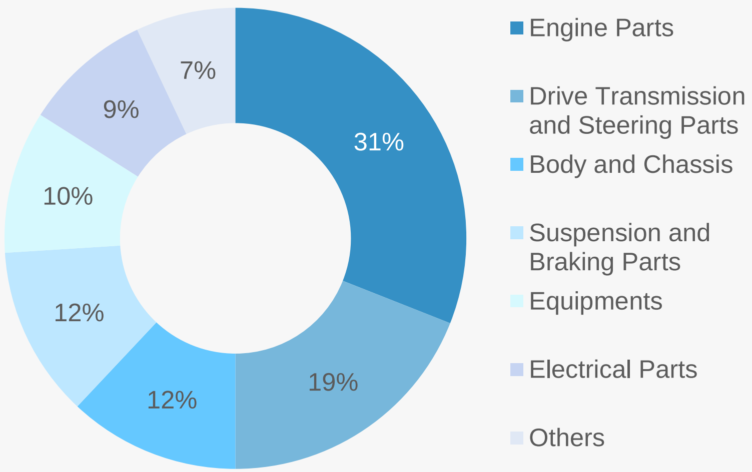
PRODUCTION BREAKUP

- 'Engine parts' accounts for 31 per cent of the entire product range of the auto components sector followed by 'drive transmission and steering parts' (19 per cent)
- 'Two wheelers' is the largest domestic customer segment for the auto components industry
- Original Equipment Manufacturers (OEMs) dominate production volumes by market range; encouragingly, exports account for a round 28 per cent.

Domestic market share by segment (FY16)



Production volumes by product range (FY15)

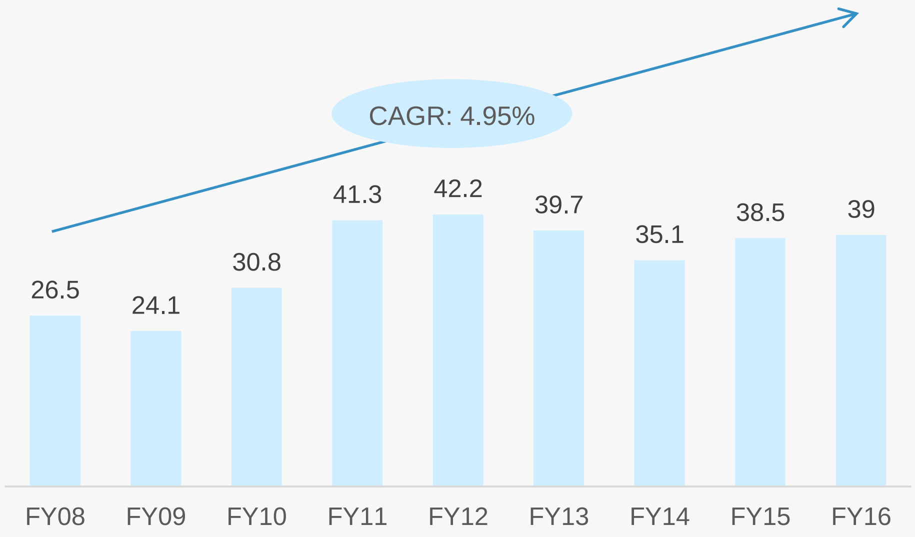


Source: ACMA, TechSci Research

THE AUTO COMPONENTS SECTOR HAS RECORDED ROBUST GROWTH OVER THE YEARS

- Revenues have risen from USD26.5 billion in FY08 to USD39 billion in FY16 at a CAGR of 4.95 per cent during FY08-16.
- The market size for auto component sector increased by 8.8 per cent reaching to USD39 billion in FY16 from USD38.5 billion in FY15.
- As per Automobile Component Manufacturers Association (ACMA) forecasts, automobile component exports from India are expected to reach US$70-billion by 2026 from US$10.8-billion in FY15-16. The Indian auto component industry aims to achieve US$200 billion in revenues by 2026.

Aggregate turnover* (USD billion)

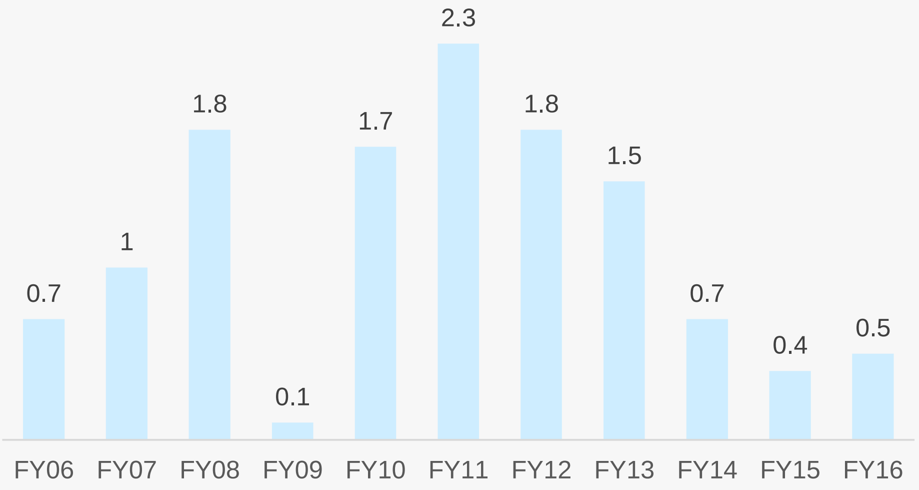


Source: ACMA, TechSci Research
Notes: CAGR – Compound Annual Growth Rate,
*Turnover data covers supplies to OEMs , aftermarket sales and exports

INVESTMENTS HAVE BEEN RISING AT A FAST PACE

- Investments in the auto components sector reached USD0.5 billion in FY16 in comparison with USD0.4 billion in FY15.
- Capital investments into the auto component sector have seen a downward trend despite of its improved market conditions mainly because of the moderations made in the vehicle sales and depressed market sentiments.
- With the launch of “Make in India” initiative, the government is expected to vitalise a substantial investment in the auto component sector.
- CAET is planning to invest around USD413.50 million to expand its tire production during 2017-22. The company plans to reach at a production level of 17 million two-wheeler tires, annually, 1 million Truck & Bus Radial (TBR) tires and 6 million passenger car radial tires, annually.

