



The Rise of Indian Auto Industry

Bochum, April 28, 2005

Agenda

- 1. Key driver the growing auto demand: India's growing economy firing on all cylinders**
- 2. The Indian auto industry: Reaching critical mass**
- 3. Six key trends in the Indian passenger car industry**
- 4. Implications to Automakers and Suppliers**

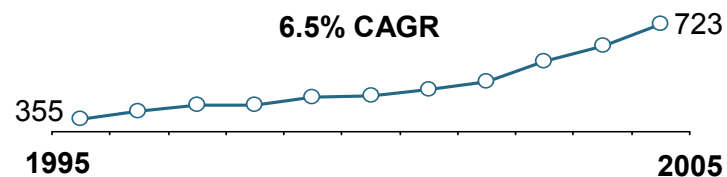
- 1. Key driver for the growing auto demand:
India's growing economy firing on all cylinders**

Strong economic growth foreseen across all industries in India

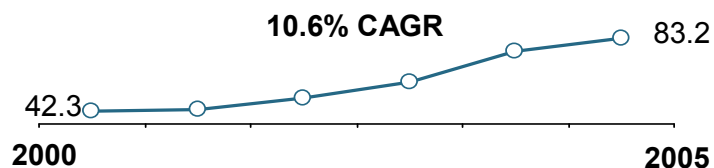
Key facts about Indian economy

Strong economic indicators

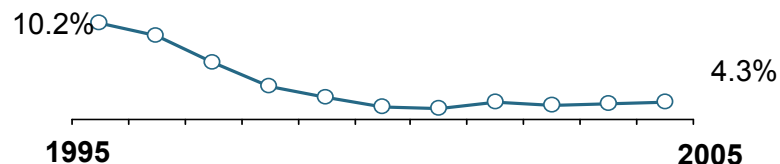
GDP USD Bn



Exports USD Bn



Inflation

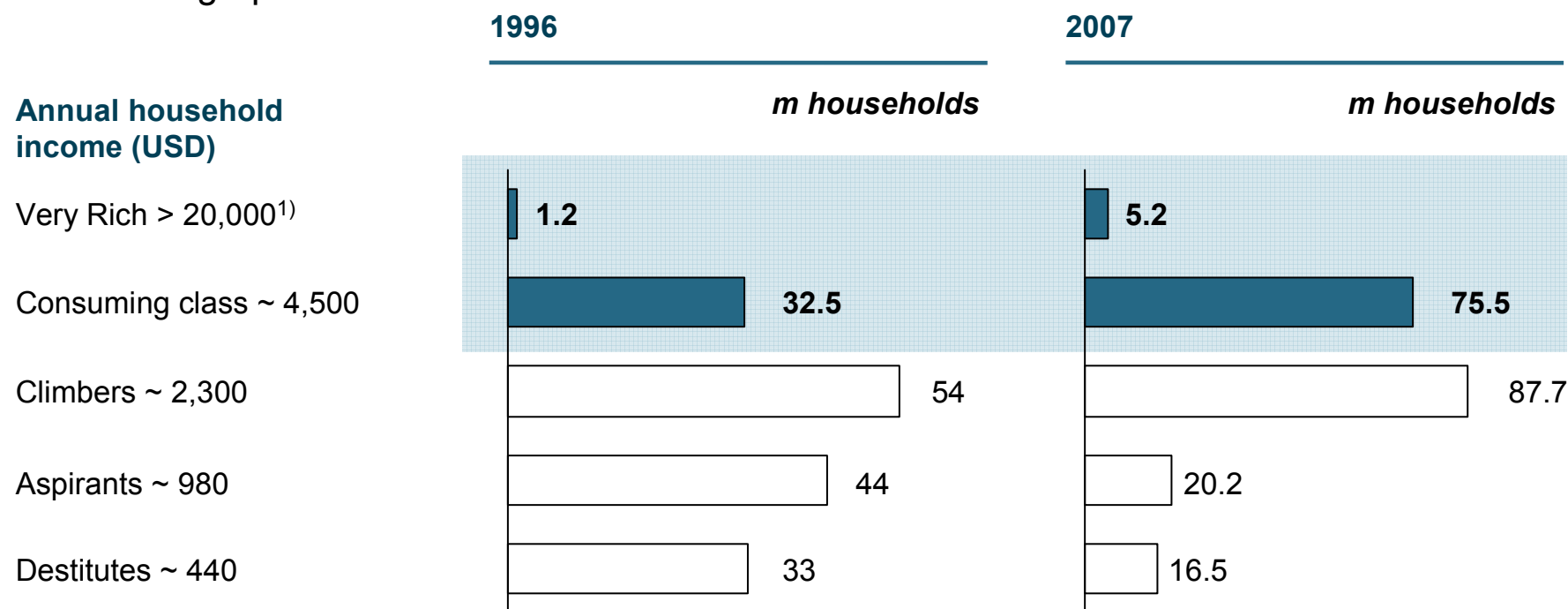


All sectors on fire

- The **information technology** segment is projected to grow at 22.7% for the next few years
- The **pharmaceutical** industry is projected to double between 2002 and 2008
- The **textile** industry is the second largest in the world; the industry is projected to grow by 50% in the 2004-08 period
- The **telecom** market is one of the world's largest and fastest growing; 50% growth is projected by 2007
- The **automotive** industry is one of fastest growing in the world; including two wheelers, 8.5 million units were produced in 2004-05, and over a million were cars
- The **healthcare** industry is expected to more than double by 2012

The economic growth is changing the demographics favorably towards development of a sustainable automotive industry

