



AUTO COMPONENTS

September 2009

The focus of this presentation is to discuss...

- ❖ Profile of Indian auto component industry
- ❖ Growth potential of Indian auto component industry
- ❖ India as a manufacturing hub

India — the global manufacturing hub

Before 1983	1983–1993	1993–2009	Evolution of India as a global manufacturing hub
<p>Closed market</p> <ul style="list-style-type: none"> • Growth of market limited by supply • Outdated models <p>Players</p> <ul style="list-style-type: none"> • Hindustan Motors • Premier • Telco • Ashok Leyland • Mahindra & Mahindra 	<ul style="list-style-type: none"> • Japanisation — GoI-Suzuki joint venture (JV) to form Maruti Udyog • JV with companies in commercial vehicles and components <p>Players</p> <ul style="list-style-type: none"> • Maruti Udyog • Hindustan Motors • Premier • Telco • Ashok Leyland 	<ul style="list-style-type: none"> • Delicensing of sector in 1993 • Global major original equipment manufacturers (OEM) start assembly in India (Toyota, GM, Ford, Honda, Hyundai) • Imports allowed from April 2001; alignment of duty on components and parts to Association of Southeast Asian Nations (ASEAN)* levels • Implementation of value-added tax (VAT) • Emerging small and medium enterprises (SMEs) in India • More global players set up manufacturing bases in India, such as Volkswagen, BMW, Nissan, etc. 	

High levels of competence in design and processes, high productivity and low costs are the forte of Indian auto-makers.

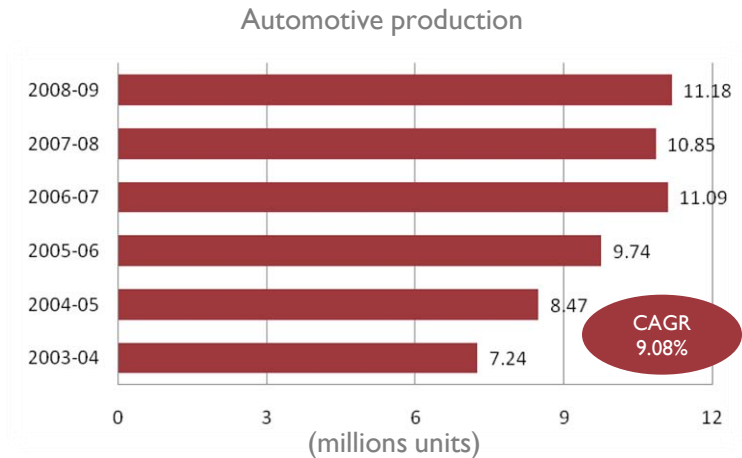
* ASEAN member countries include Malaysia, Indonesia, the Philippines, Singapore, Thailand, Brunei Darussalam, Vietnam, Lao PDR, Myanmar and Cambodia

Indian automobile industry stands at 11 million vehicles at present

The Indian auto industry has the potential to emerge as one of the largest in the world. Presently, India is :

- The largest two-wheeler manufacturer in the world.
- The largest three-wheeler market in the world.
- The second-largest two-wheeler market in the world.
- The fourth-largest commercial vehicle market in the world.

* Compound Annual Growth Rate (CAGR)



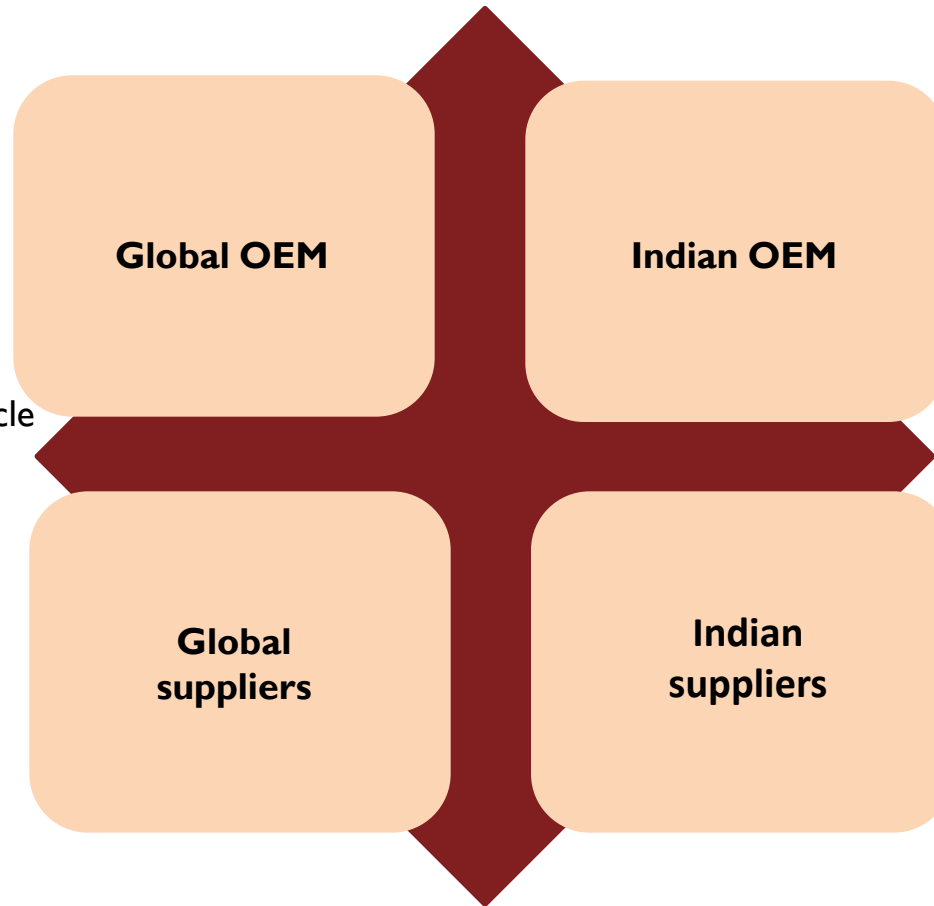
Share of automotive segments (2008-09)

Segment	Share in total	5-year CAGR*
Two-wheelers	75.4%	8.8 %
Passenger vehicles	16.4%	16.7%
Three-wheelers	4.5%	10.4%
Commercial vehicles	3.7%	12.6%

Source: Society of Indian Automobile Manufacturers (SIAM)
IMaCS analysis

All large global players are present in India

- GM
- Toyota
- Ford
- Hyundai
- Maruti Suzuki
- Honda
- Skoda
- Volvo
- Mercedes Benz
- BMW
- Volkswagen
- Suzuki Motorcycle



- Tata Motors
- Mahindra & Mahindra
- Bajaj Auto
- TVS Motors
- Hero Honda
- Force Motors
- Ashok Leyland
- Eicher
- Swaraj Mazda

- Delphi
- Visteon
- Bosch
- Denso
- Valeo
- Thyssen Krupp

- Bharat Forge
- Sundram Fasteners
- Rane Group
- Shriram Pistons
- RICO Auto
- Sono Koyo Steering
- Exide

The OEM as well as the component industry is highly competitive

- The Indian auto industry is highly competitive with a number of global and Indian auto-companies present.
- The supplier industry is equally competitive with a mix of global and Indian players.
- Two-thirds of auto component production is consumed directly by OEMs.
- The major advantage of the Indian automotive industry is an educated and skilled, English-speaking workforce.

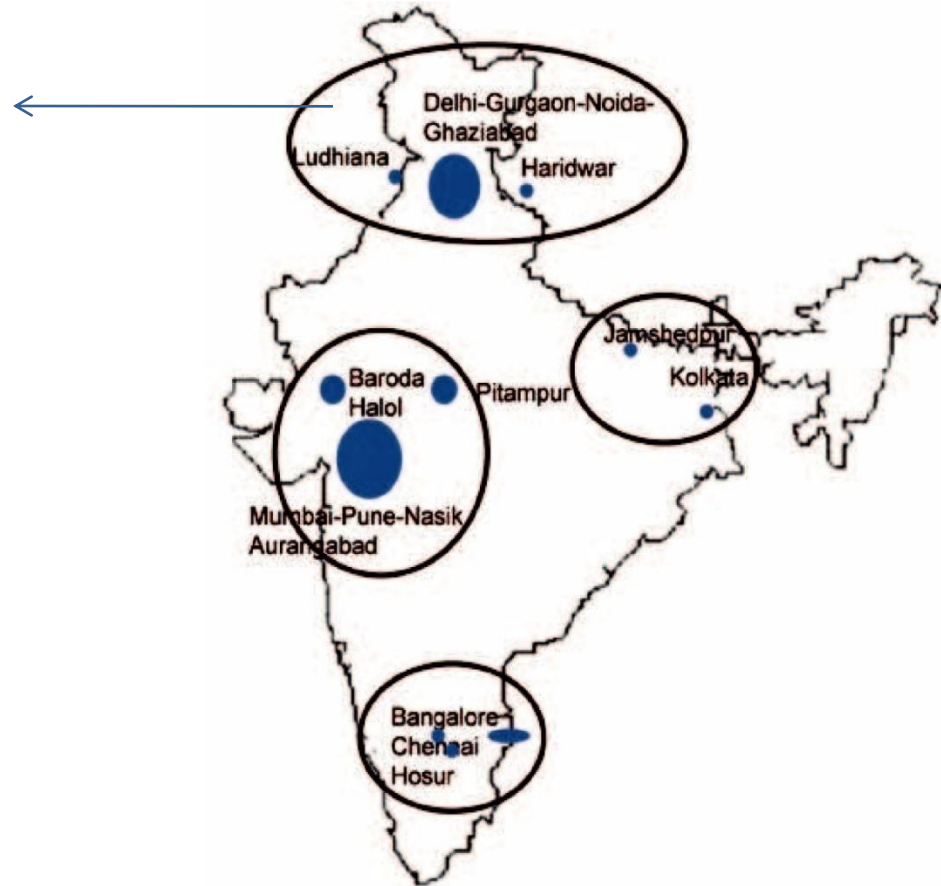
Indian auto industry has evolved around three major clusters ... (1/5)

- Major automotive clusters: Mumbai-Pune-Nashik-Aurangabad (west); Chennai-Bangalore-Hosur (south); and Delhi-Gurgaon-Faridabad (north).
- Export-oriented companies have formed base in the west/south regions, due to proximity to ports.
- Uttarakhand is fast emerging as an auto hub with leading companies deciding to set up units in the state to make use of the benefits of the state's tax-holiday scheme.
- Tata Motors, along with Bajaj Auto and Mahindra & Mahindra, are together investing about US\$ 640 million in Uttarakhand.
- With the upcoming plant of Tata Nano in Gujarat, Sanand is also likely to develop as another node in the western cluster.

