**AUTO COMPONENTS**

**EXECUTIVE SUMMARY**

**Robust growth in auto component**
- Turnover of the Indian auto component sector stood at USD40.6 billion in FY2012–13; the industry is expected to reach USD115 billion by FY2020–21

**Rising indigenisation**
- During 2011–12, the indigenisation level of domestic players was around 95 per cent and foreign OEMs 65–70 per cent; indigenisation of foreign OEMs is expected to reach around 80 per cent by 2014

**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 780 million in 2011; 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**
- India is the fourth-largest producer of steel in the world and among the lowest-cost ones as well; the country is slated to become the second-largest steel producer by 2015; Steel is a key raw material used in automobiles

*Source: ACMA, CARE Research, IHS, NCAER, Asian Development Bank, Aranca Research*

*Note: OEM: Original Equipment Manufacturer*
Growing demand

- 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

- 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
  - Fourth largest steel producer globally hence a cost advantage

- Policy support
  - Continued policy support in the form of Auto Policy 2002 and National Automotive Mission Plan 2002-16
  - Strong support to R&D through establishment of NATRiP centres

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

FY13
- Market size: USD40.6 billion

FY21E
- Market size: USD115 billion

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
The Auto Components Market is split into six product segments:

1. Engine & engine parts
   - Pistons and piston rings
   - Engine valves and parts
   - Fuel-injection systems and carburetors
   - Cooling systems and parts
   - Power train components

2. Transmission & steering parts
   - Gears
   - Wheels
   - Steering systems
   - Axles
   - Clutches

3. Suspension & braking parts
   - Brake and brake assemblies
   - Brake linings
   - Shock absorbers
   - Leaf springs

4. Equipment
   - Headlights
   - Halogen bulbs
   - Wiper motors
   - Dashboard instruments
   - Other panel instruments

5. Electrical parts
   - Starter motors
   - Spark plugs
   - Electric ignition systems (EIS)
   - Flywheel magnetos
   - Other equipment

6. Others
   - Sheet metal parts
   - Body and chassis
   - Fan belts
   - Pressure die castings
   - Hydraulic pneumatic instruments

Source: Aranca Research
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 (FY13).

**Number of players: organised vs. unorganised**

<table>
<thead>
<tr>
<th></th>
<th>Organised</th>
<th>Unorganised</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>650+</td>
<td>5,800</td>
</tr>
</tbody>
</table>

**Turnover breakup: organised vs. unorganised (FY13)**

- Organised: 85%
- Unorganised: 15%

**Source:** ACMA, Aranca Research

Note: Organised players refer to ACMA members in FY13 whereas unorganised players are of FY10.
WITHIN THE ORGANISED SECTOR, LARGE PLAYERS PLAY A KEY ROLE

- Large firms play a dominant role in the organised sector; of the total production in the sector in FY10, large Indian firms accounted for a major share (at 43 per cent); MNCs formed 15 per cent.

- High-value precision engineering products are primarily produced by the organised sector.

- From a sales perspective, about 30 per cent of firms have revenues higher than USD25 million (FY10).

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

- > USD100mn: 46
- Between USD50 and USD100mn: 51
- Between USD25 and USD50mn: 82
- Between USD5 and USD25mn: 179
- < USD 1mn: 245

Production breakup in the organised sector (FY10)

- Large Indian Players: 43%
- MNCs: 42%
- Others: 15%

Source: ACMA, Aranca Research
‘Engine parts’ account 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 healthy 15 per cent

Source: ACMA, Aranca Research

Production volumes by product range (FY13)
Domestic market share by segment (FY12)

- Two Wheelers: 77.3%
- Passenger Vehicles: 15.1%
- Commercial Vehicles: 4.7%
- Three Wheelers: 3.0%

Production volumes by market range (FY11)

- OEM: 60%
- Replacement: 25%
- Exports: 15%

Source: ACMA, Aranca Research
Revenues have risen from USD26.5 billion in FY08 to USD40.6 billion in FY13 – a CAGR of 8.9 per cent.