Investments in the auto component sector (USD billion)

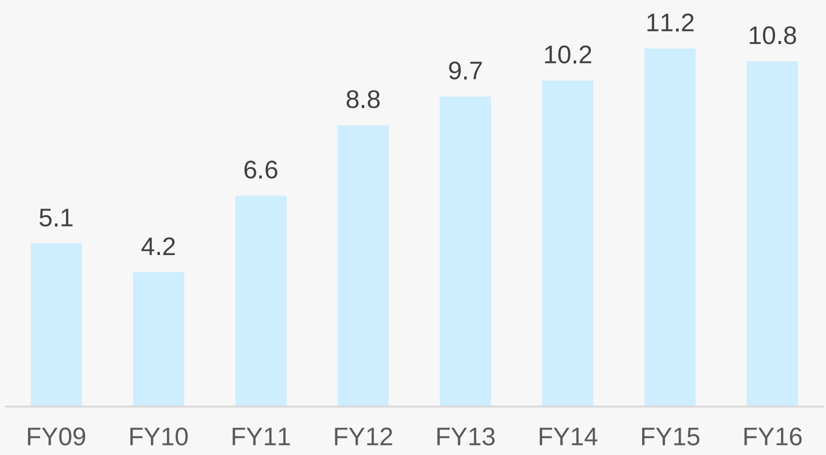


Source: ACMA, TechSci Research

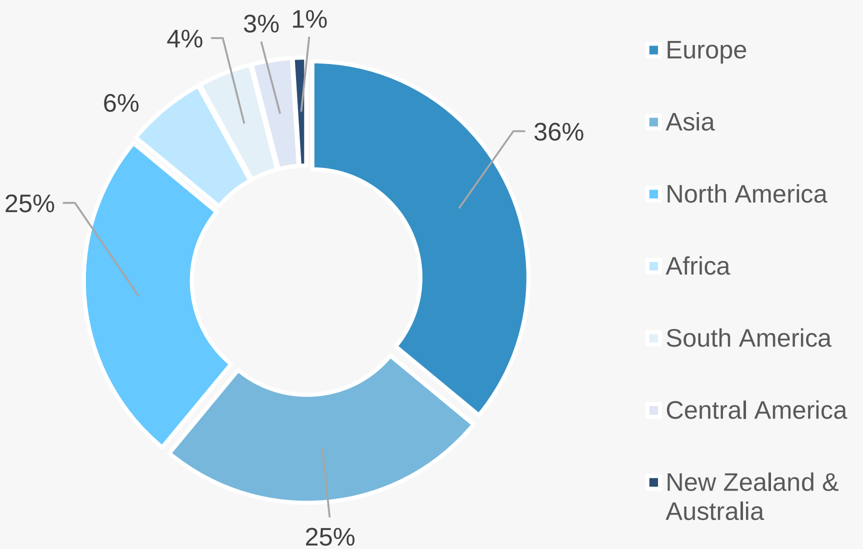
EXPORTS HAVE AIDED OVERALL GROWTH IN THE SECTOR

- India's exports of auto components increased at a CAGR of 11.31 per cent, during FY09-FY16, with the value of auto component exports increasing from USD5.1 billion in FY09 to USD10.8 billion in FY16.
- Europe accounted for a volume share of 36 per cent during FY16 in Indian auto component exports followed by Asia and North America with 25 per cent each in same year.

Value of auto component exports (USD billion)



Shares in export volumes by geography (FY16)



Source: ACMA, TechSci Research

NOTABLE TRENDS IN THE INDIAN AUTO COMPONENTS SECTOR

Global components sourcing hub

- Major global OEMs have made India a component sourcing hub for their global operations
- Several global Tier-I suppliers have also announced plans to increase procurement from their Indian subsidiaries
- India is also emerging as a sourcing hub for engine components, with OEMs increasingly setting up engine manufacturing units in the country
- For companies like Ford, Fiat, Suzuki, and General Motors, India has established itself as a global hub for small engines

Improving product-development capabilities

- Increased investments in R&D operations and laboratories, which are being set up to conduct activities such as analysis and simulation, and engineering animations
- The growth of global OEM sourcing from India and the increased indigenisation of global OEMs is turning the country into a preferred designing and manufacturing base
- ACT established to offer technical services to ACMA members for enhancing process and quality abilities through various cluster programmes

Inorganic route to expansion

- Domestic players are acquiring global companies to gain access to latest technology, expand their client base and diversify revenue streams
- Players such as Amtek Auto and Bharat Forge have adopted a dual-shore manufacturing model
- Mahindra Group agreed to form a 60:40 joint venture by acquiring Italy based car designer firm, Pininfarina SpA
- In February 2017, with an investment of US$ 29.74 million, Pricol inaugurated a new 6.58 acres factory in Pune, to develop infrastructure to cater to the growing electronic cluster business for off road vehicles, commercial vehicles, two-wheelers, etc.
- Ansysco Anand collaborated with Japan’s Seiken Chemical to sell coolant & brake fluids in Japan
- At a cost of US$14 million, Bharat Forge acquired US based - WFT and PMT Holding Inc., for expanding their product portfolio in automotive and other industrial segments

Source: TechSci Research
Note: OEM means Original Equipment Manufacturer
ACT - ACMA Centre for Technology

AUTO COMPONENTS

PORTER FIVE FORCES ANALYSIS

PORTERS FIVE FORCES ANALYSIS

Competitive Rivalry

- Competition among industry players is intense as government has already deregulated the sector
- Increasing number of foreign firms (Ford, Volkswagen, etc.) are increasing their presence
- Cheaper imports of components from China is increasing

Threat of New Entrants

- The threat level is medium, given the concentration of industry clusters in specific strategic centers
- Foreign firms are increasing their footprints in India

Substitute Products

- Threat from substitute products remains low, as public transportation is underdeveloped even in most cities
- Rapid growth in Indian economy has changed travel patterns

Bargaining Power of Suppliers

- Bargaining power of suppliers is medium, as there are a large number of steel and aluminum manufacturers (key raw material)
- Some of them have their own units which give them linkage power

Bargaining Power of Customers

- High demand from car manufacturers give them lesser bargaining power
- Product differentiation is low

Source: News updates

AUTO COMPONENTS

STRATEGIES ADOPTED

STRATEGIES ADOPTED

New strategies	• Auto component suppliers are focused on entering new vehicle segments and manufacturing new products with higher margin • Both Indian and global manufacturers are investing in new capacities and newer programmes, in order to get long term advantage • As markets in North, West and South are getting saturated, components makers are now focusing on untapped market like the Northeast region of the country.
Diversification	• Many Indian firms specialising in only one product market or segment and are looking forward to diversify horizontally in other segments such as two-wheelers, passenger cars or commercial vehicles. • They are stepping up their product development capabilities in order to have the best chance of capturing growth opportunity.
Capacity	• India's projected production is around 8.7mn passenger vehicles per year by 2020 (with most of them being compact cars) • Many MNC's like Ford, Hyundai, Toyota and GM are launching new vehicle models due to their earlier success in the Indian market.
R&D facilities	• Looking at the opportunity many global suppliers for example Bosch Chassis Systems, Tenneco and Faurecia have established R&D facilities in India to adapt global designs and develop new products • Increasing investments in R&D also assists companies in setting up laboratories and new facilities to conduct activities like analysis, simulation and engineering animations. For instance Magneti Marelli entered into a joint venture with Maruti Suzuki, to establish a new plant for production of robotized gearboxes for automobiles.

Source: Make in India, News updates

AUTO COMPONENTS

GROWTH DRIVERS

GROWTH DRIVERS OF THE INDIAN AUTO COMPONENTS MARKET

Growth drivers

Demand-side drivers

- Robust growth in domestic automotive industry
- Increasing investment in road infrastructure
- Growth in the working population and middle class income to drive the market

Supply-side drivers

- Competitive advantages facilitating emergence of outsourcing hub
- Technological shift; focus on R&D

Policy support

- Establishing special auto parks and virtual SEZs for auto components
- Lower excise duty on specific parts of hybrid vehicles
- Policies such as Automotive Mission Plan 2016-26, Faster Adoption & Manufacturing of Electric Hybrid Vehicles (FAME, April, 2015), NMEM 2020, likely to infuse growth in the auto component sector of the country.