Indian auto industry has evolved around three major clusters ... (2/5)

Major cluster: North/Central

- Hero Honda
 - Honda SIEL
 - Honda Motorcycle & Scooter India
 - Maruti Suzuki
 - Tata Motors
 - Bajaj Auto
-
- Delphi Auto
 - JBM
 - Sona Koyo
 - Asahi India
 - Denso India
 - Lumax
 - Johnson Matthey

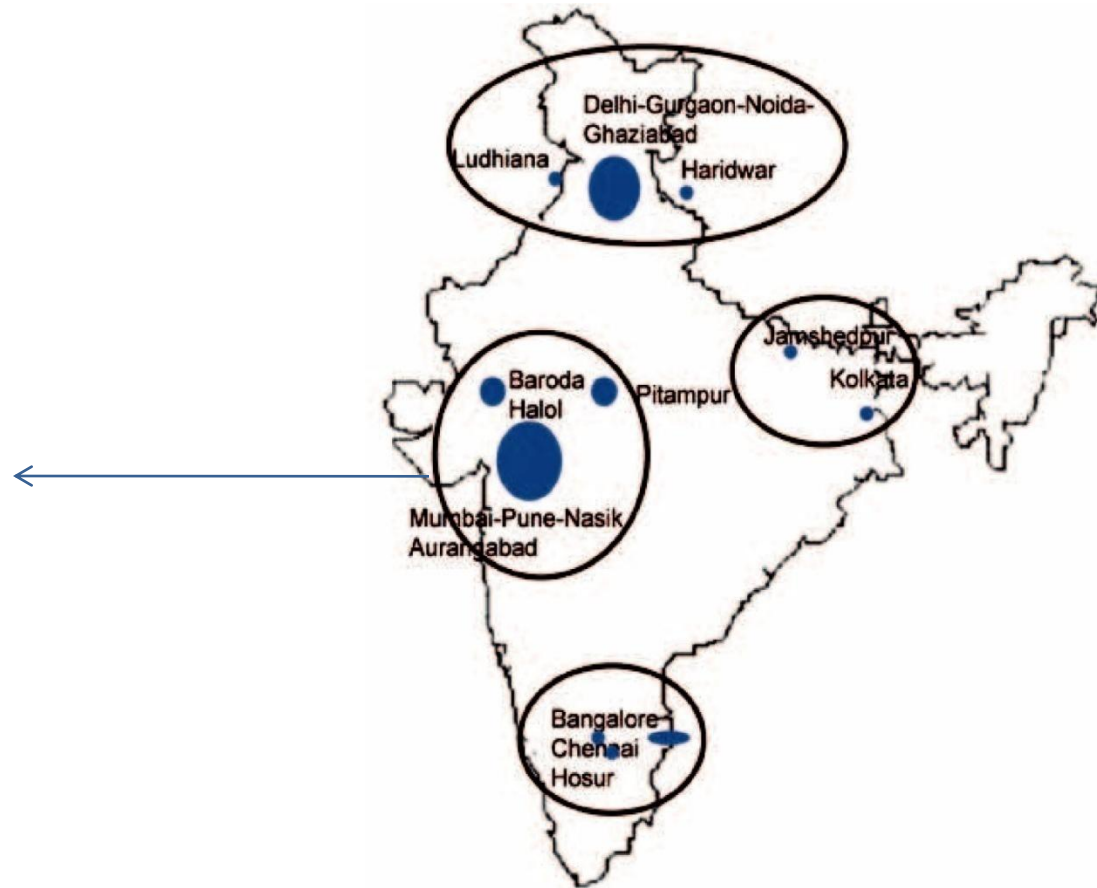


Indian auto industry has evolved around three major clusters ... (3/5)

Major cluster: West

- Daimler
- GM
- Skoda
- Bajaj Auto
- Mahindra & Mahindra
- Tata Motors
- Volkswagen

- Bharat Forge
- DGP Hindoday
- Kirloskar Brothers
- TACO Group
- SKF Bearings
- Supreme Industries
- Bright Brothers
- Bosch Chassis
- Tata Johnson
- NRB Bearings

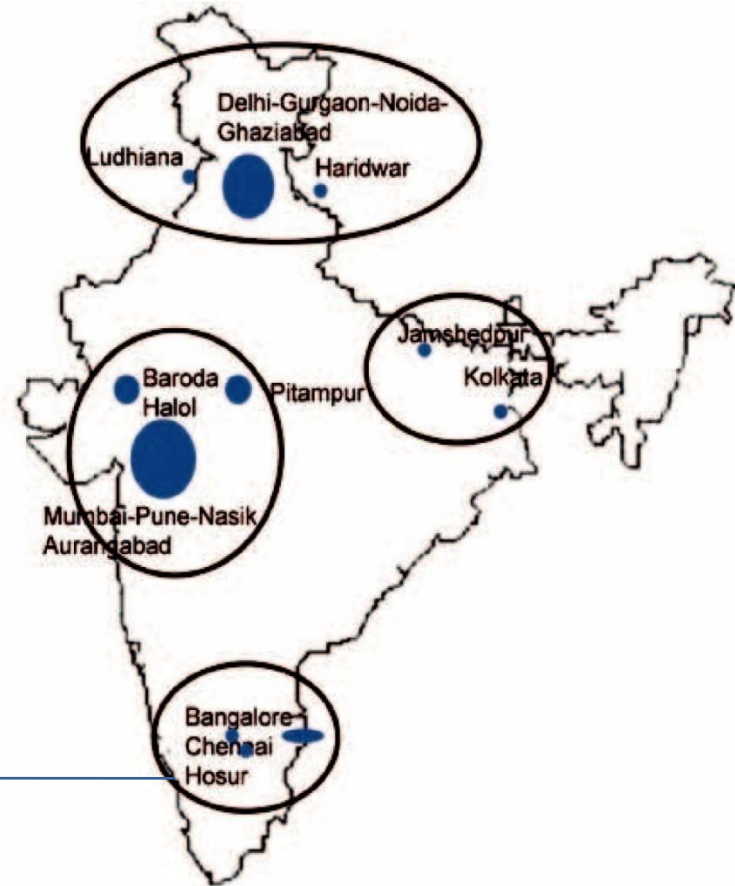


Indian auto industry has evolved around three major clusters ... (4/5)

Major cluster: South

- Ashok Leyland
- Ford
- TVS Motors
- Hyundai
- Toyota Kirloskar Motor
- Royal Enfield
- Volvo

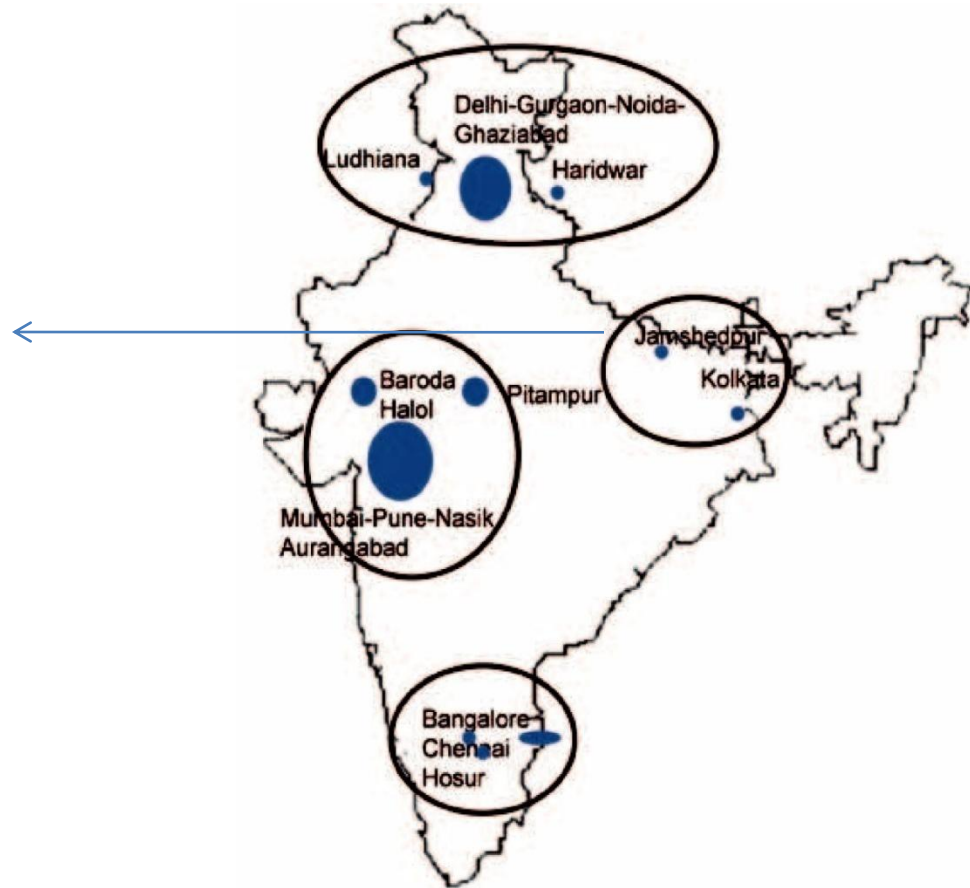
- Brake India
- Fenner
- Rane Group
- Visteon
- Sundaram Fasteners
- Delphi TVS
- India Nippon
- TI Group
- Lucas-TVS
- Ucal Fuel Systems



Indian auto industry has evolved around three major clusters ... (5/5)