Source: ACMA, Aranca Research

* Turnover data covers the entire supply from the auto components industry to on-road and off-road vehicle manufacturers, and the aftermarket in India and overseas from both ACMA members as well as non-member firms (including component suppliers captive to the OEMs, unorganised and small players)

Note: CAGR – Compound Annual Growth Rate
Investments in the auto component sector increased at a CAGR of 28.4 per cent to USD2.3 billion in FY11 from USD0.66 billion in FY06.

Investments in the sector slowed in FY12, but remained high.

* Source: ACMA, Aranca Research
India’s exports of auto components increased at a CAGR of 19.6 per cent to USD9.3 billion during FY08-13.

Europe accounts for the largest share of Indian auto components exports (35.0 per cent) followed by North America (26.0 per cent) and Asia (25.0 per cent).
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 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 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

Source: Aranca Research
Note: OEM means Original Equipment Manufacturer
GROWTH DRIVERS OF THE INDIAN AUTO COMPONENTS MARKET

- **Demand-side drivers**
  - Robust growth in domestic automotive industry

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

- **Policy support**
  - Market liberalisation
  - Establishing special auto parks and virtual SEZs for auto components
  - Lower excise duty on specific parts of hybrid vehicles

- **Growth drivers**

**MARCH 2014**
Favourable government policies

- Launch of the Automotive Mission Plan, which allows FDI and tax holidays, has been favourable for the industry.
- Union Budget for FY14 extends the concessional excise duty of 6 per cent up to 31 March 2015 for battery manufacturers supplying to producers of electrically operated vehicles.

India Vehicle Loan Outstanding* (USD billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13.5</td>
<td>13.5</td>
<td>17.4</td>
<td>19.8</td>
</tr>
</tbody>
</table>

CAGR:13.6%

Vehicle production in India (thousand units)

<table>
<thead>
<tr>
<th></th>
<th>Passenger Vehicles</th>
<th>Commercial Vehicles</th>
<th>2&amp;3 Wheelers</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY13</td>
<td>3,234</td>
<td>832</td>
<td>16,561</td>
</tr>
<tr>
<td>FY20(E)</td>
<td>6,700</td>
<td>1,800</td>
<td>28,400</td>
</tr>
</tbody>
</table>

Capacity addition by 2015 (thousand units)

<table>
<thead>
<tr>
<th></th>
<th>FY13</th>
<th>FY20(E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maruti Suzuki</td>
<td>500</td>
<td>400</td>
</tr>
<tr>
<td>Nissan</td>
<td>350</td>
<td></td>
</tr>
<tr>
<td>General Motors</td>
<td>240</td>
<td>165</td>
</tr>
<tr>
<td>Ford</td>
<td>120</td>
<td>100</td>
</tr>
<tr>
<td>Peugeot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honda</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toyota</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M&amp;M</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India, Aranca Research
Note: * Loan outstanding at the end of financial year

Source: Media Publication

For updated information, please visit www.ibef.org
## AUTO COMPONENTS

### FAVOURABLE POLICY MEASURES AIDING GROWTH

<table>
<thead>
<tr>
<th>Policy/Plan</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Policy 2002</td>
<td>• Automatic approval for 100 per cent foreign equity investment in auto component manufacturing facilities&lt;br&gt;• Manufacturing and imports in this sector exempt from licensing and approvals</td>
</tr>
<tr>
<td>Automotive Mission Plan 2006–16</td>
<td>• Setting up of a technology modernisation fund focusing on small and medium enterprises&lt;br&gt;• Establishment of automotive training institutes and auto design centres, special auto parks and auto component virtual SEZs</td>
</tr>
<tr>
<td>NATRiPs</td>
<td>• Set up at a total cost of USD388.5 million to enable the industry to adopt and implement global performance standards&lt;br&gt;• Focus on providing low-cost manufacturing and product development solutions</td>
</tr>
<tr>
<td>Dept. of Heavy Industries &amp; Public Enterprises</td>
<td>• 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&lt;br&gt;• Provided export benefits to intermediate suppliers of auto components against the Duty Free Replenishment Certificate (DFRC)</td>
</tr>
<tr>
<td>Union Budget 2013–14</td>
<td>• Concessional excise duty of 6 per cent has been extended up to 31 March 2015 for manufacturers of batteries supplying to producers of electrically operated vehicles&lt;br&gt;• Exemption from basic customs duty on lithium-ion automotive batteries for manufacture of lithium-ion battery packs for supply to manufacturers of hybrid and electric vehicles</td>
</tr>
</tbody>
</table>