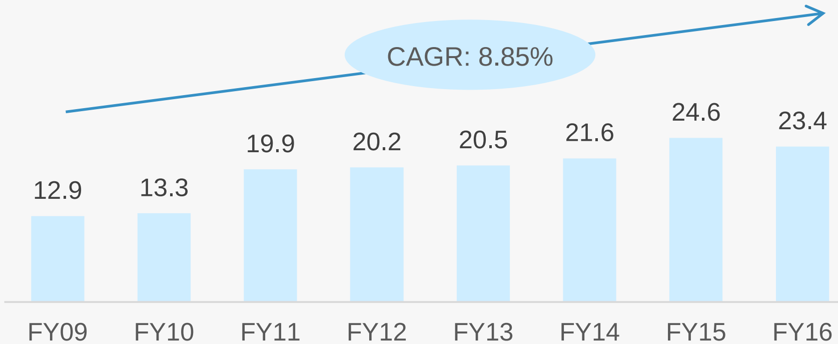
Notes: NMEM – National Mission For Electric Mobility

ROBUST GROWTH IN DOMESTIC AUTOMOTIVES INDUSTRY

Favourable government policies

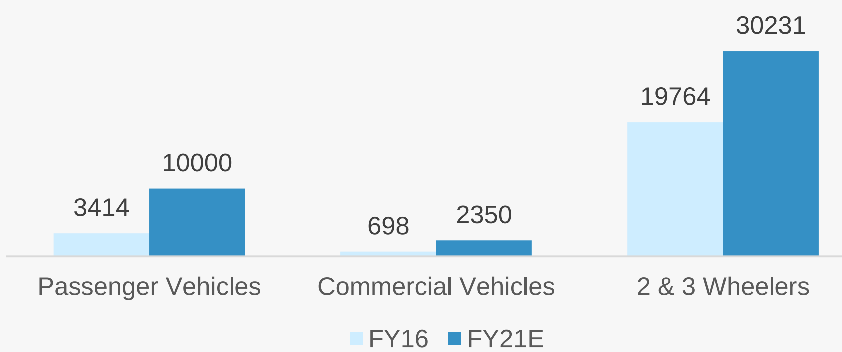
- Launch of the Automotive Mission Plan, which allows FDI and tax holidays, has been favourable for the industry.
- Union Budget 2016 – 17 focuses on amending the Motor Vehicle Act to boost the road transport sector, mainly in passenger segment.

India vehicle loan outstanding** (USD billion)

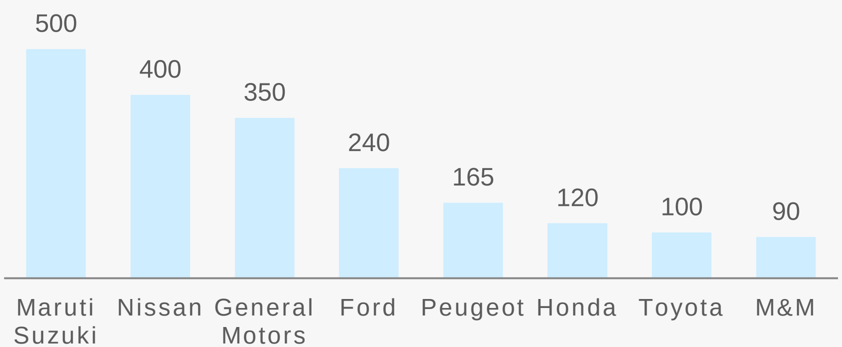


Source: Reserve Bank of India, TechSci Research
Note: * Data is till September 2015
**Loan outstanding at the end of financial year

Vehicle production in India (thousand units)



Capacity addition by 2015 (thousand units)



Source: ACMA, TechSci Research
Note: (E) - Estimate

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FAVOURABLE POLICY MEASURES AIDING GROWTH

Auto Policy 2002	• Automatic approval for 100 per cent foreign equity investment in auto component manufacturing facilities. • Manufacturing and imports are exempt from licensing and approvals.
NATRiP	• Set up at a total cost of USD388.5 million to enable the industry to adopt and implement global performance standards. • Focus on providing low-cost manufacturing and product development solutions.
Dept. of Heavy Industries & Public Enterprises	• Created a USD200 million fund to modernise the auto components industry by providing an interest subsidy on loans and investment in new plants and equipment. • Provided export benefits to intermediate suppliers of auto components against the Duty Free Replenishment Certificate (DFRC).
Union Budget 2016–17	• The Motor Vehicle Act to be amended to accelerate the road transport sector, in passenger segment. • Applicability of 1 per cent infrastructure cess on small petrol, LPG, CNG cars; 2.5 per cent cess on diesel cars of specific capacity; 4 per cent cess on other higher engine capacity vehicles including SUVs.
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. • It is expected to generate an additional employment of 65 million.
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 and pure electric vehicles.

Source: SIAM, Make in India, TechSci Research
Note: NATRiP - National Automotive Testing and R&D Infrastructure Project

INDIA (GLOBAL HUB): KEY DEVELOPMENTS & INVESTMENTS…(1/2)

Hotbed for automotive R&D	• 928 MNC's have set up 1,165 R&D centers. • India accounted for almost 40 per cent of the total globalised engineering and R&D centers around the world in 2015.
On path of becoming a global hub	• Nissan India exports engine and body parts regularly to 14 countries from India. • Brakes India Private Ltd to export turbocharger castings to United Sates and Europe. • Honda Cars India Limited looking forward to supply components to foreign markets. • By 2020, India is expected to be the third largest automobiles producer, globally. • Maruti Suzuki spares and accessories business has grown at a CAGR of 19.3 per cent in last five years, showing a growth of 19 per cent during FY16
New tie-ups	• Vishnu Vaibhav Industry Pvt Ltd (VVIPL) entered into a technical collaboration with Germany based ZF TRW Global Body Control Systems (BCS) to supply four-wheeler automotive switches in India in March 2016. • ACMA ties up with Pakistan Association of Automotive Parts & Accessories Manufacturers (PAAPAM) for trade facilitation and growth of automotive industry in their respective countries. • ACMA is in talks with Taiwanese auto electronics companies for attracting investments into the Indian auto components sector. • As on September 2016, German auto component manufacturer ZF Friedrichshafen plans to setup a Technical Centre in Hyderabad, India. The manufacturer has signed a Letter of Intent (LoI) with the government of Telangana.

Source: News articles, Government Websites, TechSci Research, Ministry of External Affairs, Govt. of India (ITP) Division

INDIA (GLOBAL HUB): KEY DEVELOPMENTS & INVESTMENTS…(2/2)

Developments

- Denso International India is working on the improvement of fuel emission for Indian as well as global vehicles manufacturers.
- Cummins, the diesel engine maker has planned to expand its investment in R&D centres based in India.

