

Auto Components

NOVEMBER
2011



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Auto Components

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Contents

- ❖ Advantage India
- ❖ Market overview and trends
- ❖ Growth drivers
- ❖ Success stories: Amtek, Bharat Forge
- ❖ Opportunities
- ❖ Useful information

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Advantage India

Robust demand

- India set to break into the league of top five vehicle producing nations
- Domestic auto component demand expected to rise to USD 113 billion in 2020 from USD 26 billion in 2011

Export opportunities

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

2020E

Market size:
USD 113
billion

Advantage India

Competitive advantages

- Cost-effective manufacturing base saves 10-25 per cent relative to operations in Europe and Latin America
- Easy availability of highly skilled manpower and a strong education base

Policy support

- Announcement of excise duty cuts on various auto components in successive federal government budgets
- Encouragement to R&D through establishment of NATRiP centres

FY11

Market size:
USD 26
billion

Notes: NATRiP - National Automotive Testing and R&D Infrastructure Project, 2020E – estimated figure for the year 2020; these estimates are from Automotive Component Manufacturers Association of India (ACMA)

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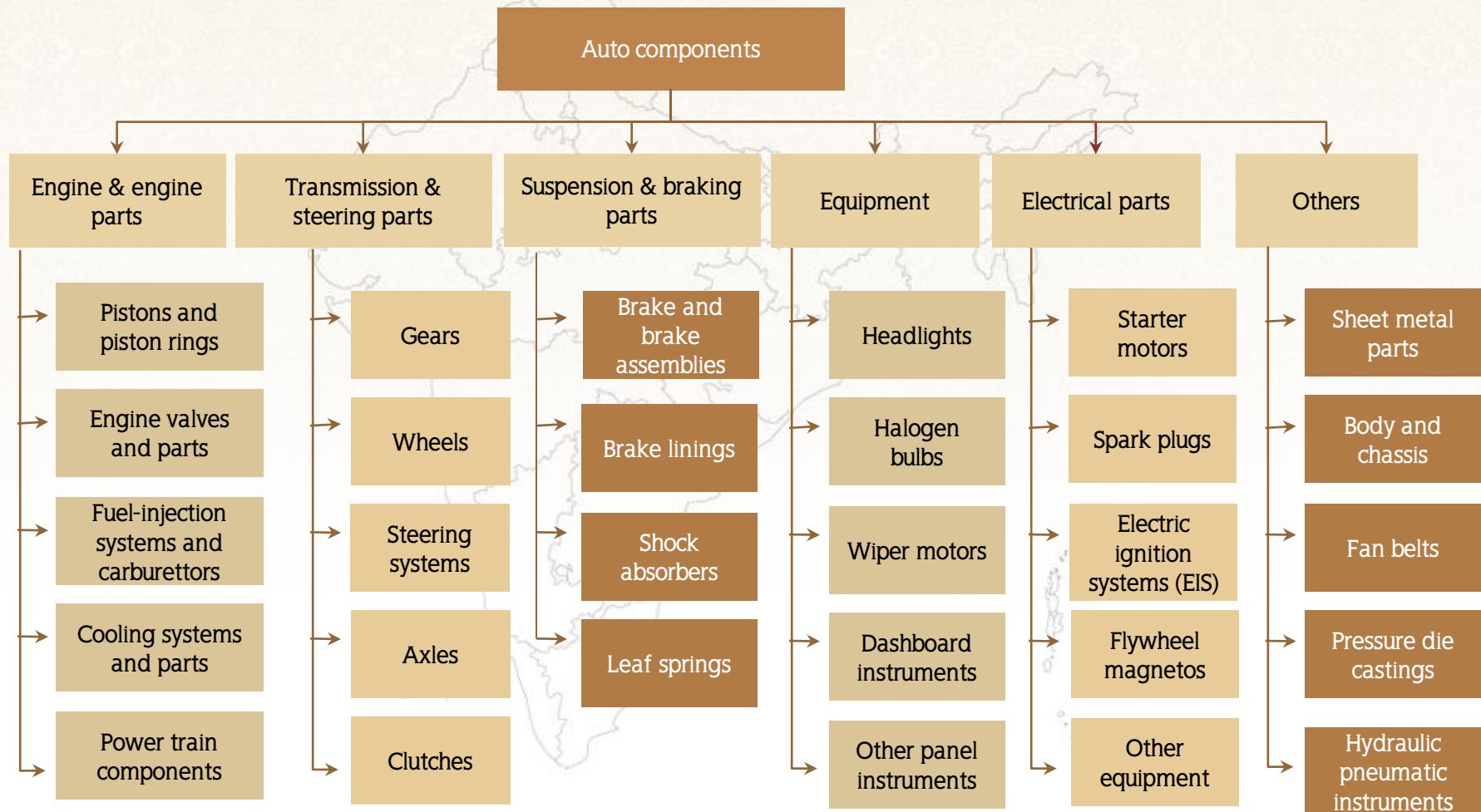
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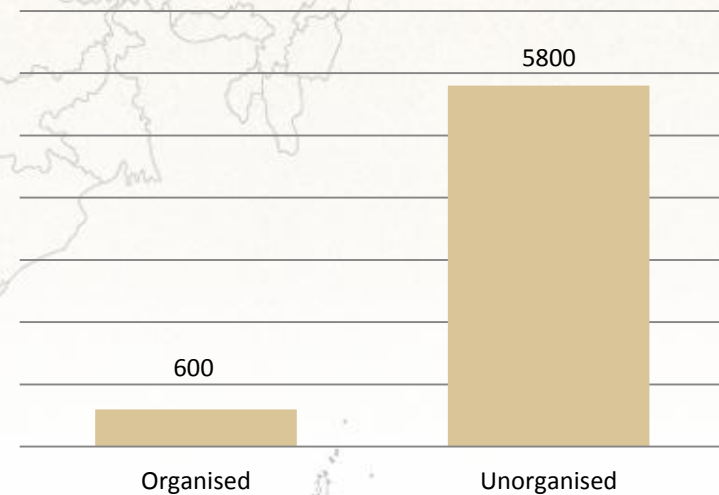
The Auto components market is split into six product segments



Large number of unorganised players ... (1/2)

- The number of units in the unorganised sector outnumber those in the organised one

Number of players: organised vs. unorganised (FY10)

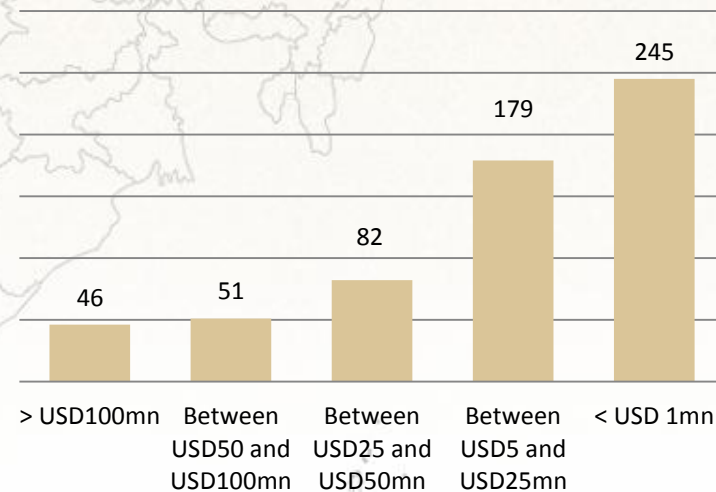


Source: ACMA, Aranca Research

Large number of unorganised players ... (2/2)