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

### EXPORTS DRIVEN BY INDIA’S COMPETITIVE ADVANTAGE OVER PEERS

<table>
<thead>
<tr>
<th>Region</th>
<th>Design and engineering skills</th>
<th>Manufacturing skills</th>
<th>Manpower costs</th>
<th>Supplier base</th>
<th>Raw materials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>East Asia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Central &amp; Eastern Europe</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovakia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Latin America</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: ACMA, Aranca Research

Less competitive than India | In competition with India

MARCH 2014

For updated information, please visit [www.ibef.org](http://www.ibef.org)
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.
- The company is also planning to invest USD300 million for a new engine plant and metal pressing shop in India.

- Ford is investing USD72 million to expand its power-train facility in Chennai to further support its sales and export growth plans in India.
- 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 with an investment of USD115 million.
- The company has an export base for certain key engine components in India.

- Volkswagen plans to increase sourcing from India to 70 per cent of its total global sourcing.
- Plans to build engine assembly plant in India by 2015 and additional investment of USD84* million on component manufacturing.

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

**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.
- 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**

<table>
<thead>
<tr>
<th>Awards</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Productive Maintenance (TPM) Award</td>
<td>15</td>
</tr>
<tr>
<td>Deming Award</td>
<td>12</td>
</tr>
<tr>
<td>Japan Institute of Plant Maintenance (JIPM) Award</td>
<td>3</td>
</tr>
<tr>
<td>Japan Quality Medal</td>
<td>2</td>
</tr>
<tr>
<td>Shingo Silver Medallion</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: ACMA, Aranca Research

---

For updated information, please visit [www.ibef.org](http://www.ibef.org)
### AUTO COMPONENTS

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

<table>
<thead>
<tr>
<th>Location</th>
<th>Business description</th>
</tr>
</thead>
</table>
| 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                                                                                                                                                  |
| 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 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                                                                                                                                 |
| Silchar Centre, Assam                  | • Research, design, development and testing of vehicles  
  • Centre of excellence for photometry, electromagnetic compatibility (EMC) and test tracks                                                                                                                                 |
Forging
Iron Casting
Aluminium Casting
Machining & Sub-Assembly
Assembly & Focused Products
Developed Products


Organic growth and integration
Acquisition in India/overseas
Capacity expansion
Joint ventures and technical partnerships
FY13 Turnover of USD422.1 million
FY06 Turnover of USD185.2 million

MARCH 2014
For updated information, please visit www.ibef.org
AUTO COMPONENTS

BHARAT FORGE: INDIA'S LARGEST AUTO COMPONENTS EXPORTER

Transmission parts
Hubs
Front Axle Beams
Crank Shaft
Closed Die Forging
Open Die Forging

- Organic Growth & Integration
- Entry into new markets like US, Greece
- ISO Accreditations
- Acquisitions in various countries
- Joint ventures and technical partnerships

FY05 Turnover of USD291.5 million
FY13 Turnover of USD1,049.9 million

Turnover of USD291.5 million


MARCH 2014

For updated information, please visit www.ibef.org
**DOMESTIC AND EXPORT MARKETS HOLD HUGE POTENTIAL**

- The domestic market is expected to account for 74 per cent of total sales by 2021 with a total market size of USD85 billion.

- Exports will account for as much as 26 per cent of the market by 2021.

- The total market size is expected to be USD115 billion by 2021, which is more than 2.7 times the current market size of USD42 billion.

*Source: ACMA, Aranca Research*
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.