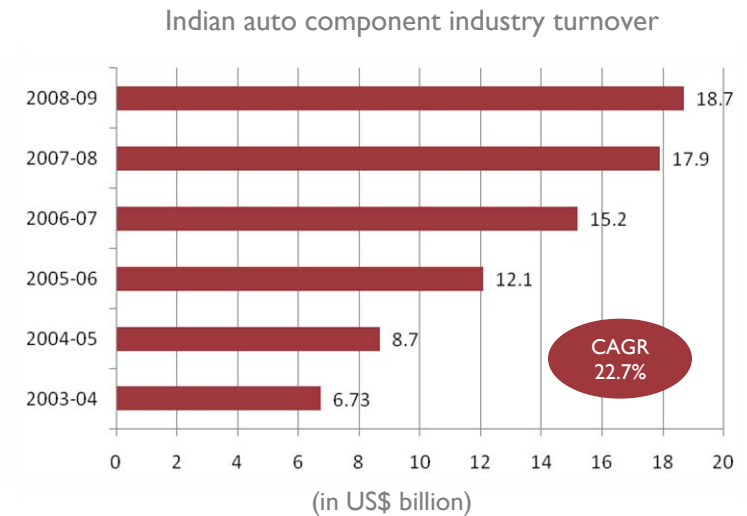
Minor cluster: East

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



Indian auto component industry has grown at a CAGR of over 22% in the last five years

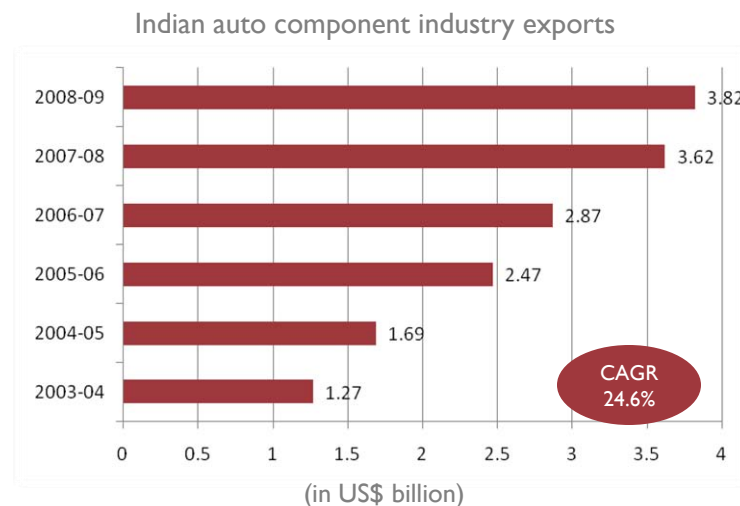
- The Indian auto component industry reached a size of US\$ 19 billion in 2008–09, growing at a CAGR of around 23 per cent over the last five years.
- Though the industry witnessed slower growth in 2008–09 owing to the global slowdown, Indian auto component manufacturers are equipped to address the challenges of a downturn.
- Positive sales trends in the first quarter of the current fiscal year demonstrate the strong fundamentals underlying the industry.



Source: Automotive Component Manufacturers Association (ACMA), IMAcS analysis

Exports of auto components stand at around US\$ 3.8 billion

- Exports by the Indian auto component industry touched US\$ 3.82 billion in 2008–09.
- The growth trend for the year reflected the impact of the global slowdown; however, Indian auto component manufacturers have adopted risk mitigation measures through diversification strategies in terms of tapping new regions and strengthening their position in the Indian after-market.
- Indian auto component manufacturers expect a surge in exports with the coming into effect of the ASEAN free trade agreement (FTA) as India is in a strong position to gain from it.

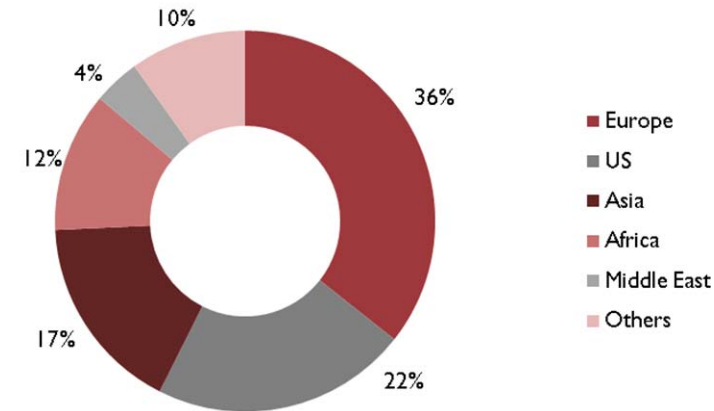


Source: IMaCS analysis

Europe, followed by the US, are the top export markets for India

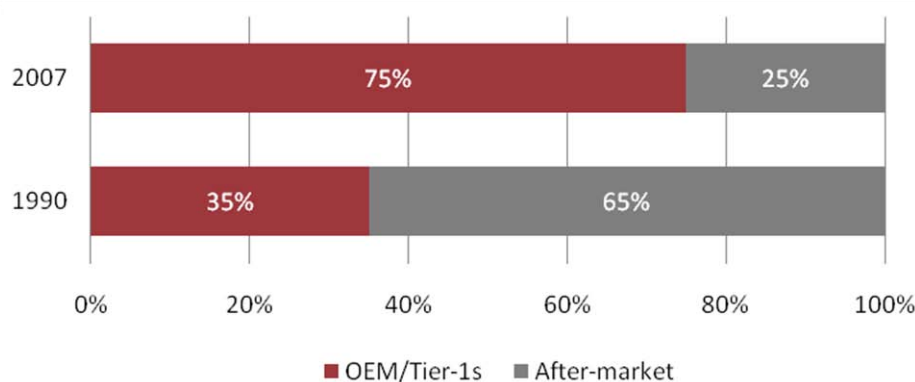
- Europe and the US together account for nearly 58 per cent of total exports from India.
- Asia is gradually becoming a key market for component exports.
- Auto component manufacturers are gradually moving up the value chain with the share of supply to OEMs in total exports increasing and supply to the aftermarket decreasing.

Indian auto component exports by destination (April–December 2008)



Source: ACMA, IMaCS analysis

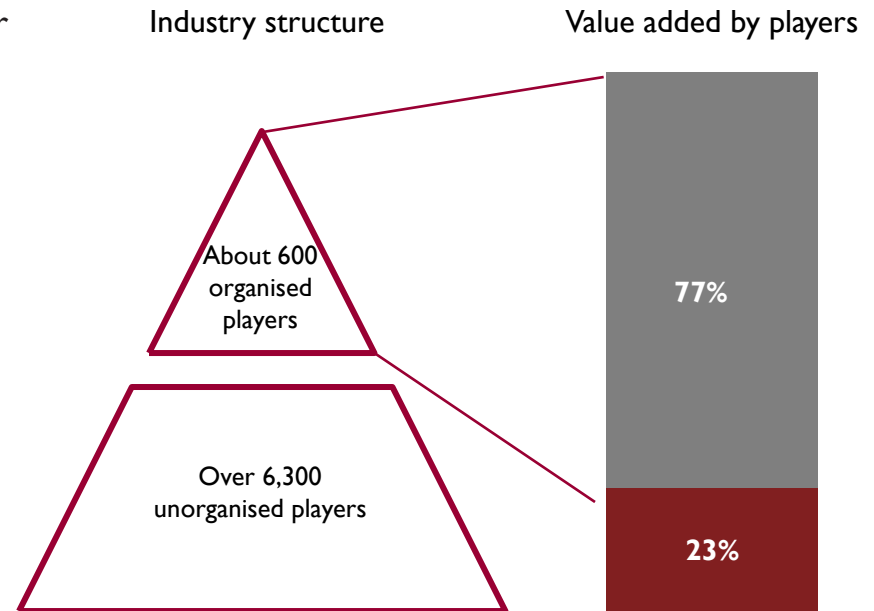
Export by type of client (in %)



Source: ACMA, IMaCS analysis

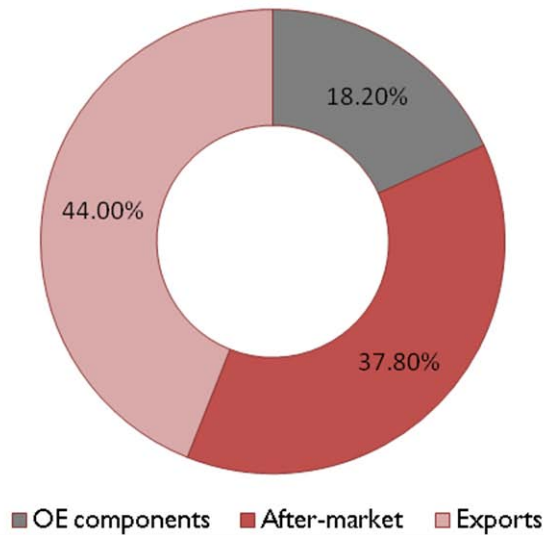
Indian auto component industry is highly fragmented

- About 600 organised players account for 77 per cent of the value added in the sector.
- Unorganised players are mainly replacement market players or tier-3/tier-4 component manufacturers.
- The Automotive Component Manufacturers Association of India (ACMA) represents the auto component industry in India and has around 595 registered members.

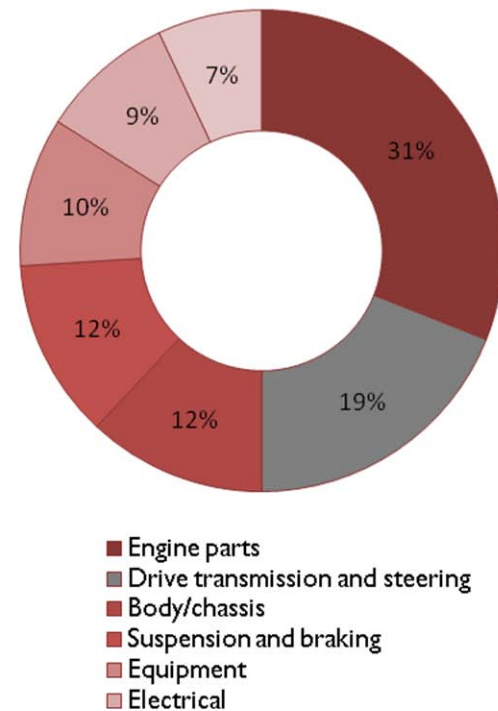


Break up of auto component market

Break up by market type for 2007 – 08 (E)



Break up of components industry by type of components



Source: IMAcS analysis
E = Estimated

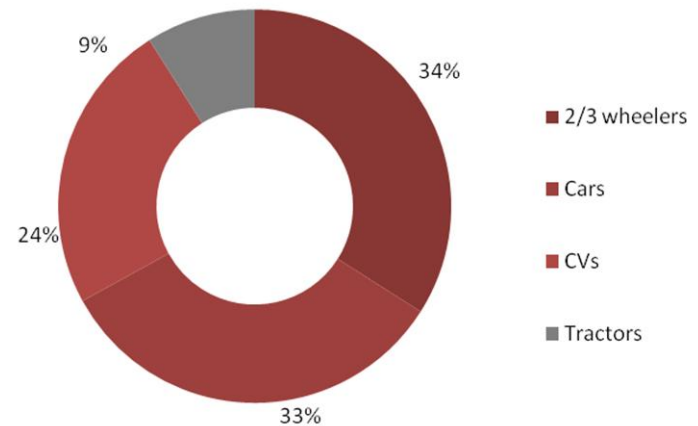
- OEM demand accounts for half of the auto component market in India.