Investments

- Tata Opportunities Fund got a 15 per cent stake in Varroc group (Aurangabad-based auto component manufacturer) for USD50 million.
- Tata Cummins, started its third manufacturing facility in Phaltan to develop diesel engines.
- Taiwan-based KUS Auto, a leading global manufacturer plans to start manufacturing operations in Q1 CY2017. The company will produce tanks for heavy commercial vehicles (HCVs).
- As on September 2016, Marquardt plans to set up a greenfield plant in the automotive hub of Chakan, near Pune. The plant is likely to be commissioned by 2019-20.
- French auto parts maker, Valeo, is planning to invest USD 100 billion in India over next two to three years.
- Magna International, Canada's giant auto parts supplier, is planning to open 3 new plants in India by 2019
- In February 2017, Gestamp invested US$ 38.67 million for a new hot stamping plant in Pune, to meet the growing demand for safer & lighter vehicles. Adoption of this technology is expected to reduce the overall weight of the vehicle by 30 per cent

Source: News articles, Government Websites, TechSci Research, Ministry of External Affairs, Govt. of India (ITP) Division

INDIA IS POISED TO EMERGE AS AN OUTSOURCING HUB

* Global auto component players are increasingly adopting a dual-shore manufacturing model, using overseas facilities to manufacture few types of components and Indian facilities to manufacture the others

HYUNDAI	• Hyundai plans to source gasoline and diesel engines from its Indian manufacturing operations for its domestic and global operations. • The company is also planning to invest USD300 million for a new engine plant and metal pressing shop in India, and is also in plans to open its second manufacturing plant in Rajasthan. • With the encouragement of Indian government, Hyundai, is planning to set up its third new plant in the country and expand its production capacity to 7.2 lakh units annually.
Ford	• Ford expanded its retail distribution network of genuine parts in Gujarat, Daman & Diu and Silvassa. • Ford is currently working on a small – capacity petrol engine called Dragon which is estimated to be ready by 2016 – 17. The Detroit – based company is planning to produce 1.5 million units a year globally, 4 lakh of which will be produced in India. • In 2015, the company opened a new production facility in Sanand, Gujarat which is likely to increase its capacity by adding 240,000 cars and 270,000 engines to its existing production level. USD1 billion has been invested for this manufacturing plant.
HONDA	• Honda is likely to setup a third manufacturing plant in Gujarat for which USD384.9 million (approx.) has been initially invested which is expected to reach USD655.1 million by the end of the project • The company has an export base for certain key engine components in India. • The company planned to invest USD59.23 million (approx.) in Tapukara plant to expand production capacity from 120,000 units per annum to 180,000 units per annum.
TOYOTA	• Toyota Kirloskar Motor disclosed its fully integrated cloud based telematics service for Indian market, by the name Toyota Connect. • Toyota India under a new joint venture initiated production of diesel engines at Jigani Industrial Area.

Source: Respective Company Websites, News Articles, TechSci Research
Note: (* Figure converted from EUR to USD at EUR/USD = 1.4)

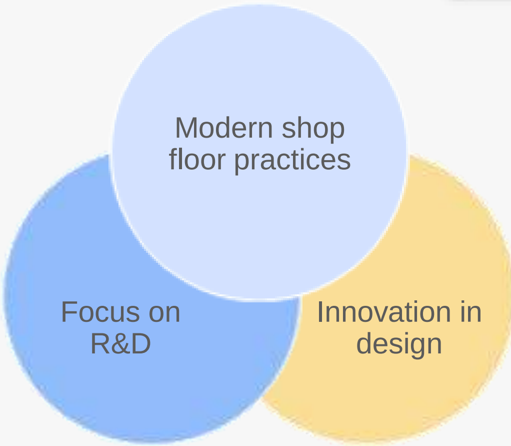
TECHNOLOGICAL SHIFT; FOCUS ON R&D…(1/3)

Certifications received by Indian players (FY15)	
Certifications	Number
OHSAS 18001	162
ISO 14001	287
TS 16949	546
ISO 9001	651

Awards received by Indian players (FY15)	
Awards	Number
Total Productive Maintenance (TPM) Award	15
Deming Award	14
Japan Institute of Plant Maintenance (JIPM) Award	3
Japan Quality Medal	5
Shingo Silver Medallion	2

- Indian manufacturers are embracing best shop floor practices such as 5-S, 7-W, Kaizen, TQM, TPM, 6 Sigma and Lean Manufacturing

- The timeline of NATRiP has officially been extended till 2017 considering the completion of facilities.
- Private players are keen to set up their R&D base in India.



- Increased deployment of IT-enabled automobile support systems such as Global Positioning Systems (GPS), Anti-Braking Systems (ABS), Automatic Speech Recognition (ASR) and safety systems promoting innovation in the auto components industry

Source: ACMA, TechSci Research

TECHNOLOGICAL SHIFT; FOCUS ON R&D…(2/3)

ACMA Award Winners (2015)	
Excellence in Export	
1. Abilities India Pistons & Rings, Ghaziabad (Small Category) 2. Endurance Technologies, (K-120) Aurangabad (Large Category)	Gold Trophy
1. Bohra Rubber, Faridabad (Small Category) 2. Stork Rubber Products, Gurgaon (Small Category) 3. Bharat Gears, Faridabad (Large Category) 4. Global Autotech, Greater Noida (Large Category)	Silver Trophy
1. Mayur Uniquoters, Jaipur (Large Category)	Bronze Trophy
Excellence in Technology	
1. Stork Rubber Products, Gurgaon (Small Category) 2. Mindarika, Manesar (Large Category)	Gold Trophy
1. National Engineering Industries, Jaipur (Large Category)	Silver Trophy
1. Lucas TVs, Padi, Chennai (Large Category)	Bronze Trophy
1. Abilities India Pistons & Rings, Ghaziabad (Small Category)	Certificate of Appreciation
Excellence in Quality & Productivity	
1. Nippon Thermostat (India), Gummidipoondi (Small Category) 2. Neolite ZKW Lightings, Bahadrugah (Large Category)	Gold Trophy
1. Lumax Cornagila Auto Technologies, Pune (Small Category) 2. Hella India Lighting, Derabassi (Large Category)	Silver Trophy

Source: ACMA, TechSci Research

TECHNOLOGICAL SHIFT; FOCUS ON R&D…(3/3)

ACMA Award Winners (2015)	
Excellence in Quality & Productivity	
1. Chang Yun India, Gurgaon (Large Category)	Bronze Trophy
1. Beswak Components, Sriperumbudur (Small Category) 2. Stork Rubber Products, Chennai (Small Category) 3. Stork Rubber Products, Gurgaon (Small Category)	Certificate of Appreciation
Excellence in Manufacturing	
1. KCTR Varsha Automotive, Pune (MSME Category) 2. Pranav Vikas (India), Palwal (Large Category)	Gold Trophy
1. Autostart India, Faridabad (MSME Category) 2. Friends Castings, Phillaur (MSME Category) 3. Endurance Technologies, Aurangabad (Large Category) 4. Endurance Technologies, Transmission Division, Aurangabad (Large Category)	Silver Trophy
1. Stork Auto Engineering, Manesar (MSME Category) 2. Endurance Technologies, Braking Division, Aurangabad (Large Category) 3. Rockman Industries, Haridwar (Large Category)	Bronze Trophy