- Around 30 per cent of the organised market has revenues above USD 25 million

Number of players by revenue in the organised sector (FY10)

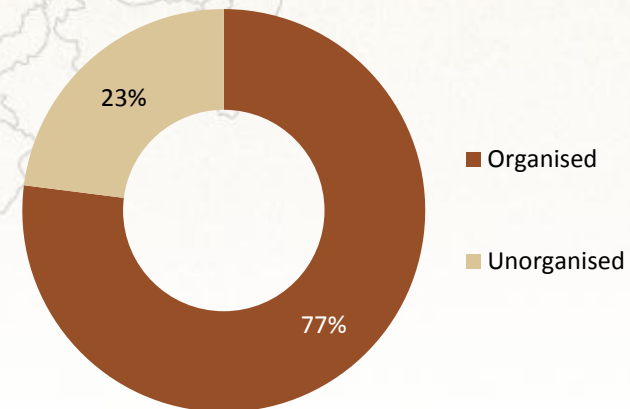


Source: ACMA, Aranca Research

Organised market churns out maximum production ... (1/2)

→ Though lesser in number, the organised sector accounts for 77 per cent of total production

Production breakup: organised vs. unorganised (FY10)

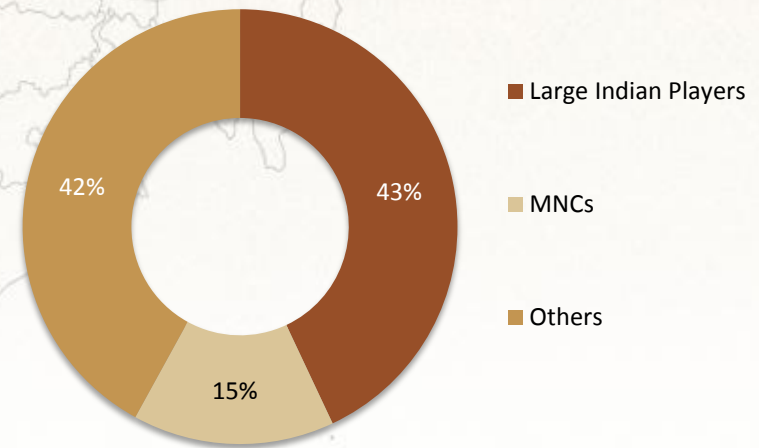


Source: ACMA, Aranca Research

Organised market churns out maximum production ... (2/2)

- Large Indian players account for 43 per cent of production within the organised sector; MNCs account for 15 per cent

Production breakup in the organised sector (FY10)



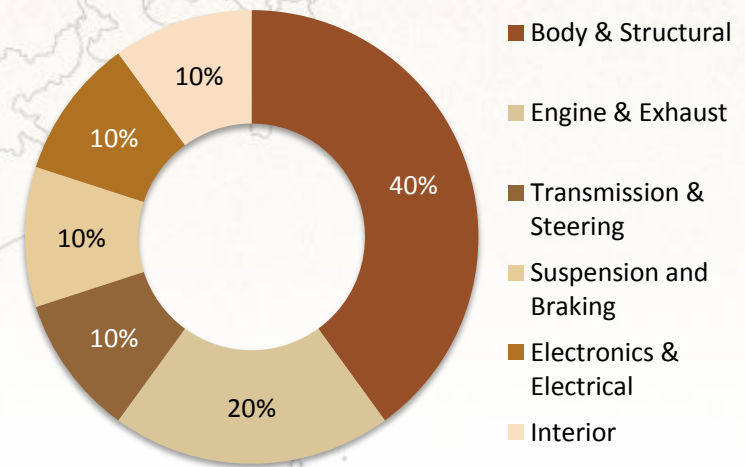
Source: ACMA, Aranca Research

Production breakup ... (1/2)

- Body & structural components alone account for 40 per cent of the entire product range
- Cars & utility vehicles is the largest customer segment for the auto components industry
- OEM is by far the largest market, followed by replacement and exports

Notes: OEM means Original Equipment Manufacturer

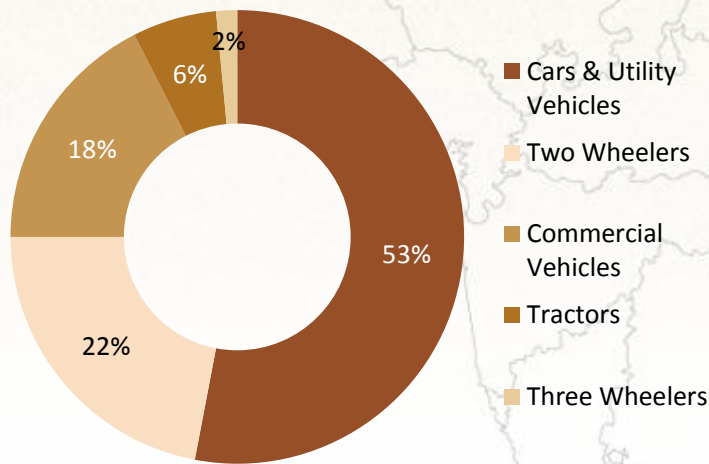
Production volumes by product range (FY10)



Source: ACMA, Aranca Research

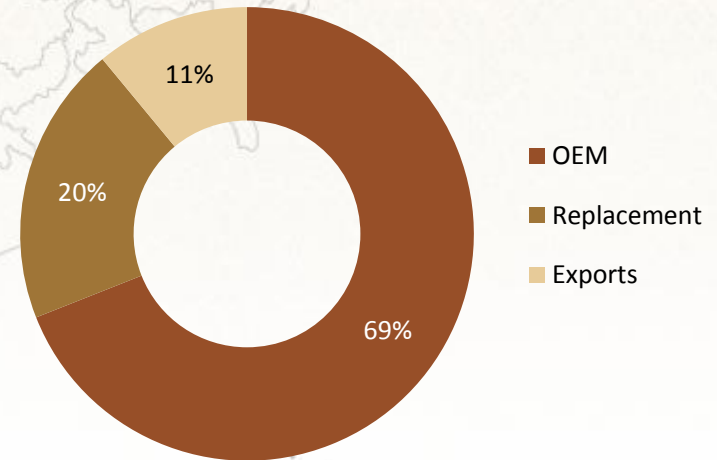
Production breakup ... (2/2)

Production volumes by segment (FY10)



Source: ACMA, Aranca Research

Production volumes by market range (FY10)