- OEM demand accounts for half of the auto component market in India.

Two-wheeler, three-wheeler and car segments account for a major portion of the component market in India

- Two- and three-wheelers, along with passenger cars, account for two-thirds of the components manufactured.
- However, commercial vehicle (CV) components have shown the fastest growth rate over the last five years. The growth rate of components for various vehicle categories are as follows:
 - Two-wheelers, three-wheelers and cars: Around 15 per cent
 - CVs: Over 25 per cent

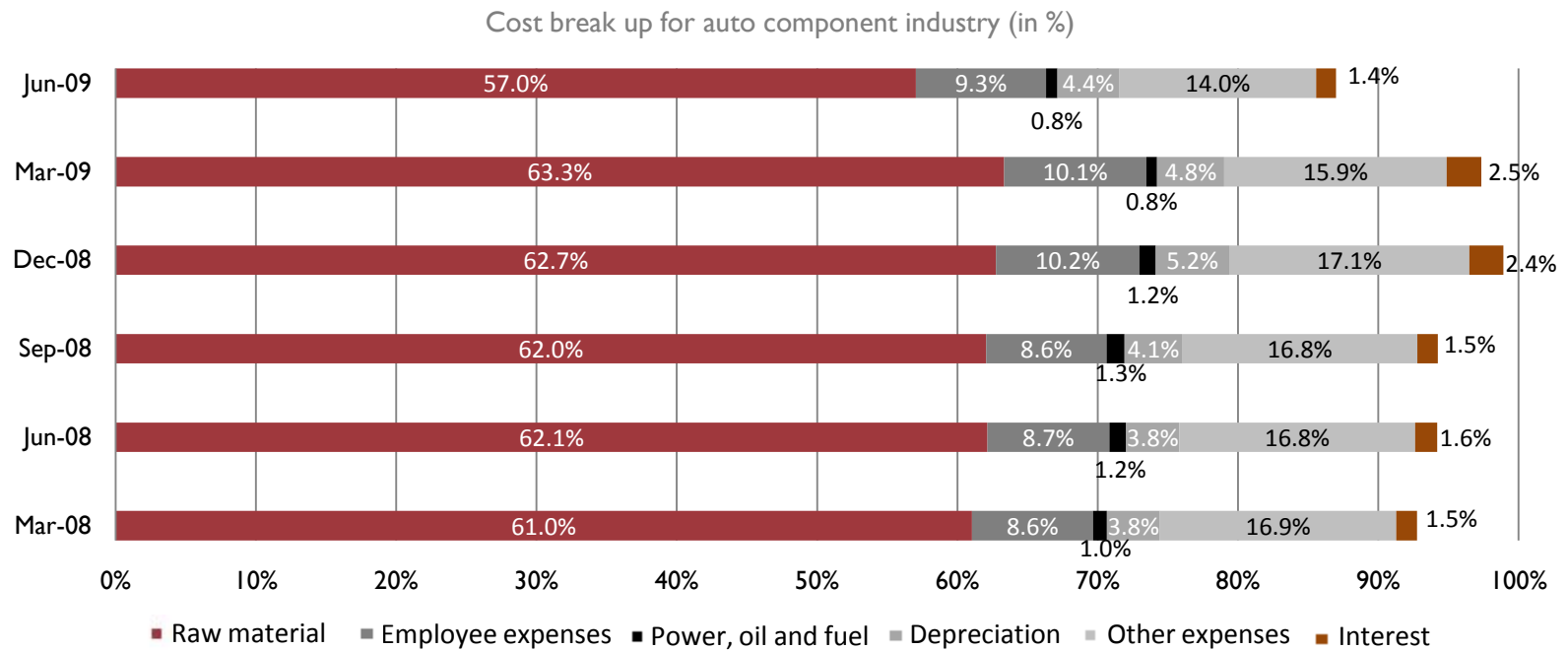
Break up by vehicle segment for 2007–08 (E)



Source: IMaCS analysis
E = Estimated

Industry-wide cost structure

- During the quarter ended June 2009, all costs as a percentage of sales have seen a decline except for power, oil and fuel costs.
- Raw material costs has contributed the maximum to improvement in margins as these costs have come down from 63.3 per cent in March 2008 to 57 per cent in June 2009.



Source: IMaCS analysis

Snapshot of segment performance

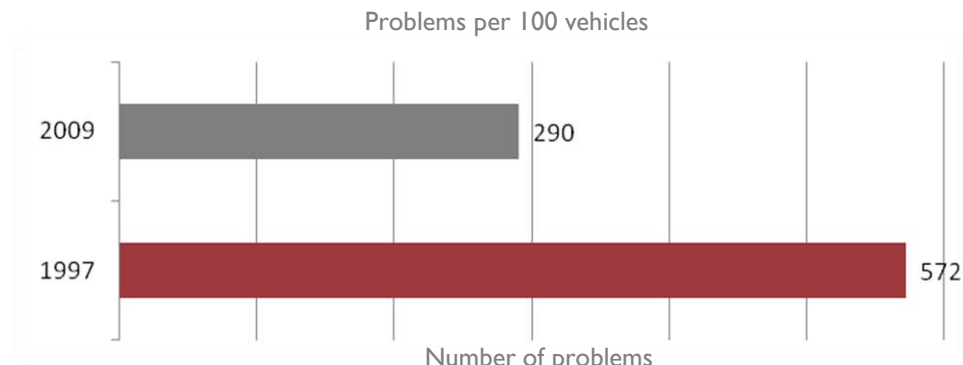
	Transmission and steering	Suspension and braking	Engines	Electrical	Equipment	Others	Industry
Margins							
PBDIT margins	8.93%	10.99%	14.17%	14.52%	6.48%	9.25%	11.19%
PBT margins	1.45%	3.39%	8.70%	10.99%	1.21%	2.04%	5.03%
PAT margins	1.61%	7.04%	9.58%	7.72%	1.22%	1.10%	4.82%
Growth							
Sales growth	-20.80%	1.60%	1.37%	12.18%	8.03%	24.41%	8.49%
PBDIT growth	-14.24%	11.15%	0.67%	46.51%	-17.92%	-2.15%	6.71%
PAT growth	-38.28%	-19.73%	20.63%	53.34%	-72.19%	-37.14%	7.43%
PBT growth	-51.87%	12.92%	-1.00%	70.91%	-65.10%	-62.92%	-1.54%

- Quarterly results for April to June 2009 suggest that the industry has bounced back very quickly in terms of both sales and profit after tax (PAT) growth.
- The suspension and braking segment has out-performed the industry's CAGR in terms of profit before depreciation, interest and taxes (PBDIT) and profit before tax (PBT).
- The average PBT margin for the industry over the last six quarters stands at around 5 per cent.

Growing exports have fuelled quality improvement

- The quality awareness of Indian companies has increased over the last decade driven by the need of the export market and the increasing demand for quality from Indian OEMs.
- 11 Indian auto component manufacturers have got the prestigious Deming Prize.
- Vehicle dependability across the auto industry in India averages 290 problems per 100 vehicles (PP100), which is an improvement over the 2008 figure of 331 PP100.
- Although improvement is evident across most problem categories, the improvement is primarily driven by fewer reported problems with the driving experience and engine categories.

Certification	No. of companies as in 2008-09
Japan Quality Medal Winner	1
JIPM Awards	4
Deming Prize	11 (nine since 2003)
OHSAS 18001	60
ISO 14001	182
QS: 9000	81
TS16949	393
ISO 9000	557