Source: ACMA, TechSci Research

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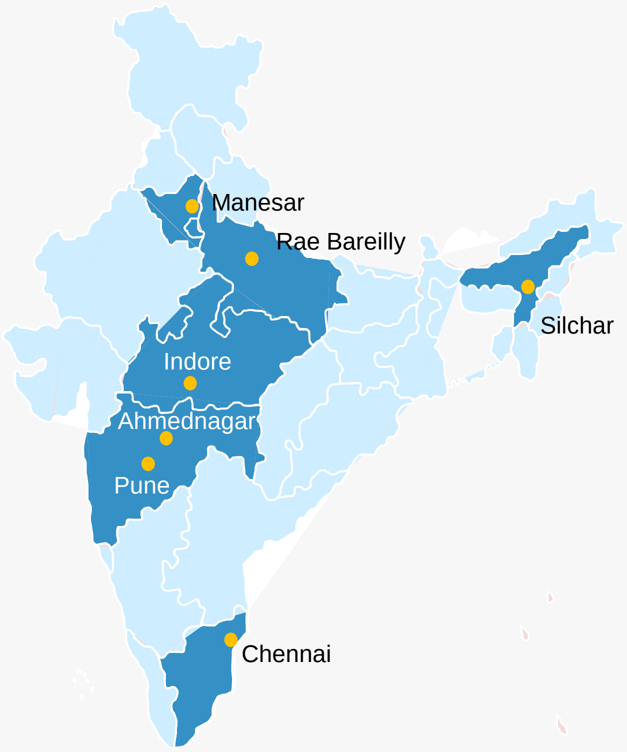
BOOST TO R&D IN THE AUTO COMPONENTS SECTOR - NATRIP CENTRES

	Business description
Vehicles Research & Development Establishment (VRDE), Ahmednagar	• Research, design, development and testing of vehicles • Centre of Excellence for photometry, Electromagnetic Compatibility (EMC) and test tracks
Indore: National Automotive Test Tracks (NATRAX)	• Complete testing facilities for all vehicle categories • Centre of Excellence for vehicle dynamics and tire development • In October 2014, Powertrain LAB facility has been inaugurated to support R&D
Automotive Research Association of India (ARAI), Pune	• Services for all vehicle categories • Centre of Excellence for power-train development and material
Chennai Centre, Tamil Nadu	• Complete homologation services for all vehicle categories • Centre of Excellence for infotronics, EMC[1] and passive safety
Rae Bareilly Centre	• 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	• 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	• Research, design, development and testing of vehicles • Centre of Excellence for photometry, Electromagnetic Compatibility (EMC) and test tracks • First batch of driving training project has been completed on August, 2015

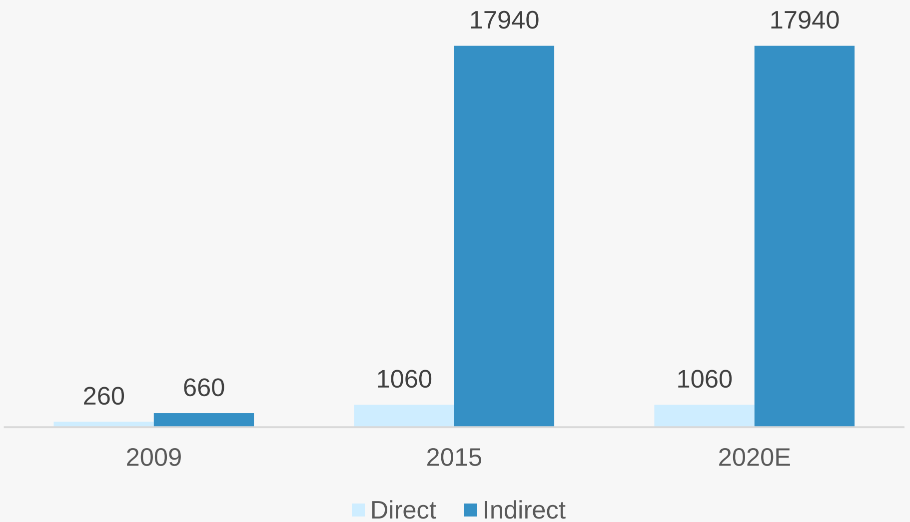


Source: NATRIP
Note: [1] EMC-Electromagnetic Compatibility

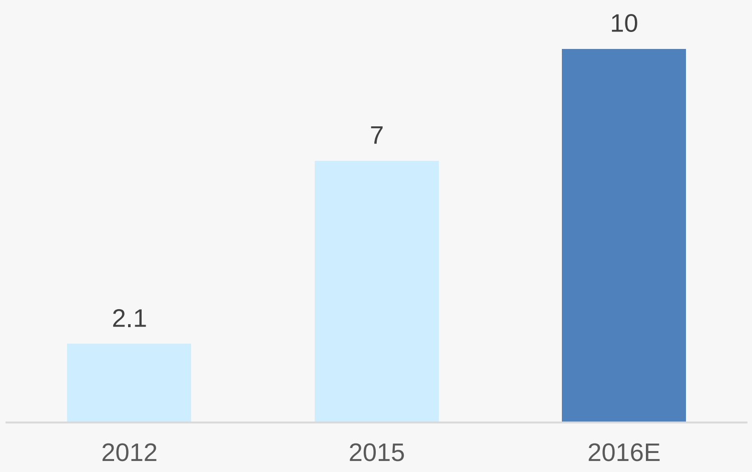
CONTRIBUTION TO EMPLOYMENT AND GDP TO HOLD HUGE POTENTIAL

* The auto component industry employs about 19 million people both directly and indirectly.
* The industry is expected to employ an additional 25 million people by 2016
* Contribution to GDP accounts for 7 per cent in 2015 and is expected to reach 10 per cent by 2016

Auto component Industry's contribution to employment (000 persons)



Contribution to GDP (%)



Source: ACMA, India in Business, TechSci Research

Note: E - Estimated

KEY PRIVATE EQUITY DEALS

Company	Investor	Deal date	Deal value (USD million)
Classic Stripes Pvt Ltd	KKR	21st April, 2016	53.77
Panalfa Autoelektrik Limited	Spark Minda, Minda Corporation	5th April, 2016	6.80
Swaraj Automotives Ltd	b4S Solutions	3rd February, 2016	NA
Unbox Technologies Pvt. Ltd	SAIF Partners	28th December, 2015	0.50
SJS Enterprises	Everstone Capital	12th October, 2015	57.32
Honasco GmbH	Jumps Auto	5th January, 2015	NA
Amtek Auto Ltd	KKR	10th November, 2014	293.0
Sansera Engineering Pvt Ltd	Citi Venture Capital Intl	9th July, 2013	62.6
Mahindra Forgings Ltd	Participaciones	23rd October, 2013	36.54
Mahindra Two Wheelers Ltd	Samena Capital Management LLP	24th February, 2014	1498.77
Minda Corporation	Kotak PE	10th February, 2012	NA
Nederlandse Radiateuren	Banco Products(India)Ltd	23rd February, 2010	23.5
Craftsman Automation Pvt Ltd	Standard Chartered Private Ltd	9th August, 2012	18.13
JMT Auto Ltd	Amtek Auto Ltd	04th October, 2013	NA
Avtec Ltd	Warburg Pincus LLC	15th April, 2013	NA