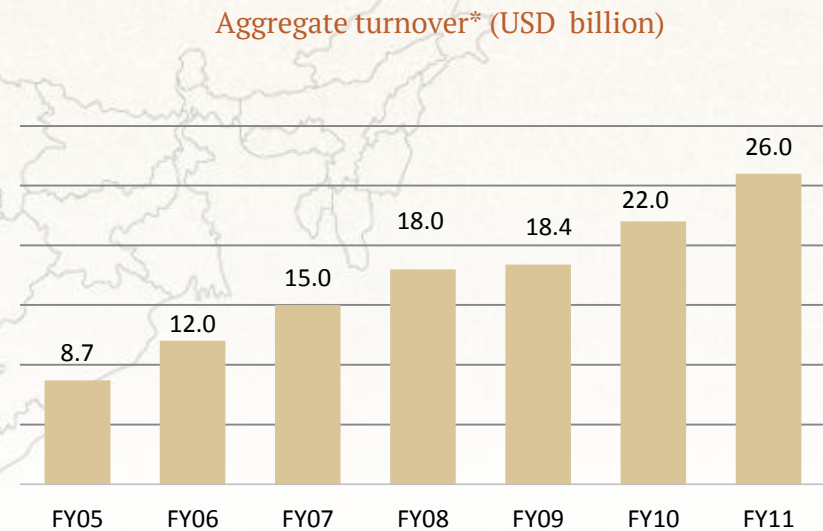


Source: ACMA, Aranca Research

Robust market growth over the last six years ... (1/2)

- Revenues have risen from USD 9 billion in FY05 to USD 26 billion in FY11 – a CAGR of 20 per cent

Notes: CAGR – Compound Annual Growth Rate
FY – Indian financial year (April – March)



Source: ACMA, Aranca Research

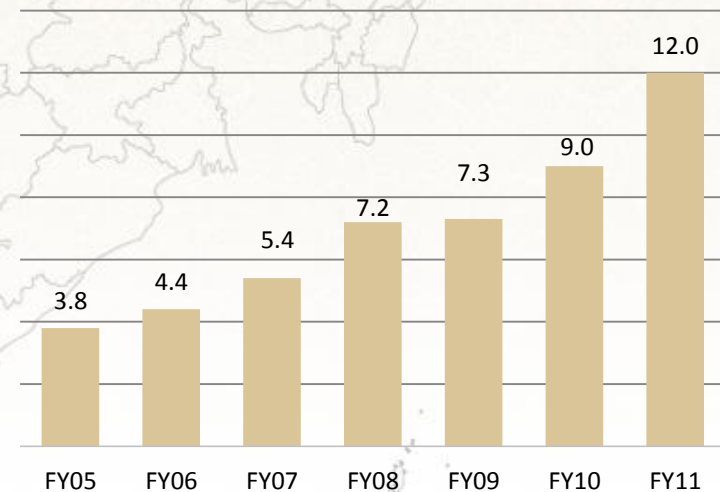
* Turnover does not take into account production for captive consumption by OEMs, components manufactured by non ACMA members whose majority supplies are non-automotive and the unorganised sectors

Robust market growth over the last six years ... (2/2)

- Capital investments in the industry have risen from USD 3.8 billion in FY05 to USD 12 billion in FY11 – a CAGR of 21 per cent

Notes: CAGR – Compound Annual Growth Rate
FY – Indian financial year (April – March)

Aggregate capital investments (USD billion)

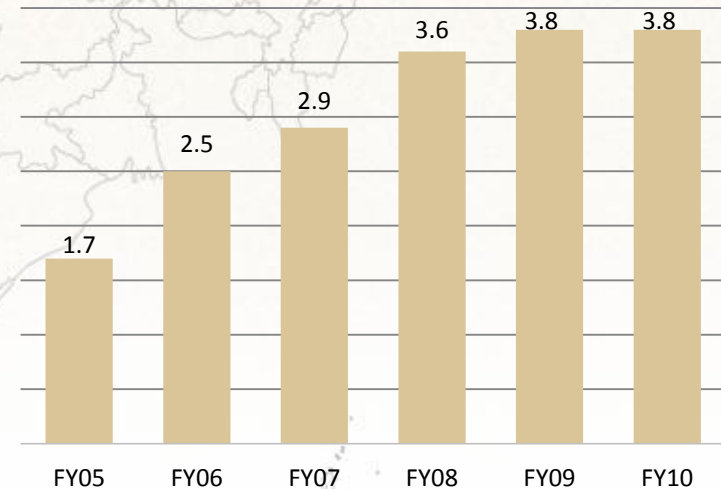


Source: ACMA, Aranca Research

Exports have aided overall growth in the sector ... (1/2)

- Export of auto components from India increased at a CAGR of 17 per cent over FY05-10

Auto Components exports (USD billion)

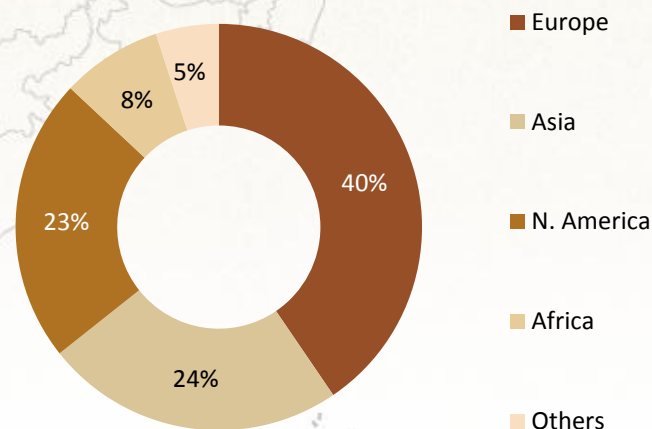


Source: ACMA, Aranca Research

Exports have aided overall growth in the sector ... (2/2)

- Europe accounts for 40 per cent of total exports, while Asia and North America account for 24 per cent and 23 per cent respectively

Exports volume by geography (FY10)



Source: ACMA, Aranca Research

Notable trends in the Indian auto components sector

Global components sourcing hub

- Major global OEMs are planning to make India a component sourcing hub for their global operations
- Several global Tier-I suppliers have also announced their 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

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

Inorganic route to expand

- Domestic players are acquiring global companies to gain access to the latest technology, expand client base and diversify revenue streams
- Players such as Amtek Auto and Bharat Forge have adopted a dual-shore manufacturing model