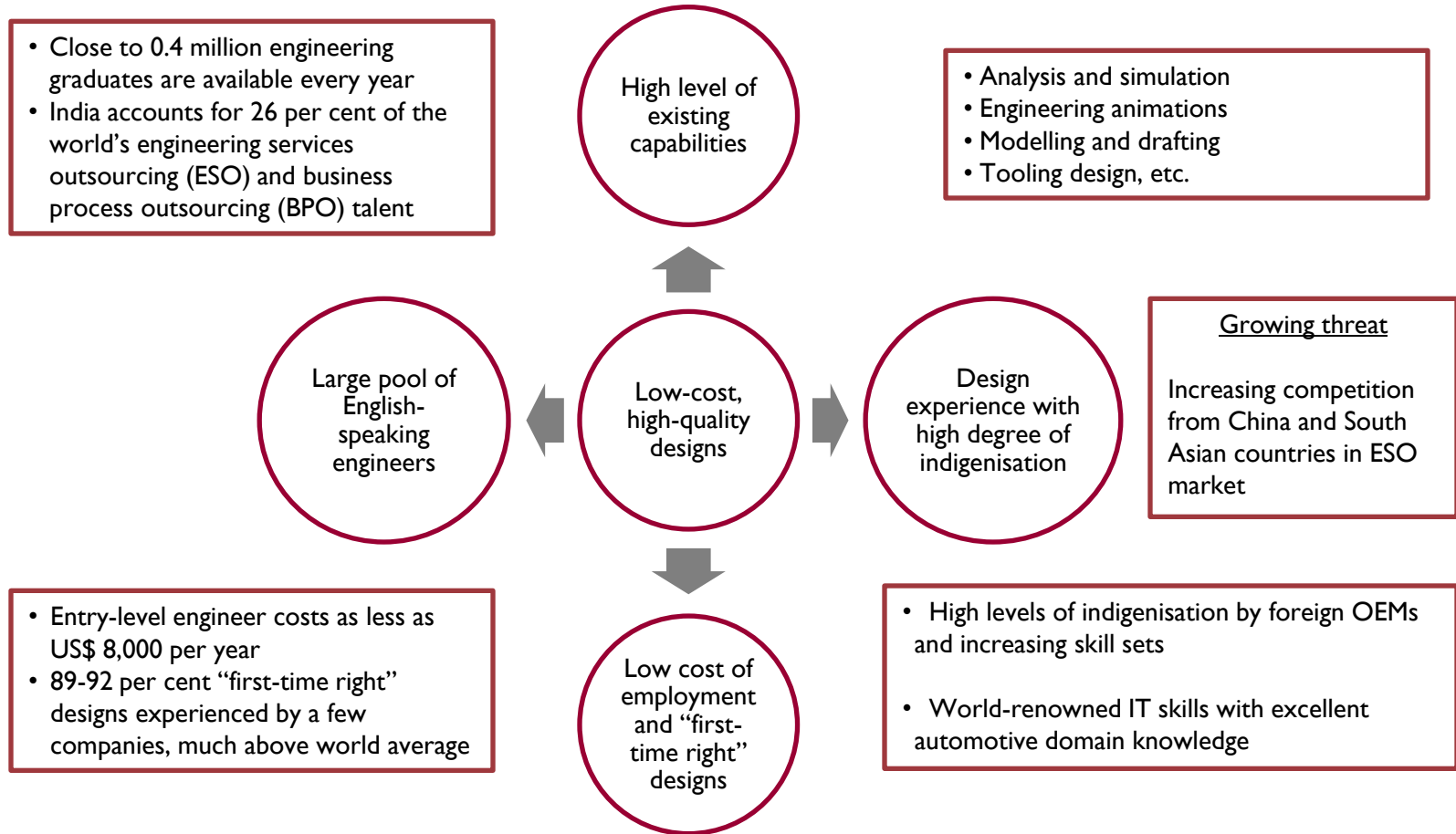
Source: JD Power Survey

Indian auto component companies are going global, mainly through acquisitions and JVs

- The year 2009 has not seen much activity in terms of acquisitions by Indian auto component companies as compared to 2008 and 2007.
- Traditionally, the trend has been to cater to high-margin markets in Europe and the US through acquisitions.
- A growing number of deals are, however, now foreseen in emerging markets to counter the saturation/recession in developed markets.

Indian company	Acquired	Country	Acquisition value
Acquisitions in 2009			
PMP Components	PAL International	Czech	US\$ 25 million
Acquisitions in 2008			
Sona Koyo Steering	ThyssenKrupp Praezisionsschmiede GmbH	Germany	US\$ 146 million
Shakti Auto Component	Arvika Gjuteri AB	Sweden	N/A
Shakti Auto Component	Intermet Europe	Germany	US\$ 130 million
Ruia Group	Metzeler Automotive Profile Systems	UK	N/A
A K Minda Group	Schenk Plastic Solutions	Germany	N/A
Acquisitions in 2007			
Tata Technologies	Incat International	UK	US\$ 95 million
Bharat Forge	Imatra Kilsta AB	Sweden	US\$ 56 million
Amtek Auto	GWK	UK	US\$ 37 million
Amtek Auto	Zelter	Germany	US\$ 36 million
Bharat Forge	Carl Dan Peddinghaus	Germany	US\$ 35 million
EL Forge	Shakespeare Forgings	UK	US\$ 28 million
Ucal Fuel Systems	Amtec Precision	USA	US\$ 28 million

Most auto component manufacturers are capable of carrying out product development activities at low costs

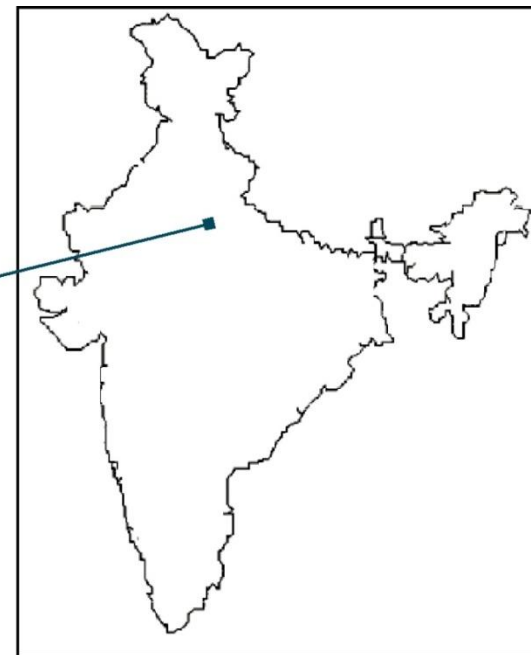


National Automotive Testing and R&D Infrastructure Project (NATRIP) — an initiative to strengthen R&D infrastructure — is approaching completion

- NATRIP, a Government of India (GoI) initiative, has envisaged an investment of Rs 1,718 crore (about US\$ 380 million) in setting up the following facilities. NATRIP is expected to strengthen the automotive R&D infrastructure in India.

Rae Bareilly centre

- Complete homologation services to agri-tractors, off-road vehicles, gensets as per Indian or global standards and a driver training centre.
- Center of excellence for accident data analysis.
- The commissioning schedule for phase-I is July 2010 and August 2010 for phase-II.
- The acquisition of land for setting up the centre is in progress and is under consideration of the Uttar Pradesh government.



NATRIP — northern and eastern region

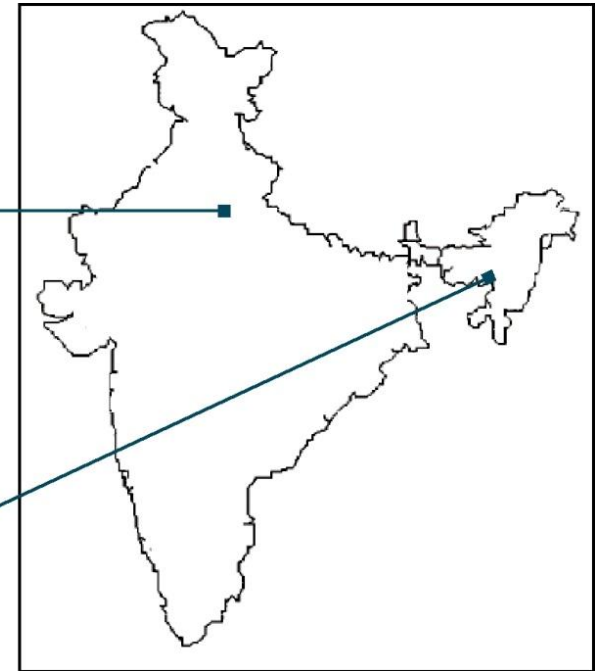
International Centre for Automotive

Technology (iCAT), Manesar

- Complete homologation services to all vehicle categories as per Indian or global standards.
- Center of excellence for component development, noise vibration and harshness (NVH) testing.
- It is scheduled to be commissioned in March 2010.
- Construction of buildings for powertrain lab and fatigue and certification lab; procurement of equipment for two more labs; and acquisition of an additional 42 acres of land is in progress.

Silchar centre

- Hill area driver training centre and inspection & maintenance facilities.
- Center of excellence for driver training.
- Commissioning schedule: 2010 (on schedule); civil works at one site completed; tenders for equipment on track.



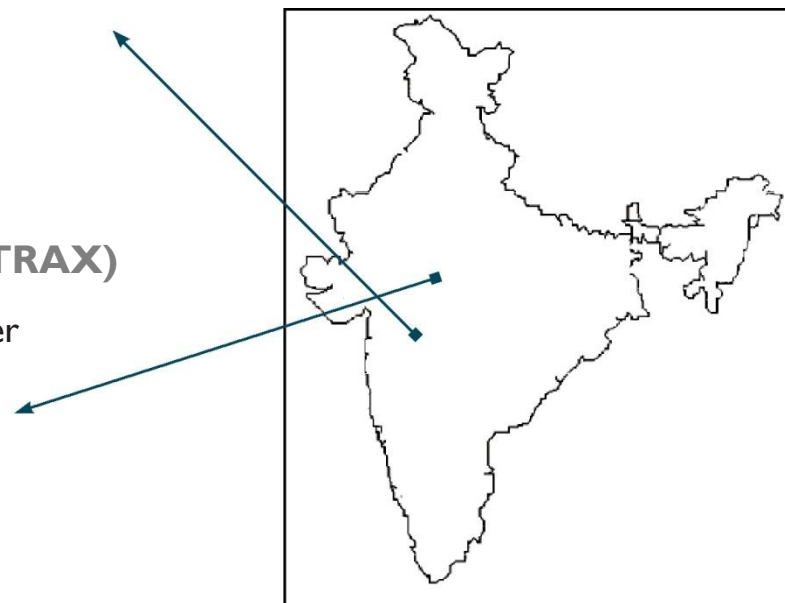
NATRIP — western region

Ahmednagar — Vehicles research & development establishment (VRDE) upgradation

- Research, design, development and testing of vehicles.
- Center of excellence for photometry, electromagnetic compatibility (EMC), test tracks.
- Commissioning schedule: Completed.

Indore – National Automotive Test Tracks (NATRAX)

- Complete testing facilities to all vehicle categories as per Indian or global standards.
- Center of excellence for vehicle dynamics, tyre development.
- Commissioning schedule: December 2010.
- In progress: 4,000 acres of land already acquired; construction of powertrain lab, test tracks and building in advanced stages; shifting of utilities in progress.



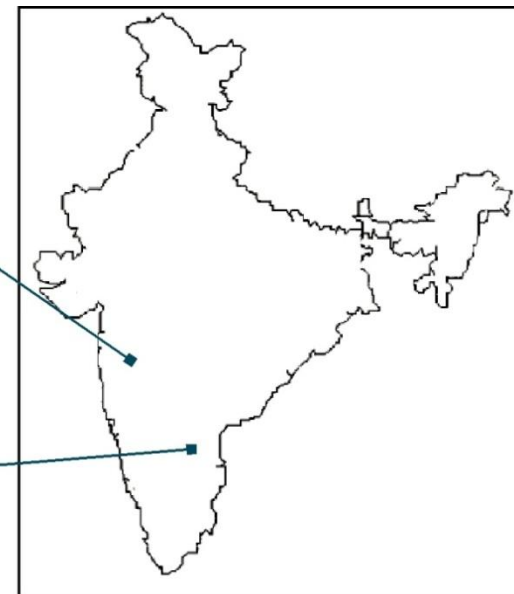
NATRIP — southern region

Pune — ARAI upgradation

- Complete homologation services to all vehicle categories as per Indian or global standards.
- Center of excellence for power train development, materials, fatigue.
- Commissioning schedule: Rescheduled to March 2010.
- In process: Land acquisition nearing completion; civil package tender in final stages; equipment tender finalised.