Other key product types will most likely be Transmission & Steering components, and Electronics & Electrical parts.

Source: ACMA, Aranca Research
Note: 2020E – Estimated value for 2020 by ACMA
# AUTO COMPONENTS

## OPPORTUNITIES IN ENGINEERING PRODUCTS

<table>
<thead>
<tr>
<th>Outlook</th>
</tr>
</thead>
</table>
| **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** | • 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 between 2010–15 |

Note: OEM means Original Equipment Manufacturer
A niche, small entrepreneurial venture can focus on product innovation, leveraging India’s abundance of high-skilled labor at low costs.

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

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

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

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

Note: SME – Small and Medium Enterprise
## AUTO COMPONENTS

### MAJOR PLAYERS BY SEGMENT

<table>
<thead>
<tr>
<th>Segment</th>
<th>Players</th>
</tr>
</thead>
</table>
| Engine & engine parts          | • 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  | • 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                     | • Lucas TVS, Denso, Delco Remy Electricals and Nippon Electricals are key players in this segment |
| Suspension & braking parts     | • 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                      | • Headlights – Lumax, Autolite and Phoenix Lamps  
                                  • Dashboard – Premiere Instruments & Controls  
                                  • Sheet metal parts – Jay Bharat Maruti, Omax Auto and JBM Tools |
## Plant capacity additions

- **Bosch**, which has six companies in India, plans to invest USD458 million on fuel economy and safety technology along with an additional USD7.7 million by end-2013 to nearly triple its Antilock Braking System manufacturing capacity to about 800,000 units at its Chakan plant; moreover, the company has acquired 97 acres of land in Bidadi for the construction of a new manufacturing facility which will commence production of Diesel Fuel Injection System components in 2015.

- **Apollo Tyres** is planning to invest USD551.4 million* over by 2015 to set up two new facilities in East Europe and Brazil and expand its global footprint. Apollo Tyres currently generates approximately 40 per cent of the group’s total revenue from overseas operations.

- India’s **TACO** is setting up five auto component manufacturing plants in Sanand, Gujarat, at an investment of USD62 million. These five new factories are part of the vendor park being developed at the Tata Nano plant site.

- **Hyundai India** is setting up a plant in Tamil Nadu with an investment of USD333 million to manufacture diesel engines and auto components.

- **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.

### Source:
Respective Company Websites, News Articles, Aranca Research

### Notes:
TACO - Tata AutoComp Systems Ltd,

(* Figure converted from EUR to USD at EUR/USD = 1.4)
## AUTO COMPONENTS

### KEY PRIVATE EQUITY DEALS

<table>
<thead>
<tr>
<th>Company</th>
<th>Investor</th>
<th>Deal date</th>
<th>Deal value (USD million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ssangyong Motor Co Ltd</td>
<td>Mahindra &amp; Mahindra Ltd</td>
<td>8th February 2011</td>
<td>464.0</td>
</tr>
<tr>
<td>Peguform GmbH</td>
<td>Motherson Sumi Systems Ltd</td>
<td>23rd November 2011</td>
<td>200.8</td>
</tr>
<tr>
<td>Endurance Technologies</td>
<td>Actis PE</td>
<td>24th December 2011</td>
<td>71.0</td>
</tr>
<tr>
<td>Sansera Engineering Pvt Ltd</td>
<td>Citi Venture Capital Intl</td>
<td>9th July 2013</td>
<td>56.0</td>
</tr>
<tr>
<td>Bombay-BCL Springs Division</td>
<td>NHK Automotive Components Pvt</td>
<td>30th November 2011</td>
<td>39.1</td>
</tr>
<tr>
<td>Minda Corporation</td>
<td>Kotak PE</td>
<td>10th February 2012</td>
<td>25.0</td>
</tr>
<tr>
<td>Nederlandse Radiateuren</td>
<td>Banco Products(India)Ltd</td>
<td>23rd February 2010</td>
<td>24.1</td>
</tr>
<tr>
<td>RSB Group</td>
<td>IL&amp;FS Investment Managers, Ltd</td>
<td>17th July 2007</td>
<td>21.2</td>
</tr>
<tr>
<td>Uniparts India Ltd</td>
<td>Pinebridge Capital Partners LLC</td>
<td>12th Feb 2008</td>
<td>20.0</td>
</tr>
<tr>
<td>Kirloskar Oil Engines Ltd-BBD</td>
<td>Pierburg India Pvt Ltd</td>
<td>20th May 2011</td>
<td>19.2</td>
</tr>
<tr>
<td>Avtec Ltd</td>
<td>Actis Capital LLP</td>
<td>3rd Mar 2005</td>
<td>17.8</td>
</tr>
<tr>
<td>RSB Group</td>
<td>Evolvence Capital</td>
<td>17th Jul 2007</td>
<td>17.0</td>
</tr>
<tr>
<td>Craftsman Automation Pvt Ltd</td>
<td>Standard Chartered Private Ltd</td>
<td>9th August 2012</td>
<td>15.4</td>
</tr>
<tr>
<td>Amtek Auto Ltd</td>
<td>Warburg Pincus LLC</td>
<td>23rd Nov 2010</td>
<td>14.3</td>
</tr>
</tbody>
</table>