Notes: OEM means Original Equipment Manufacturer

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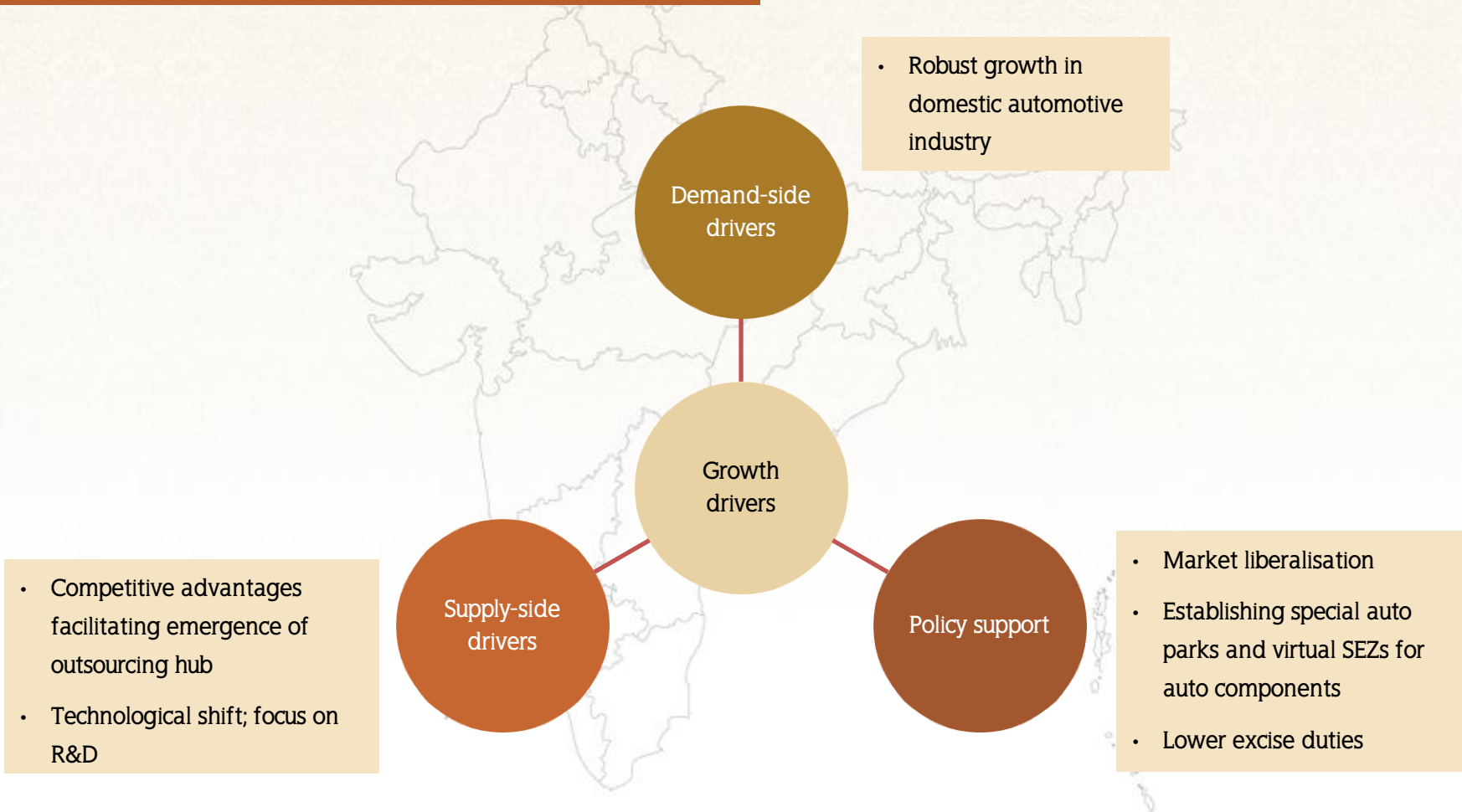
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Growth drivers of the Indian Auto Components market



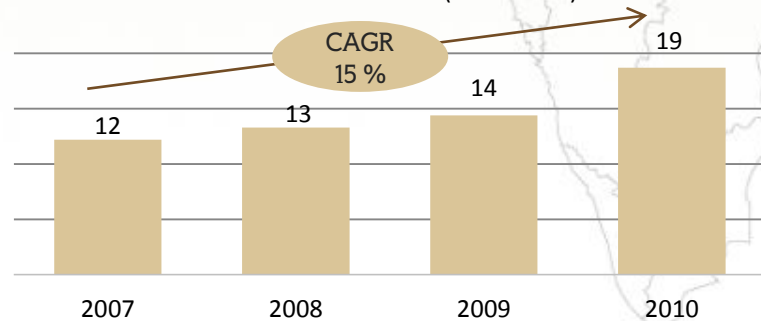
Robust growth in domestic automotives industry

Favourable government policies

- Launch of the Automotive Mission Plan that allows FDI and gives tax holidays has been favourable for the industry
- Excise duty on small cars has been reduced
- Launch of the National Mission for Hybrid & Electric Vehicles under Budget FY12 would make hybrid vehicle kits cheaper by reducing the excise duty rebate to 5 per cent from the current 10 per cent

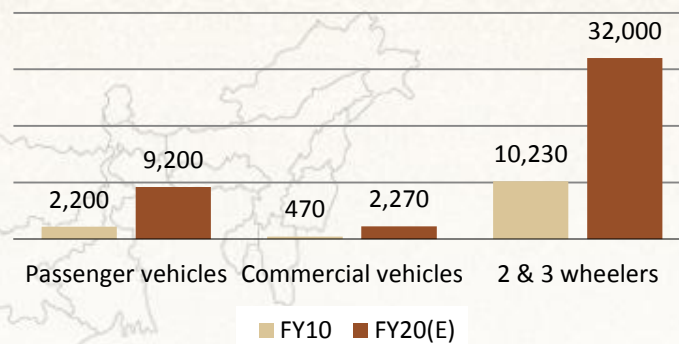
Easy auto financing

India Auto Loan market size (USD billion)



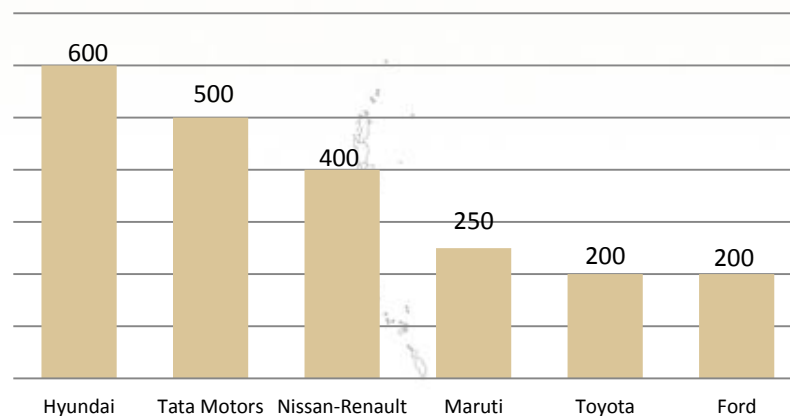
Source: ACMA, State Bank of India, Aranca Research
Notes: FY indicates Indian financial year (April – March)

Vehicle production in India* (thousand units)



*ACMA Estimates; E – Expected

Capacity additions in FY10 (thousand units)



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 in this sector exempt from licensing and approvals

Automotive Mission Plan 2006–16

- Setting up of a technology modernisation fund focusing on small and medium enterprises
- Establishment of automotive training institutes and auto design centres, special auto parks and auto component virtual SEZs

NATRiPs

- Set up at a total cost of USD 388.5 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 USD 200 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 2011–12

- Reduced duty on CNG/LPG kits for fossil fuelled vehicles from 10 per cent to 5 per cent
- Excise duty on LED lights cut to 5 per cent from 10 per cent; exempt from special CVD
- Fuel-cell technology vehicles to receive 10 per cent excise duty concession

Source: News Articles, Government Websites, Aranca Research
Notes: NATRIP - National Automotive Testing and R&D Infrastructure Project

Exports driven by India's competitive advantage over peers

		Design & Engg* skills	Manufacturing skills	Manpower costs	Supplier base	Raw materials
East Asia	Korea	In competition with India	In competition with India	In competition with India	In competition with India	In competition with India
	China	In competition with India	Less competitive than India	In competition with India	In competition with 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, Aranca Research