Chennai centre

- Complete homologation services to all vehicle categories as per Indian or global standards.
- Center of excellence for infotronics, EMC, passive safety.
- Commissioning schedule: Rescheduled for December 2009.
- In progress: Award of most of the work completed by April 2009.

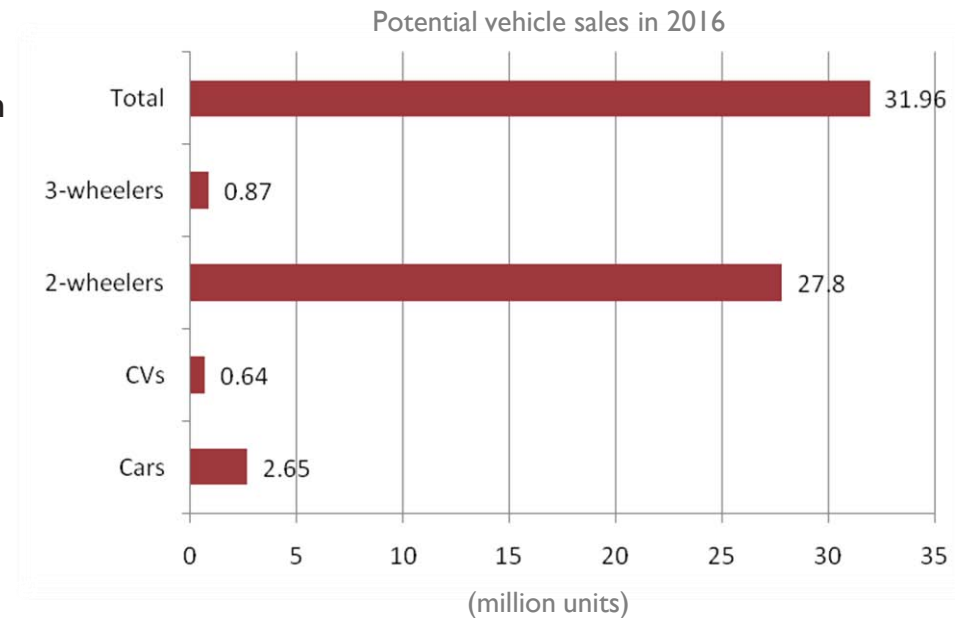


The focus of this presentation is to discuss...

- ❖ Profile of Indian auto component industry
- ❖ **Growth potential of Indian auto component industry**
- ❖ India as a manufacturing hub

Indian auto industry is expected to grow to US\$ 130 billion to US\$ 150 billion by 2016

- The size of the Indian automotive industry is expected to grow at 13 per cent per annum to reach around US\$ 130 billion to US\$ 150 billion by 2016.
- In volume terms, the market is expected to grow to 31.96 million vehicles by 2016.

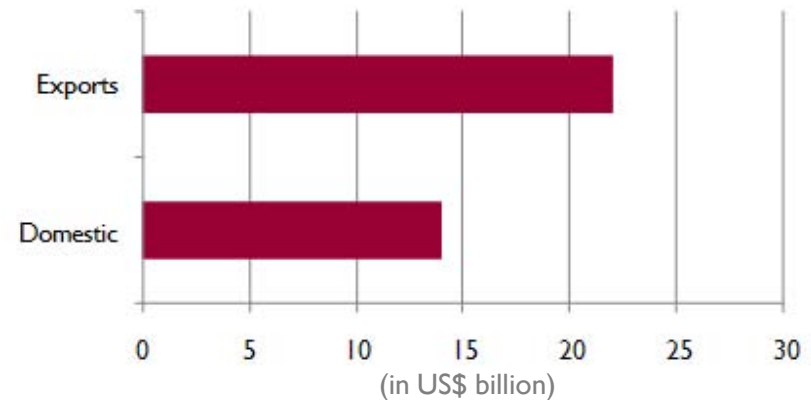


Sources: Automotive Mission Plan (AMP), SIAM, ACMA, IMaCS analysis

Indian auto component industry is expected to grow to US\$ 33 billion to US\$ 40 billion by 2016

- The Indian auto component industry is well positioned to capitalise on the growth in outsourcing to low-cost countries.
- Exports would lead the growth in the component industry, which is expected to be worth US\$ 33 billion to US\$ 40 billion by 2016, from the current size of more than US\$ 18 billion (2008–09).

Projected size of auto component industry in 2016

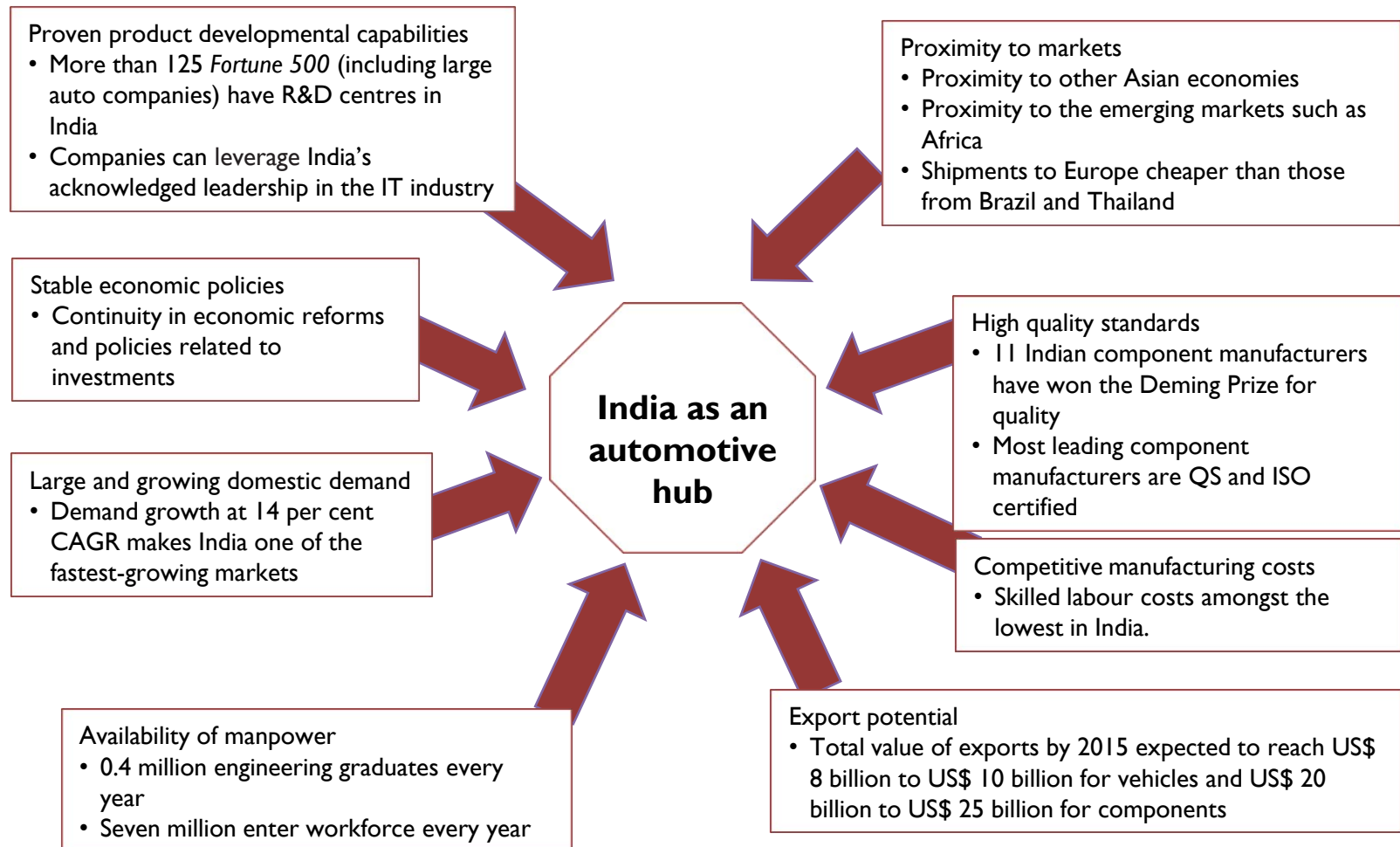


Sources: AMP, SIAM, ACMA, IMaCS analysis

The focus of this presentation is to discuss...