Source: Thomson Reuters, Aranca Research

For updated information, please visit [www.ibef.org](http://www.ibef.org)
**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
**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.
## Exchange Rates

### Exchange rates (Fiscal year)

<table>
<thead>
<tr>
<th>Year</th>
<th>INR equivalent of one USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>44.95</td>
</tr>
<tr>
<td>2005-06</td>
<td>44.28</td>
</tr>
<tr>
<td>2006-07</td>
<td>45.28</td>
</tr>
<tr>
<td>2007-08</td>
<td>40.24</td>
</tr>
<tr>
<td>2008-09</td>
<td>45.91</td>
</tr>
<tr>
<td>2009-10</td>
<td>47.41</td>
</tr>
<tr>
<td>2010-11</td>
<td>45.57</td>
</tr>
<tr>
<td>2011-12</td>
<td>47.94</td>
</tr>
<tr>
<td>2012-13</td>
<td>54.31</td>
</tr>
</tbody>
</table>

### Exchange rates (Calendar year)

<table>
<thead>
<tr>
<th>Year</th>
<th>INR equivalent of one USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>45.55</td>
</tr>
<tr>
<td>2006</td>
<td>44.34</td>
</tr>
<tr>
<td>2007</td>
<td>39.45</td>
</tr>
<tr>
<td>2008</td>
<td>49.21</td>
</tr>
<tr>
<td>2009</td>
<td>46.76</td>
</tr>
<tr>
<td>2010</td>
<td>45.32</td>
</tr>
<tr>
<td>2011</td>
<td>45.64</td>
</tr>
<tr>
<td>2012</td>
<td>54.69</td>
</tr>
<tr>
<td>2013</td>
<td>54.45</td>
</tr>
</tbody>
</table>

Average for the year
India Brand Equity Foundation ("IBEF") engaged Aranca to prepare this presentation and the same has been prepared by Aranca in consultation with IBEF.

All rights reserved. All copyright in this presentation and related works is solely and exclusively owned by IBEF. The same may not be reproduced, wholly or in part in any material form (including photocopying or storing it in any medium by electronic means and whether or not transiently or incidentally to some other use of this presentation), modified or in any manner communicated to any third party except with the written approval of IBEF.

This presentation is for information purposes only. While due care has been taken during the compilation of this presentation to ensure that the information is accurate to the best of Aranca and IBEF’s knowledge and belief, the content is not to be construed in any manner whatsoever as a substitute for professional advice.

Aranca and IBEF neither recommend nor endorse any specific products or services that may have been mentioned in this presentation and nor do they assume any liability or responsibility for the outcome of decisions taken as a result of any reliance placed on this presentation.

Neither Aranca nor IBEF shall be liable for any direct or indirect damages that may arise due to any act or omission on the part of the user due to any reliance placed or guidance taken from any portion of this presentation.