*Engg – Engineering

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 plans to source gasoline and diesel engines from its Indian manufacturing operations for its domestic and global operations



- Ford expanded the annual engine production capacity of its Chennai plant to 250,000 in 2010
- Plans to make India its manufacturing hub for engines for the Asia-Pacific region and Africa



- Honda intends to set up a power-train facility in Rajasthan at an investment of USD 115 million
- The company has an export base for certain key engine components in India



- Volkswagen sourced components worth USD 1.3 billion from India till 2010
- The company plans to increase sourcing from India to 70 per cent of its total global sourcing

Source: Respective company websites, news articles, Aranca Research

Technological shift; focus on R&D

- Indian manufacturers are embracing best shop floor practices such as 5-S, 7-W, Kaizen, TQM, TPM, 6 Sigma and Lean Manufacturing
- Most players in the organised sector are certified ISO 9000, ISO 14001 and TS 16949 companies

Modern shop floor practices

Focus on R&D

Innovation in design

- NATRiP centres are being set up by the government
- 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

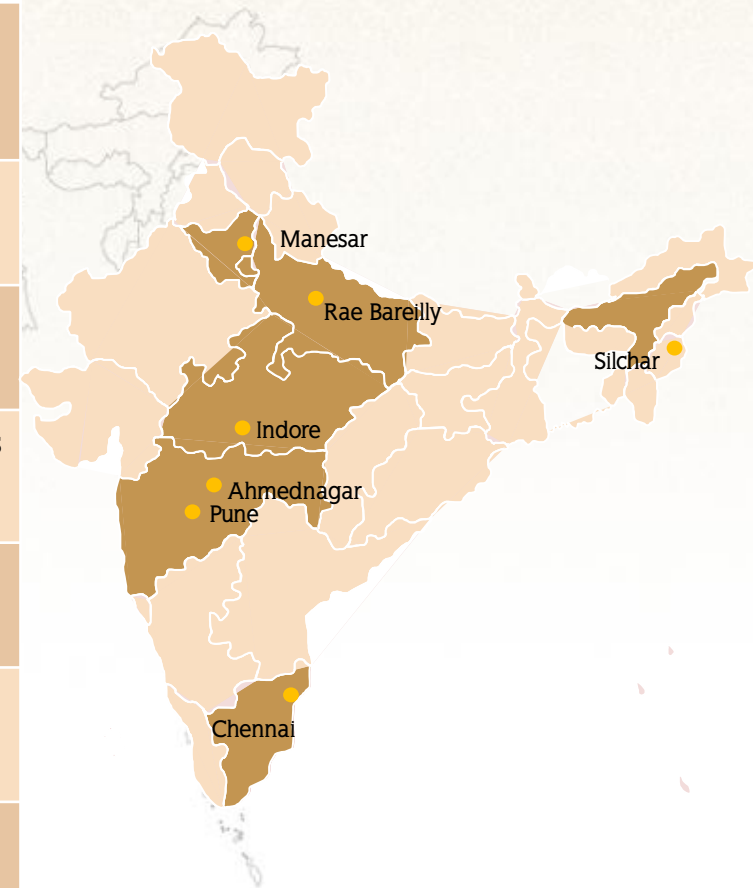
Awards received by Indian players

Awards	Number
Total Productive Maintenance (TPM) Award	15
Deming Award	11
Japan Institute of Plant Maintenance (JIPM) Award	3

Source: ACMA, Aranca Research

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
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
Silchar Centre, Assam	<ul style="list-style-type: none"> • Research, design, development and testing of vehicles • Centre of excellence for photometry, electromagnetic compatibility (EMC) and test tracks