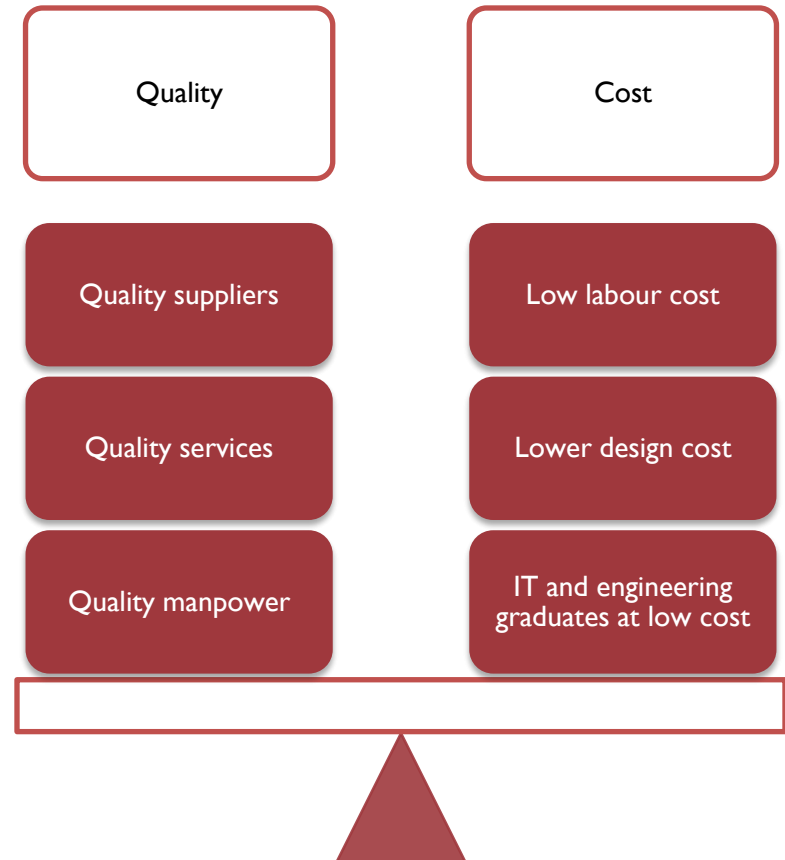
- ❖ Profile of Indian auto component industry
- ❖ Growth potential of Indian auto component industry
- ❖ **India as a manufacturing hub**

Several factors make India a favourite investment destination

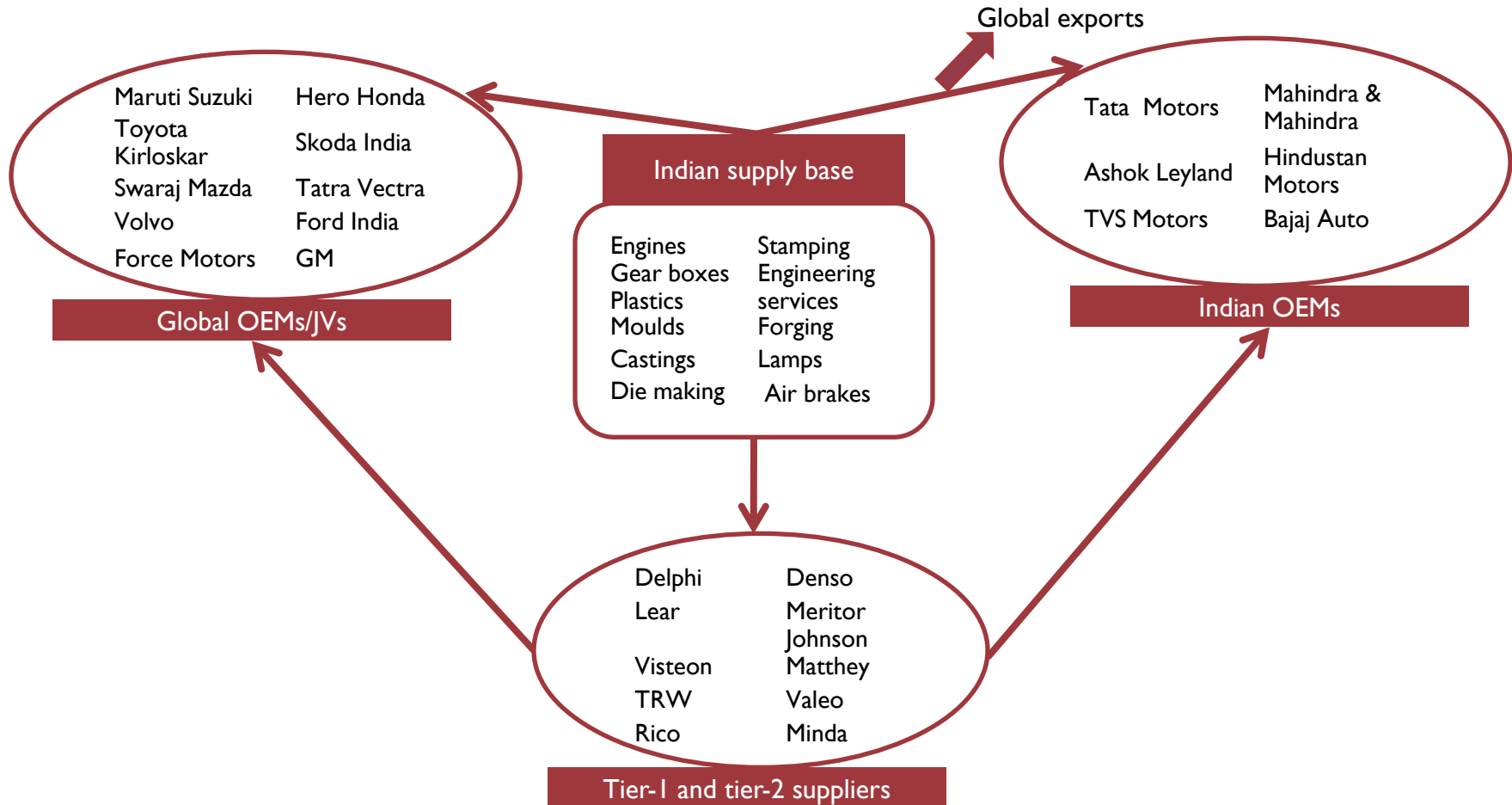


Indian auto component industry offers a balance between quality and costs

- There are nearly 0.4 million engineering graduates available every year in India at globally competitive costs.
- There are close to 500 ISO 9000-certified suppliers.



Many global auto companies have made India a manufacturing base as a robust supply base exists in India



India—a sourcing hub and a manufacturing base for OEMs

Manufacturer	Components	Worth	Comments
Hyundai, Ford, Skoda, Suzuki, Mahindra	Specific models of cars	N/A	Have already picked India as a manufacturing base for particular car model
Toyota, GM, Fiat, Volkswagen, Renault and Daimler	Hub for auto components	N/A	Are in the process of making India a manufacturing hub for auto components
Fiat Group Purchasing	Auto parts	US\$ 1 billion	By 2010 for its European and other operations. About 70 per cent of the outsourced parts will be solely for the Fiat Group's multiple operations in India
Hyundai	Auto parts for global operations		Looking to source a greater percentage of components from Indian suppliers for its global operations
Volvo	Components in the commercial vehicles segment for products manufactured at its Bangalore facility	N/A	Sourcing of auto components through the recently-inked joint venture with Eicher Motors; to be manufactured from the Pithampur plant
Volkswagen AG	Auto components	€ 1 billion	The company is targeting about 70 per cent localisation of its cars produced in India within two years of starting operations
Renault-Nissan	Has firmed up plans to source components and aggregates	€ 300 million over the next two years	First phase to source low-end tech for low-end models, high-end in second phase
Daimler Chrysler	Auto components and IT services	US\$ 125 million	Growing at 20 per cent CAGR

India—a sourcing hub also for major auto component manufacturers

Manufacturer	Component	Worth	Comments
Sona Koyo	Car parts	Under planning in 2009	Will set up four units for manufacturing car parts; has entered into JVs with JTEK, FUJI, American Axle and Arjun Stampings
Delphi	Catalytic convertors, steering systems, piston rods, drive shafts, etc.	US\$ 250 million (2007 plan)	Planning further investments in its software wing
Visteon	AC systems, alternators, panel instrument assembly	US\$ 56 million in 2002	
Bosch	Fuel injection pumps (FIPs), common rail systems	US\$ 100 million	Planning further investments of US\$ 430 million
Cummins	Engines and components	US\$ 150 million	Plans to increase investment to US\$ 500 million by 2010
Tenneco Automotive	Forgings	US\$ 60 million	
Deutz	Engine components	US\$ 70 million	Plans to procure US\$ 1,000 million worth of components from low-cost countries, including India

Competitiveness of Indian auto component industry

- In order to emerge as a manufacturing hub, India faces competition from other low-cost countries such as:
 - China
 - Thailand
 - Brazil
- IMaCS has compared the cost competitiveness of manufacturing six automotive component groups (engine, transmission and steering, suspension and braking, electricals, equipment and others) in India with respect to these countries in terms of factors such as:
 - Taxes and duties
 - Cost of manufacturing (for example, power and fuel costs, labour costs)
 - Economies of scale
- Competitiveness of manufacturing in India is improving with the reduction of tax levels, tax reforms and with improving business infrastructure.

Tax structure in India vis-à-vis other countries

- The burden of direct and indirect taxes is higher in India than in other countries.

	India	Brazil	China	Thailand
Excise	8-16%	-	-	-
VAT	12.5%	17%	17%	7%
Other taxes		15%*		
Corporate tax	34%	34%	25%	30%
Exemptions	Specific packages provided by states for large investments	Tax incentives for companies in export processing zones	Preferential corporate tax policies for foreign investment enterprises	Tax incentives for investments outside central zone
Import duty on rubber	13%	16%	8%	Free
Import duty on steel	5%	12%^	2%	10%

Source: Gol, Apectariff

- Government of India announced an across-the-board excise duty reduction of 4 per cent across automobiles on December 7, 2008
- In case of bus chassis, excise duty is at 8.18 per cent. *Refers to local taxes such as Withholding Tax (WHT)

^Import duty on heavy plates has been reduced

Labour and labour productivity in India vis-à-vis other countries

- India compares favourably with other low-cost countries in productivity-adjusted labour cost.
- Indian labour productivity in the manufacturing sector is on the increase with the application of production management techniques; many companies have doubled their productivity in the last five years.
- Government of India has earmarked nearly Rs 1,000 crore for human resource skill development initiatives across industry sectors.

	India	Brazil	China	Thailand
Labour cost (US\$/hour)	0.75	4.3	0.75	0.8
Labour cost (US\$/day)*	6	33.6	6	6.4
Productivity index**	1.0	2.0	1.0	1.2
Productivity adjusted labour cost (US\$/day)	6	16.8	6	5.33

*Assuming eight-hour shift per day

** Gross value added per person employed when compared to India

Swift progress on the National Skill Development Program (NSDP)

- The aim of the mission is “to provide within a 5-8 year timeframe, a pool of skilled workforce, sufficient to meet domestic requirements, with surpluses to cater to the skill deficits in other ageing economies”.
- The National Skill Development Corporation (NSDC) has been established with a commitment of Rs 1,000 crore from the Centre. Another Rs 15,000 crore is envisaged to be generated from state governments, public sector entities, the private sector, and bilateral and multilateral sources.
- The automobile and auto components sector is one of the top-10, high-growth manufacturing sectors that is in focus for sector-specific skill development; the sector enjoys extensive participation from the industry.
- The mission is expected to enhance skill availability and productivity across the industry.