Source: Company Websites, TechSci Research
Notes: NA – Not Available

AUTO COMPONENTS

OPPORTUNITIES

OPPORTUNITIES IN ENGINEERING PRODUCTS

Outlook	
Engine & engine parts	• New technological changes in this segment include introduction of turbochargers and common rail systems • The trend of outsourcing may gain traction in this segment in the short to medium term
Transmission & steering parts	• Share of the replacement market in sub-segments such as clutches is likely to grow due to rising traffic density • The entry of global players is expected to intensify competition in sub-segments such as gears and clutches
Suspension & braking parts	• The segment is estimated to witness high replacement demand, with players maintaining a diversified customer base in the replacement and OEM segments besides the export market • The entry of global players is likely to intensify competition in sub-segments such as shock absorbers
Equipment	• Companies operating in the replacement market are likely to focus on establishing a distribution network, brand image, product portfolio and pricing policy
Electrical	• Manufacturers are expected to benefit from the growing demand for electric start mechanisms in the two-wheeler segment
Others (Metal Parts)	• Metal part manufacturers are likely to benefit from rising demand for body & chassis, pressure die castings, sheet metal parts, fan belts, hydraulic pneumatic instruments, mainly in two wheelers industry • The prominent companies in this business are constantly working towards expanding their customer base

Source: Make in India
Note: OEM means Original Equipment Manufacturer

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OPPORTUNITIES ABOUND FOR ALL PLAYERS

Small local entrepreneur

- A niche, small entrepreneurial venture can focus on product innovation, leveraging India's abundance of high-skilled labor at low costs

Domestic tier 2/3 supplier

- Take advantage of low-cost manufacturing in India in order to support domestic Tier 1 suppliers and the domestic aftermarket

Domestic tier 1 supplier

- A large India-based auto components manufacturer can focus on the rapidly growing Indian OEM market, exports and the domestic aftermarket

India-based global supplier

- A global supplier operating across multiple product types and geographies can serve as an integrator and preferred supplier to the OEMs

Note: OEM means Original Equipment Manufacturer

OPPORTUNITIES EXIST ACROSS THE INDUSTRY VALUE CHAIN

R&D

- Joint R&D with Indian companies for new product development and process innovation
- NATRIP to assist in bringing low cost manufacturing

Process & design

- Partnerships with Indian SMEs to address product and process technologies
- Offshoring manufacturing design work to JVs or partners based in India

Manufacturing

- Greenfield manufacturing facilities in India to meet the robust domestic demand potential
- Establish India as a key link in the global auto components supply chain

Customer service

- Opportunity for strategic alliance to cover global customers

Government Initiatives

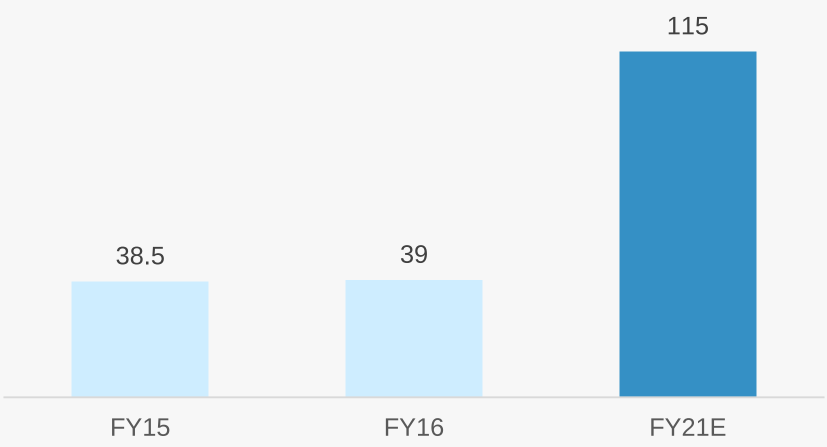
- 100 per cent FDI has been allowed under the automatic route

Note: SME – Small and Medium Enterprise

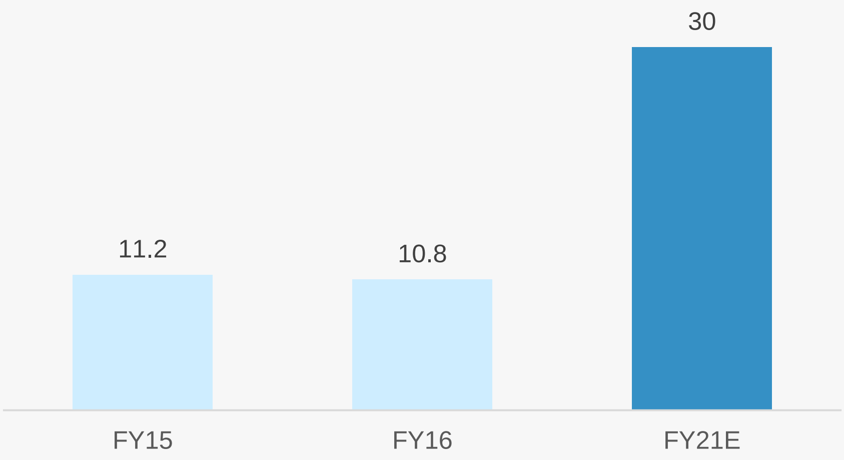
DOMESTIC AND EXPORT MARKETS HOLD HUGE POTENTIAL

* The domestic market is expected to account for 71 per cent of total sales by 2021 with a total market size of USD115 billion.
* Exports will account for as much as 26 per cent of the market by 2021

Domestic market potential (USD billion)



Export market potential (USD billion)



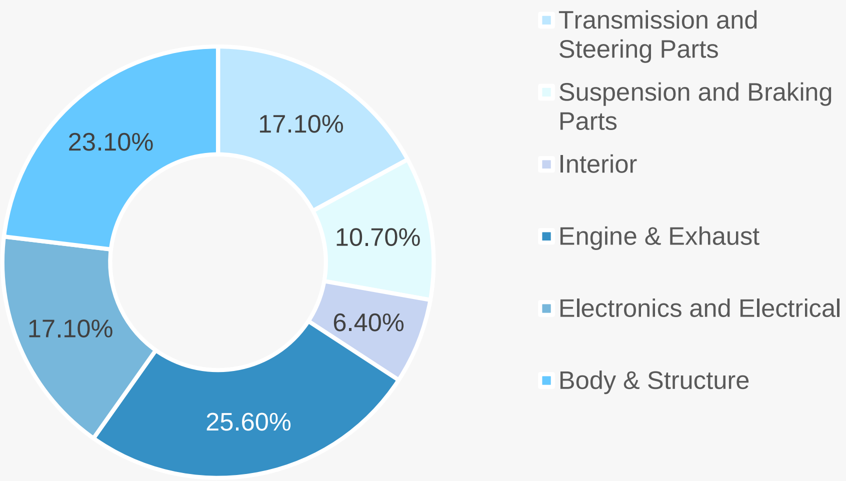
- The total market size is expected to be USD115 billion by 2021, which is nearly 3.00 times the current market size of USD39 billion.