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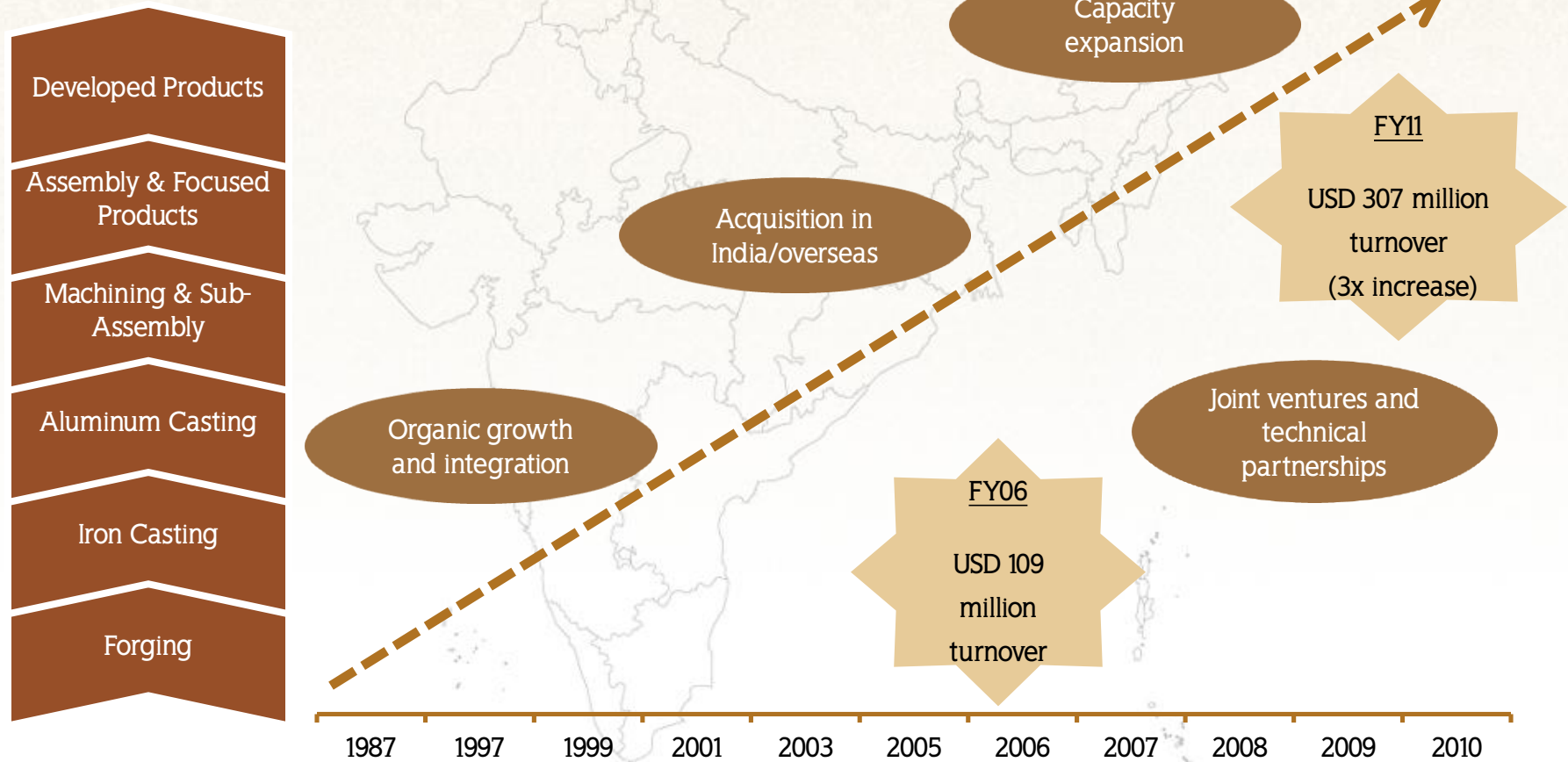
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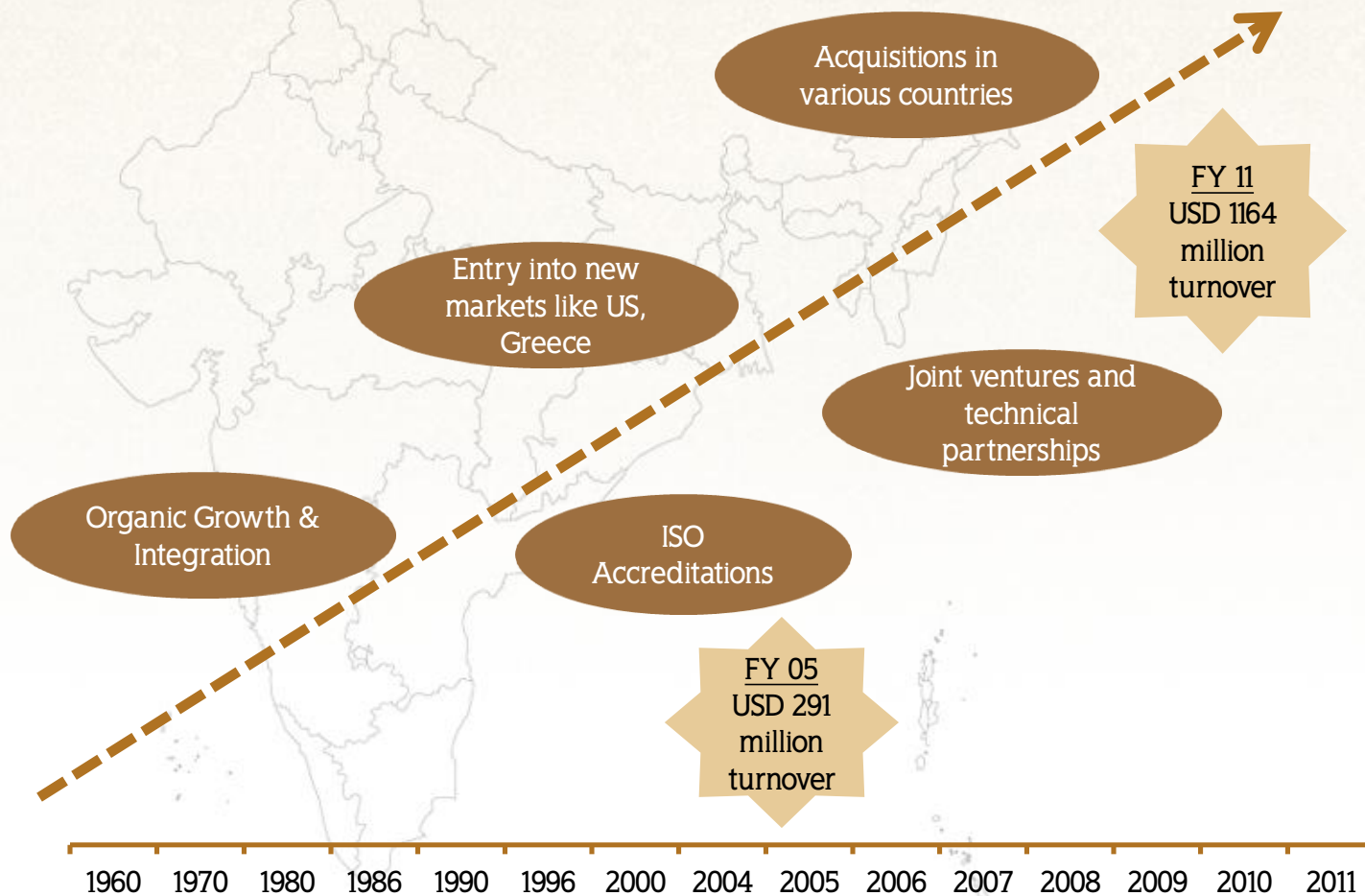
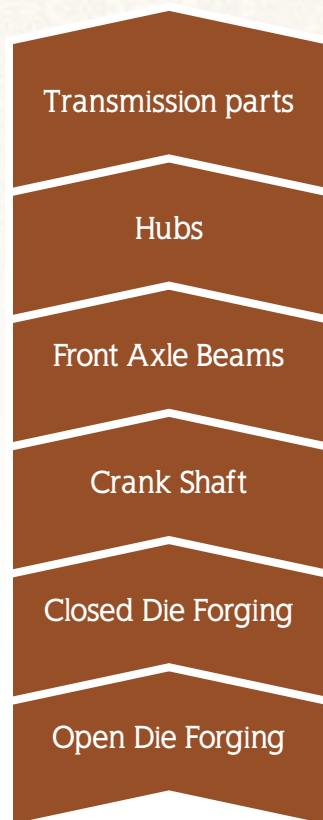
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Amtek: Continuing on its journey of success



Bharat Forge: India's largest auto components exporter



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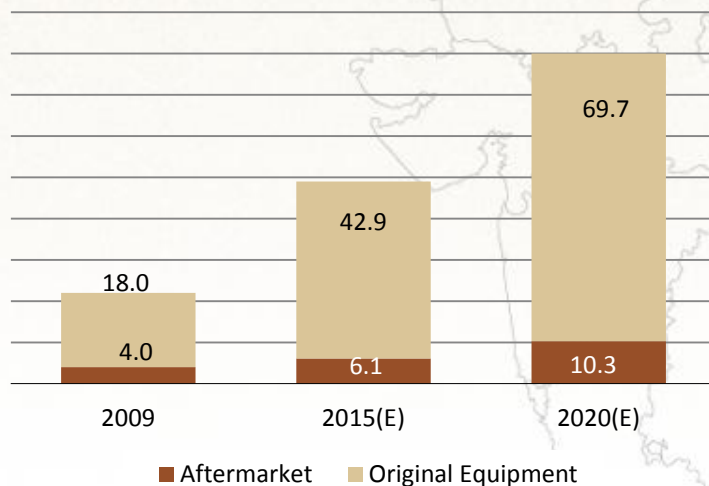
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Domestic and export markets hold huge potential

→ The domestic market is expected to account for 80 per cent of total sales by 2020 with a total market size of USD 80 billion