Power costs and interest rates in India vis-à-vis other countries

- Power costs in India are the highest amongst competing countries.
- However, power cost accounts for only around 3 per cent of the overall cost structure and is, hence, not a significant disadvantage.
- Power costs in India vary by state and are as low as US\$ 0.1 in states such as Maharashtra.
- With privatisation and competition in the Indian power sector, the cost of power is expected to be rationalised further.
- Interest rates in India are high as compared to competing countries, but are expected to soften in the future.
- The recent downturn across the global economy has forced central banks of major countries to slash lending rates.

Power costs

Country	Cost per kwh (US\$)
India	0.14
Brazil	0.05
China	0.03
Thailand	0.11

Interest rates

Country	Annual lending
India	10-11%
Brazil	13-14%
China	5-6%
Thailand	7-8%

Manufacturing in China vis-à-vis India

- Indian manufacturers suffer from a cost disadvantage vis-à-vis Chinese manufacturers mainly because of higher power and fuel costs and, to some extent, due to the cascading impact of taxes.

China		Engine parts	Transmission and steering	Suspension and braking	Electricals	Equipment	Others
Cost of component for an Indian company		100%	100%	100%	100%	100%	100%
Less							
Taxes and duties	Higher net state-level levies and cascading impact of taxes	0.55%	0.85%	1.58%	1.51%	1.72%	0.89%
	Higher import duty	0.01%	0.01%	0.03%	0.07%	0.08%	0.03%
	Higher corporate taxes	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%
Industry costs	Higher cost of power and fuel	3.43%	3.16%	4.01%	3.02%	2.13%	2.68%
	Higher cost of funds	0.62%	0.30%	0.18%	0.00%	0.44%	0.13%
	Higher rate of insurance	0.10%	0.08%	0.10%	0.08%	0.11%	0.08%
Others	Others	3.63%	2.98%	3.08%	3.11%	3.50%	2.72%
Total cost disadvantage for India		8.61%	7.65%	9.25%	8.06%	8.25%	6.80%

Manufacturing in Thailand vis-à-vis India

- Indian manufacturers suffer from a cost disadvantage vis-à-vis Thai manufacturers mainly because of higher level of taxes and their cascading impact

Thailand		Engine parts	Transmission and steering	Suspension and braking	Electricals	Equipment	Others
Cost of component for an Indian company		100%	100%	100%	100%	100%	100%
Less							
Taxes and duties	Higher net state-level levies and cascading impact of taxes	3.92%	5.26%	5.98%	5.48%	5.69%	5.42%
	Higher import duty	0.51%	0.29%	0.38%	0.88%	0.91%	0.79%
	Higher corporate taxes	0.12%	0.12%	0.12%	0.12%	0.12%	0.12%
Industry costs	Higher cost of power and fuel	0.93%	0.86%	1.09%	0.82%	0.58%	0.73%
		1.72%	1.10%	1.19%	1.22%	1.59%	0.85%
	Higher cost of funds	0.50%	0.24%	0.14%	0.00%	0.35%	0.10%
	Higher rate of insurance	0.10%	0.08%	0.10%	0.08%	0.11%	0.08%
Others		2.15%	1.51%	1.60%	1.63%	2.02%	1.25%
Total cost disadvantage for India		9.95%	9.46%	10.60%	10.23%	11.37%	9.34%

Manufacturing in Brazil vis-à-vis India

- India is competitively positioned vis-à-vis Brazil across components mainly due to the higher cost of labour in Brazil.

Brazil		Engine parts	Transmission and steering	Suspension and braking	Electricals	Equipment	Others
Cost of component for an Indian company		100%	100%	100%	100%	100%	100%
Less							
Taxes and duties	Higher net state-level levies and cascading impact of taxes	-4.28%	-5.81%	-3.94%	-3.26%	-3.22%	-5.21%
	Higher import duty	-0.34%	-0.23%	-0.19%	-0.31%	-0.27%	-0.39%
	Higher corporate taxes	0	0	0	0	0	0
Industry costs	Higher cost of power and fuel	2.79%	2.58%	3.28%	2.47%	1.74%	2.19%
	High Labour cost	-23.16%	-14.85%	-16.07%	-16.45%	-21.47%	-11.51%
	Higher cost of funds	-0.27%	-0.13%	-0.08%	0.00%	-0.19%	-0.06%
	Higher rate of insurance	-0.06%	-0.05%	-0.06%	-0.04%	-0.06%	-0.05%
Others		5.55%	4.90%	5.00%	5.02%	5.42%	4.64%
Total cost disadvantage for India		-19.77%	-13.59%	-12.06%	-12.57%	-17.78%	-10.39%

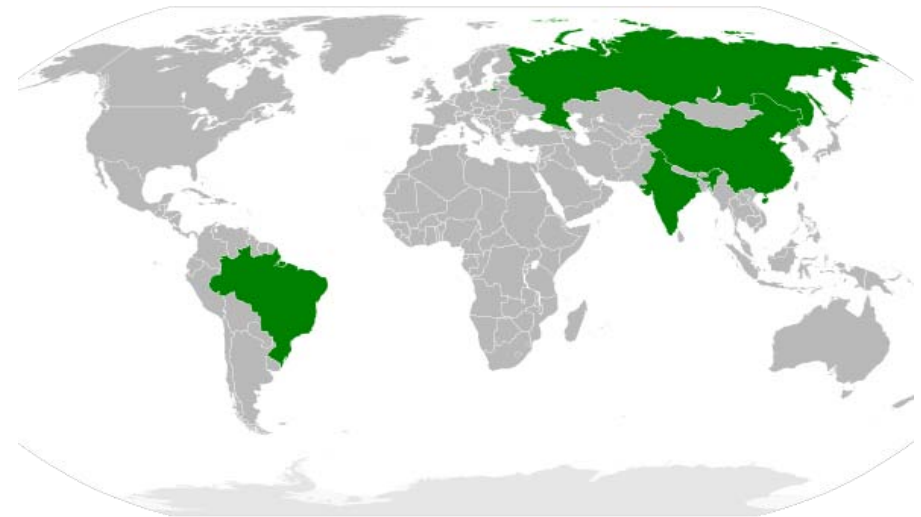
Performance of Brazil, Russia, India and China (BRIC) countries in auto component industry

China

- A large market and has a fast-developing auto component industry.
- China's indigenous industry is fairly nascent and may be considered to be in the early stages of development.

India

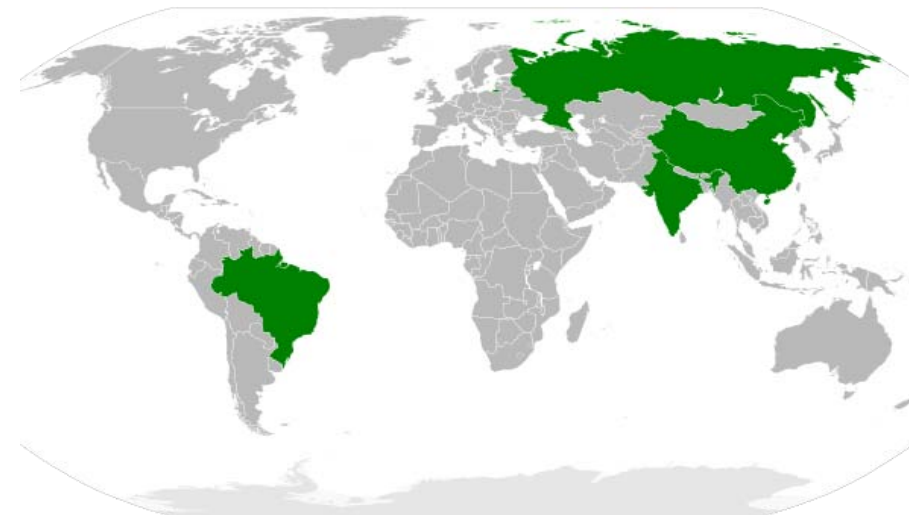
- India has an indigenous industry that has been growing.
- Indian companies are also investing in international acquisitions, development of new brands, assets and technologies.



Performance of Brazil, Russia, India and China (BRIC) countries in auto component industry

Russia

- The relatively low quality of auto components manufactured has inhibited the growth of local vehicles' production.
- But, at the same time, there exists a significant opportunity for new companies to set up large-scale production of auto components to be supplied to Western-brand cars.



Brazil

- Brazil lacks major indigenous players in auto components.
- The country has attracted several investors to the sector and is today a major net exporter of auto components.

Conclusions ... (1/2)

- India has a cost advantage when compared to Brazil. India, however, suffers from a cost disadvantage vis-à-vis China and Thailand, primarily due to the high level of taxes and their cascading impact.
- India, in the near future, is expected to go ahead with the abolition of the inter-state central sales tax (CST), which will reduce the cascading impact of taxes to some extent.
- Implementation of goods and services tax (GST), along the lines of VAT, and abolition of all other taxes is in progress and is targeted for April 2010. It will reduce the taxation loading on the automotive sector considerably. This step is expected to strengthen India's future position as a leading automobile manufacturing hub.
- Various steps being taken by the Indian government to improve infrastructure in order to reduce the disadvantage that India suffers because of poor infrastructure that causes project delays, delays in deliveries and so on. This would increase the demand for road transportation in the country.

Conclusions ... (2/2)

- Apart from road infrastructure, R&D infrastructure under the US\$ 380 million Central government project, NATRIP, which is expected to be completed by the end of year 2010, is expected to provide India a distinct advantage over other low-cost countries in the automotive industry.
- With the widespread implementation of the NSDP and the effecting of the ASEAN free trade agreement, skill development and productivity enhancement will add to the industry's competitiveness in the global market.
- Further, with the rising manpower costs in China, the competitiveness differential between India and China is fast reducing, strengthening India's potential for becoming the manufacturing hub for the global automotive industry.

DISCLAIMER

India Brand Equity Foundation (“**IBEF**”) engaged ICRA Management Consulting Services Limited (IMaCS) to prepare this presentation and the same has been prepared by IMaCS 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 IMaCS’s and IBEF’s knowledge and belief, the content is not to be construed in any manner whatsoever as a substitute for professional advice.

IMaCS 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 IMaCS 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.”