Source: ACMA, TechSci Research
Note: E - Estimate

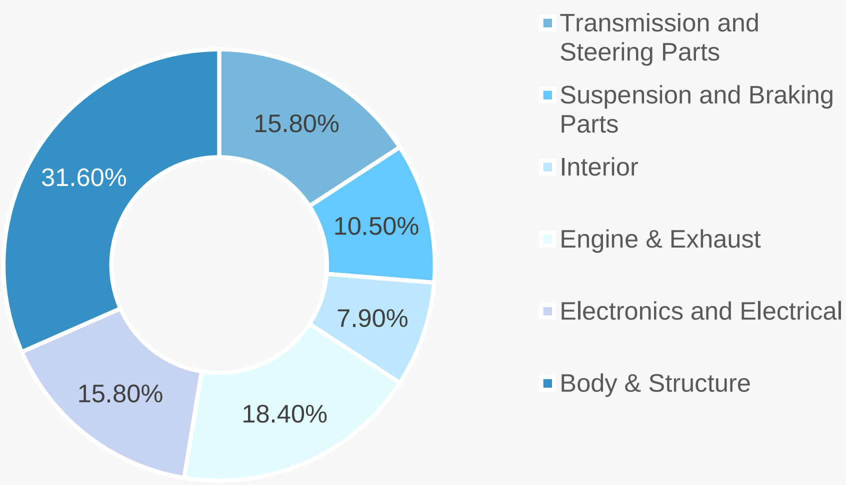
MARKET POTENTIAL BALANCED ACROSS PRODUCT TYPES

- Both domestic and export markets are almost similar in terms of potential share by different product types. For example, Engine & Exhaust components, along with Body & Structural parts, are expected to make up 50 per cent potential domestic sales as well as exports in 2020
- Transmission & Steering components, and Electronics & Electrical parts are likely to be the other key products.

Domestic market potential by components (2020E)



Export market potential by components (2020E)