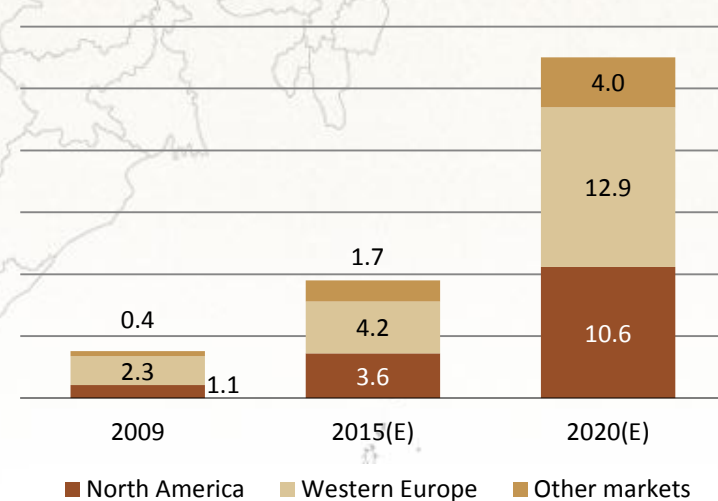
→ Exports will account for as much as 20 per cent of the market by 2020

Domestic market potential (USD billion)



Source: ACMA, Aranca Research

Export market potential (USD billion)



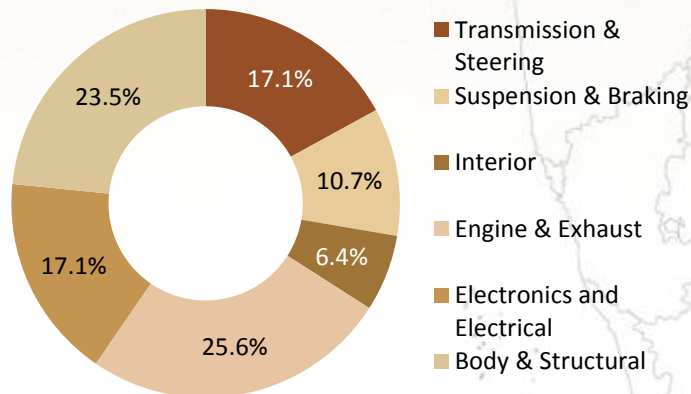
Source: ACMA, Aranca Research

• The total market size is expected to be more than USD 100 billion by 2020, which is four times the current market size of about USD 26 billion

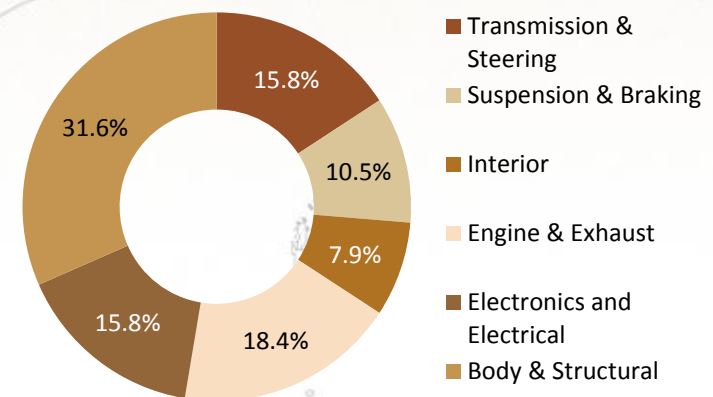
Market potential balanced across product types

- The domestic and export markets are at par in terms of product type. For instance, Engine & Exhaust components, along with Body & Structural parts, account for about 50 per cent of the potential in both domestic and export markets
- Other major product types include Transmission & Steering components and Electronics & Electrical parts

Domestic market potential by components (2020E)



Export market potential by components (2020E)



Source: ACMA, Aranca Research;

Notes: 2020E – estimated value for 2020 by ACMA

Source: ACMA, Aranca Research;

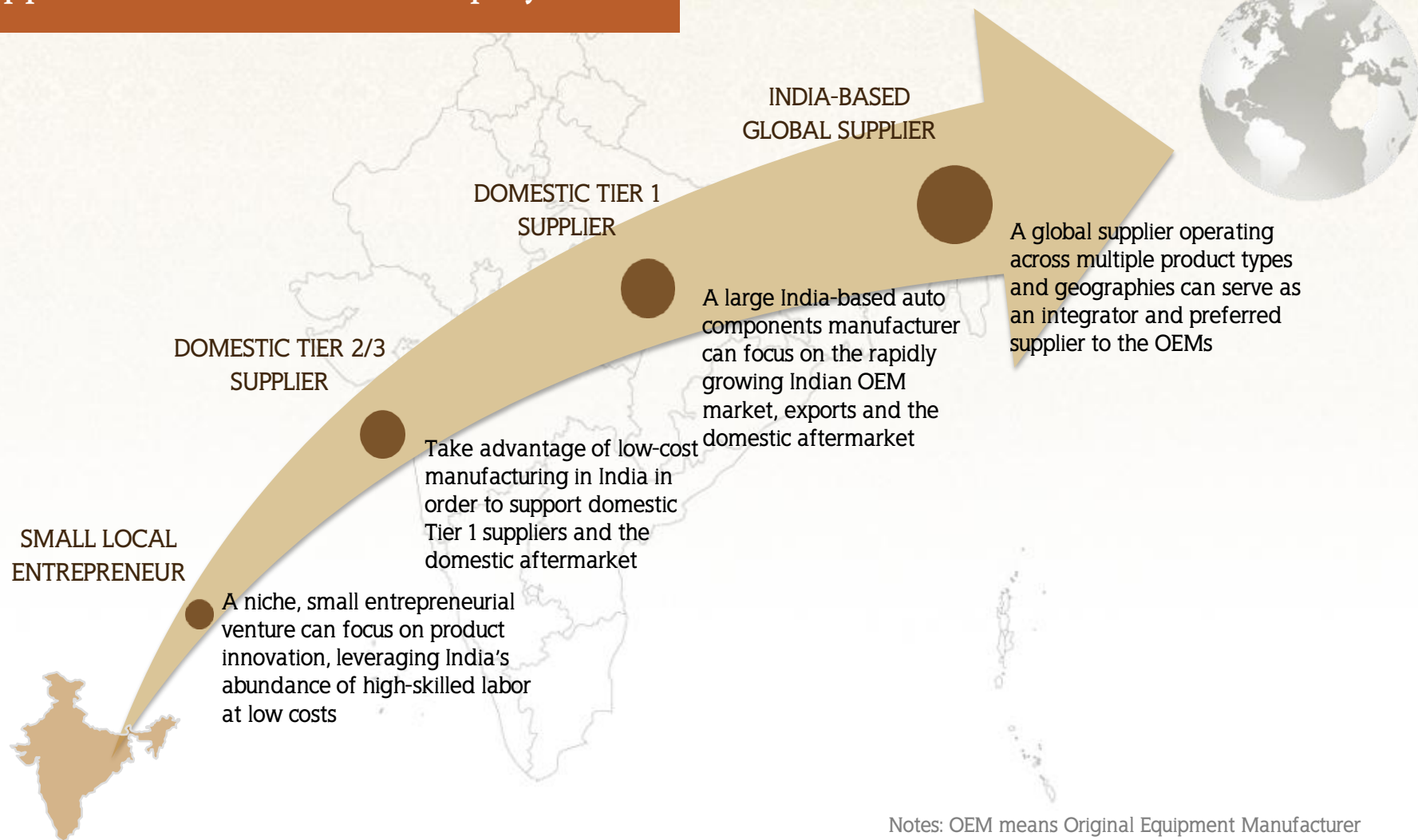
Notes: 2020E – estimated value for 2020 by ACMA

Opportunities in engineering products

Outlook	
Engine & Engine Parts	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Companies operating in the replacement market are likely to focus on establishing a distribution network, brand image, product portfolio and pricing policy
Electrical	<ul style="list-style-type: none"> • Manufacturers are expected to benefit from the growing demand for electric start mechanisms in the two-wheeler segment
Others	<ul style="list-style-type: none"> • Leading players in the sheet metal parts sub-segment are in the process of expanding their customer base. This sub-segment is expected to grow 10–11 per cent during 2010–15

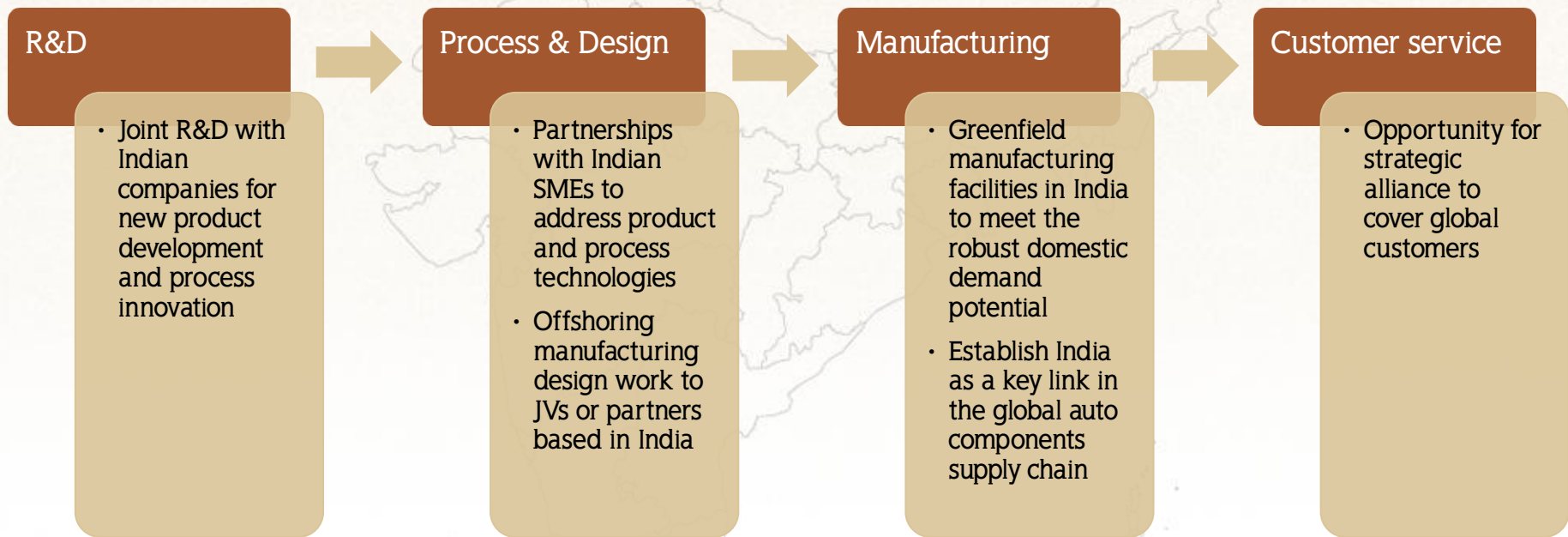
Notes: OEM means Original Equipment Manufacturer

Opportunities abound for all players



Notes: OEM means Original Equipment Manufacturer

Opportunities exist across the industry value chain



Notes: SME – Small and Medium Enterprise

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Major players by segment

	Players
Engine & Engine Parts	<ul style="list-style-type: none"> • Pistons – Goetze, Shriram Pistons & Rings, India Pistons • Engine Valves – Rane Engine Valves and Shriram Pistons & Rings • 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	<ul style="list-style-type: none"> • Steering Systems – Sona Koyo Steering Systems, Rane Madras and Rane TRW Systems • Gears – Bharat Gears, Gajra Bevel Gears, Eicher, Graziano Trasmissioni and SIAP Gears India • Clutch – Clutch Auto, Ceekay Daikin, Amalgamations Repco, Luk Clutches • Driveshafts – GKN Driveshafts, Delphi and Sona Koyo Steering Systems
Electrical	<ul style="list-style-type: none"> • Lucas TVS, Denso, Delco Remy Electricals and Nippon Electricals are key players in this segment
Suspension & Braking Parts	<ul style="list-style-type: none"> • Brake Systems – Brakes India, Kalyani Brakes 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 and Munjal Showa
Equipment	<ul style="list-style-type: none"> • 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
 <p>Engl</p>	<p>Bosch, which has six companies in India, plans to invest around USD 625 million during 2010-2013</p>
 <p>Trans</p>	<p>Apollo Tyres is planning to invest USD 625 million during 2010-2012 to meet its overseas growth target. The company aims to generate 60 per cent of the Apollo Group's overseas revenue. Apollo Tyres currently generates approximately 40 per cent of the group's total revenue from overseas operations.</p>
	<p>India's TACO is setting up five auto component manufacturing plants in Sanand, Gujarat, at an investment of USD 62 million. These five new factories are part of the vendor park being developed at the Tata Nano plant site</p>
	<p>Hyundai India is setting up a plant in Tamil Nadu with an investment of USD 333 million to manufacture diesel engines and auto components</p>
	<p>Motherson Sumi Systems plans to invest USD 80-90 million in 2010-2011 to expand the capacity of its plants in Chennai, Haldwani and Bengaluru (all in India) as well as other international plants such as a new one in Hungary</p>

Source: Respective company websites, news articles, Aranca Research

Key Private Equity deals

Company	Investor	Deal Date	Deal Value (USD million)
RSB Group	IL&FS Investment Managers, Ltd	17th July 2007	21.2
Uniparts India Ltd	Pinebridge Capital Partners LLC	12th Feb 2008	20
Avtec Ltd	Actis Capital LLP	3rd Mar 2005	17.8
RSB Group	Evolve Capital	17th Jul 2007	17
Amtek Auto Ltd	Warburg Pincus LLC	23rd Nov 2010	14.3
Bajaj Motors Ltd	New York Life Capital Partners	31st Mar 2007	12
Amtek Auto Ltd	Warburg Pincus LLC	4th Jun 2006	10.5
Aurangabad Electricals Pvt Ltd	Blue River Capital	17th Apr 2006	10.2
Shriram Foundry Ltd	SIDBI Venture Capital, Ltd	24th Apr 2008	7.5
Jamna Auto Industries Ltd	Clearwater Capital Partners	21st Aug 2010	3.2
Amtek Auto Ltd	Chrys Capital Management Co	4th Jul 2008	NA

Source: Thomson Reuters, Aranca Research

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
- **FDI:** Foreign Direct Investment
- **FY:** Indian financial year (April to March)
 - So FY10 implies April 2009 to March 2010
- **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
 - Conversion rate used: USD 1= INR 48
- Wherever applicable, numbers have been rounded off to the nearest whole number

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