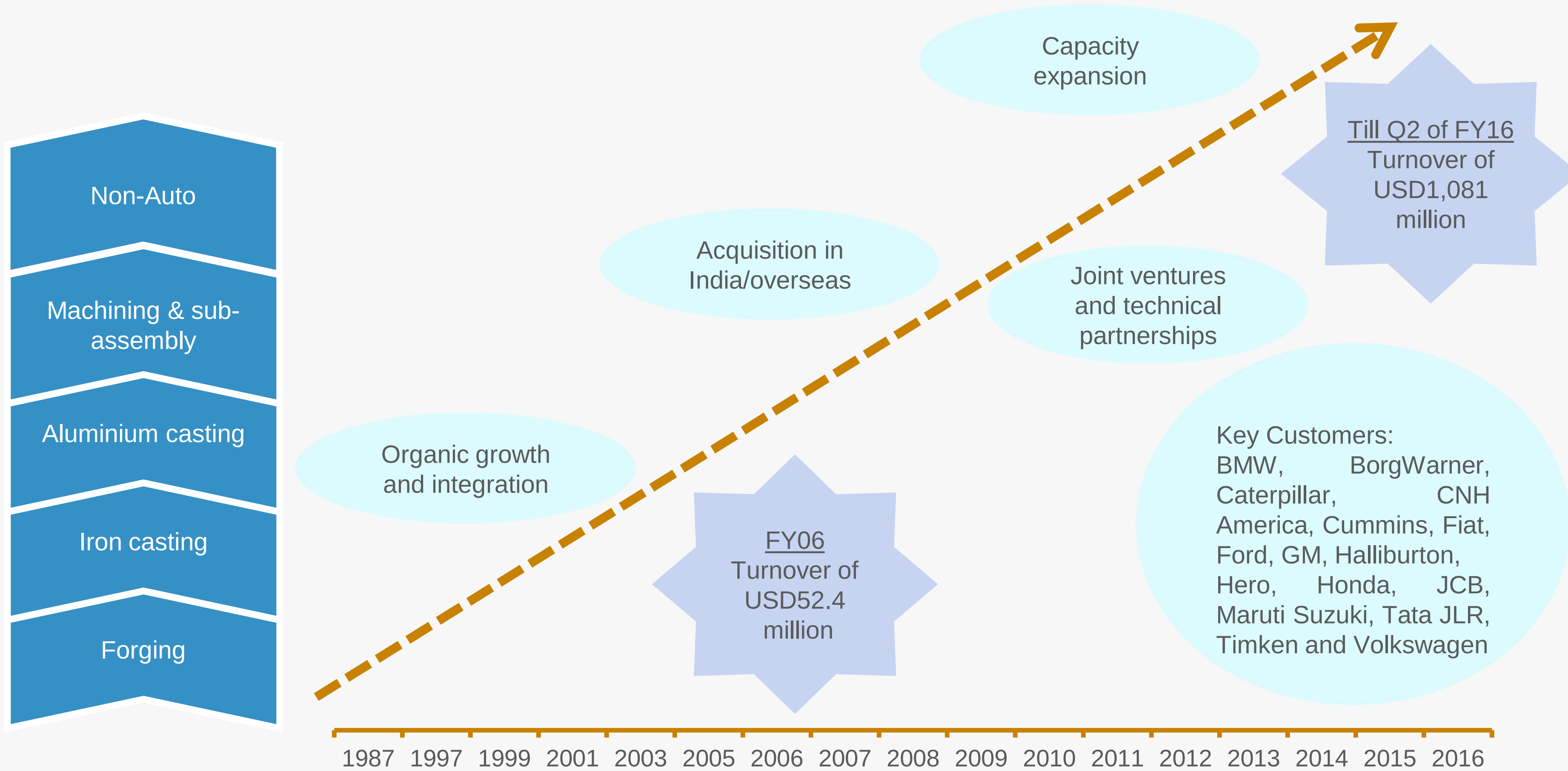


Source: ACMA, TechSci Research;
Note: 2020E – Estimated value for 2020 by ACMA

AUTO COMPONENTS

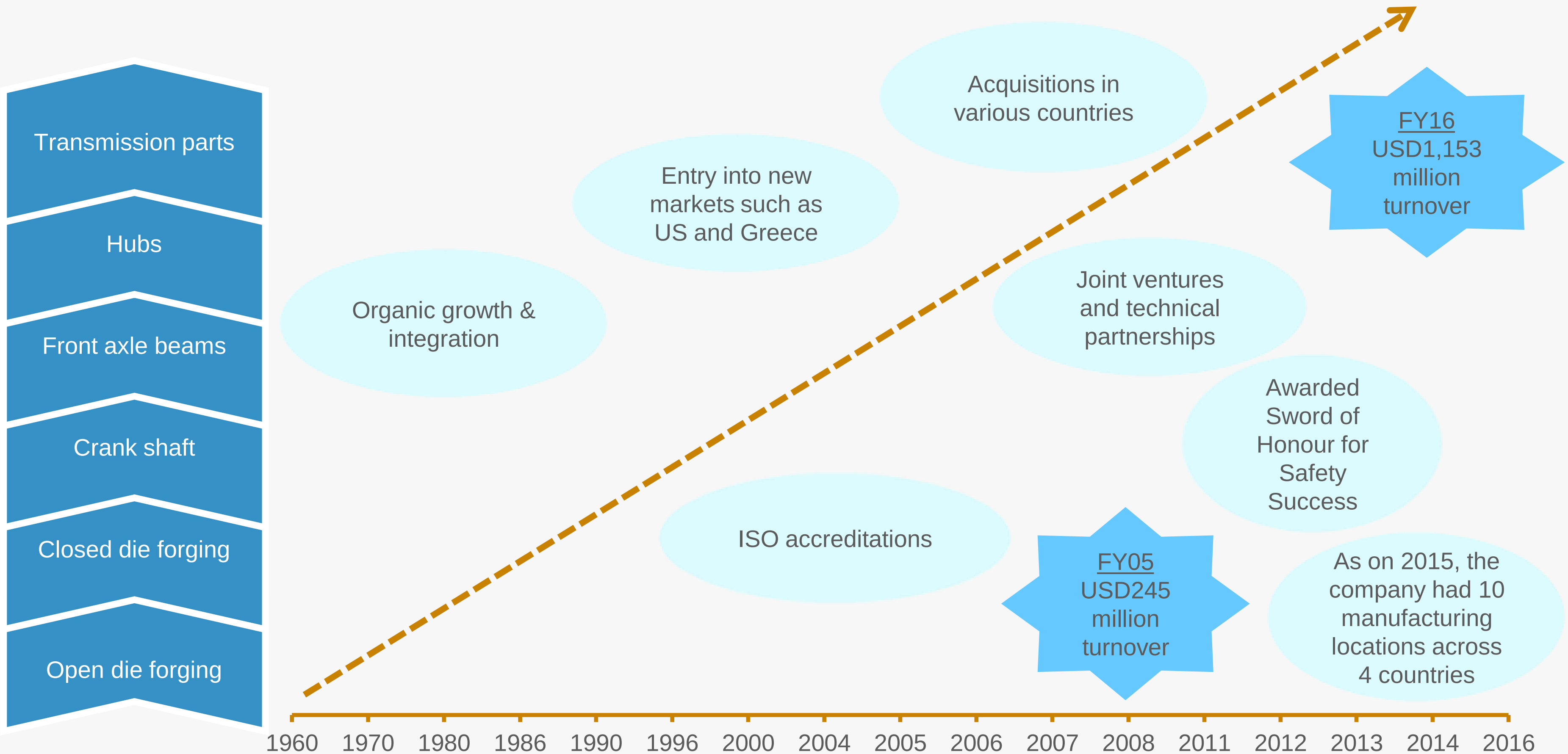
SUCCESS STORIES

AMTEK: CONTINUING ON ITS JOURNEY OF SUCCESS



Source: Company website, Corporate Presentations
Q2 :Quarter2 of FY16 i.e. March

BHARAT FORGE: INDIA'S LARGEST AUTO COMPONENTS EXPORTER



Source: Company reports, TechSci Research

MAJOR PLAYERS BY SEGMENT

	Players
Engine & engine parts	• Pistons – Goetze, Shriram Pistons & Rings, India Pistons, Anand I-Power Limited • Engine Valves – Rane Engine Valves, Shriram Pistons & Rings, SSV Valves • Carburetors – Ucal Fuel Systems and Spaco Carburetors & Escorts Auto Components • Diesel-based fuel-injection systems – Mico, Delphi-TVS Diesel System and Tata Cummins
Transmission & steering parts	• Steering Systems – Sona Koyo Steering Systems, Rane NSK Steering Systems and Rane TRW Systems • Gears – Bharat Gears, Gajra Bevel Gears, ZF Steering Gear (India) Limited, Eicher, Graziano Trasmissioni and SIAP Gears India • Clutch – Clutch Auto, Ceekay Daikin, Amalgamations Repco, Luk Clutches • Driveshafts – GKN Driveshafts, Spicer India Private Limited, Delphi and Sona Koyo Steering Systems
Electrical	• Lucas TVS, Denso, Delco Remy Electricals and Nippon Electricals are key players in this segment
Suspension & braking parts	• Brake Systems – Brakes India, Kalyani Brakes, Mando India Limited and Automotive Axles • Brake Lining – Rane Brake Lining, Sundaram Brake Lining, Hindustan Composites and Allied Nippon • Leaf Springs – Jamna Auto and Jai Parabolic • Shock Absorbers – Gabriel India, Delphi, Mando India Limited and Munjal Showa
Equipment	• Headlights – Lumax, Autolite and Phoenix Lamps • Dashboard – Premiere Instruments & Controls • Sheet metal parts – Jay Bharat Maruti, Omax Auto and JBM Tools

CAPACITY ADDITION PLANS OF KEY PLAYERS

Plant capacity additions	
BOSCH	• Bosch inaugurated its fifteenth plant in November 2015, specialising in manufacturing power tools. • On August 2015, the company had completed the construction of new manufacturing facility (Phase-1) in Karnataka for which it had acquired 97 acres of land in Bidadi and invested an amount of USD55.68 million. Completion of second phase of Bidadi plant is slated for 2018.
APOLLO TYRES LTD.	• The company, which had planned to invest USD245.66 million for the expansion of its radial tyre capacity at its Chennai plant, would invest an additional amount of USD196.53 million for this plant as on August 2015. • In September 2016, company announced that it will invest US$ 401.60 million, to double its Chennai plants capacity by the end of 2020
TATA TATA AUTOCOMP SYSTEMS LTD	• Tata Auto Component Systems is setting up five auto component manufacturing plants in Sanand, Gujarat, at an investment of USD62 million. It is also investing USD114 million for capacity addition in its Chakan plant in Maharashtra.
HYUNDAI	• Hyundai India had setup a plant in Tamil Nadu with an investment of USD333 million to manufacture diesel engines and auto components in 2015.
NGK	• NGK Technologies India Private Limited, subsidiary of NGK Insulators, Ltd. was established to market automotive related and metal components across India.
TVS	• India’s TVS Group has acquired a 90 per cent stake in Universal Components UK Ltd for USD19.2 million, as part of its expansion plans. Universal Components is a wholesale distributor of commercial vehicle parts. It has also signed a co-operation agreement with BMW Motorrad to develop motorcycles below 500cc segment. Looking for new overseas markets. • In May 2015, the company made investments of USD24.56 million towards the capacity expansion of two-wheelers across two plants in Tamil Nadu and Uttarakhand.

Source: Respective Company websites, News articles, TechSci Research

AUTO COMPONENTS

USEFUL INFORMATION

INDUSTRY ASSOCIATIONS

Automotive Component Manufacturers Association of India (ACMA)
6th Floor, The Capital Court,
Olof Palme Marg, Munirka,
New Delhi – 110 067, India
Phone: 91 11 2616 0315, 2617 5873, 2618 4479
Fax: 91 11 2616 0317
E-mail: acma@acma.in; acma@vsnl.com

GLOSSARY

- **ACMA**: Automotive Component Manufacturers Association of India
- **CAGR**: Compound Annual Growth Rate
- **FDI**: Foreign Direct Investment
- **FY**: Indian Financial Year (April to March)
  - So FY12 implies April 2011 to March 2012
- **GOI**: Government of India
- **INR**: Indian Rupee
- **OEM**: Original Equipment Manufacturers
- **NATRiP**: National Automotive Testing and R&D Infrastructure Project
- **SEZ**: Special Economic Zone
- **USD**: US Dollar
- Wherever applicable, numbers have been rounded off to the nearest whole number

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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)	66.95

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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