India demographics distribution

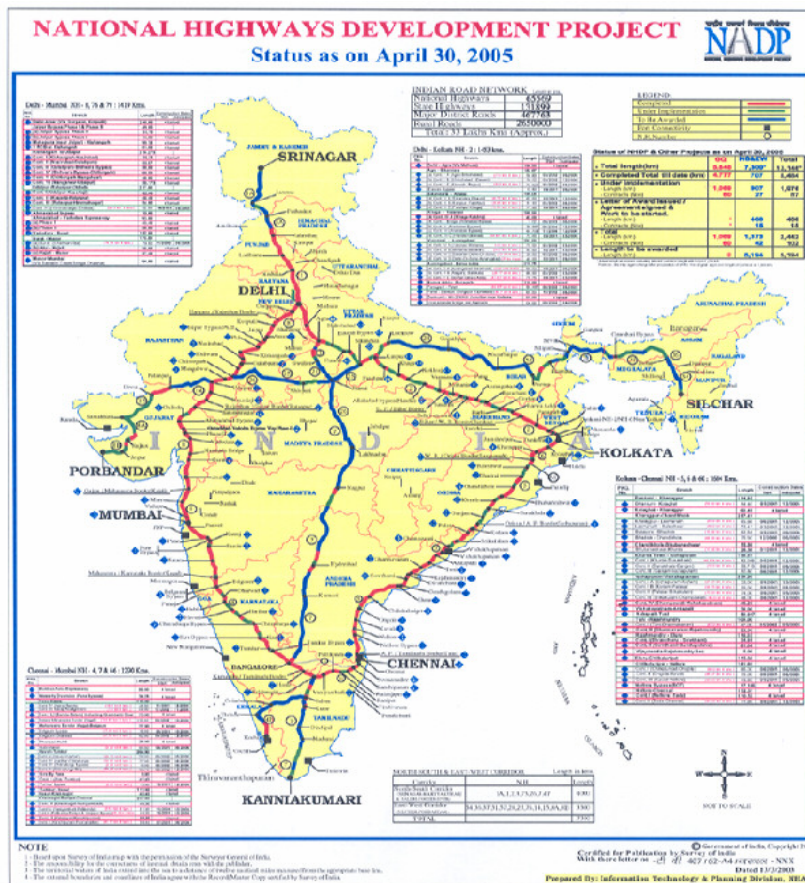


- 80 M households will have the economic power to purchase a car by 2007
- The effect of rising disposable income is already seen in the consumer market

1) On a PPP basis this is equal to USD100,000/household

Road infrastructure is beginning to be established, a positive trend towards the development of an auto industry

India road infrastructure project

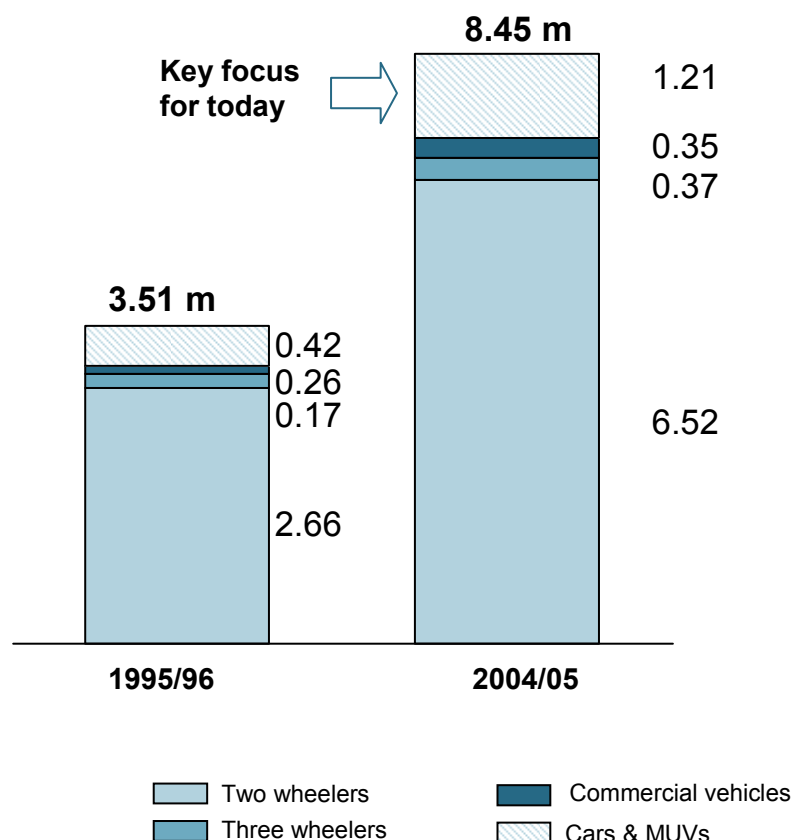


- Golden Quadrilateral program links (~6000 km) New Delhi – Mumbai – Chennai – Kolkata
- Good progress has been made so far, will drive economic expansion through road networks
- Inner city road infrastructure still weak, but progress is being made (at a slower pace)
- Overall, the economy is growing faster than the infrastructure, leading to some bottlenecks

2. The Indian auto industry: Reaching critical mass

Unlike in developed economies, the auto industry in India has a very different structure – dominated by two wheeler volumes

Indian auto industry structure and production volumes (m units)








India is...

- The second largest two wheeler manufacturer in the world
- The largest motorcycle manufacturer in the world
- The second largest tractor manufacturer in the world
- The fifth largest commercial vehicle manufacturer in the world
- The fourth largest car market in Asia

The Indian passenger car industry has emerged from a history of protectionism

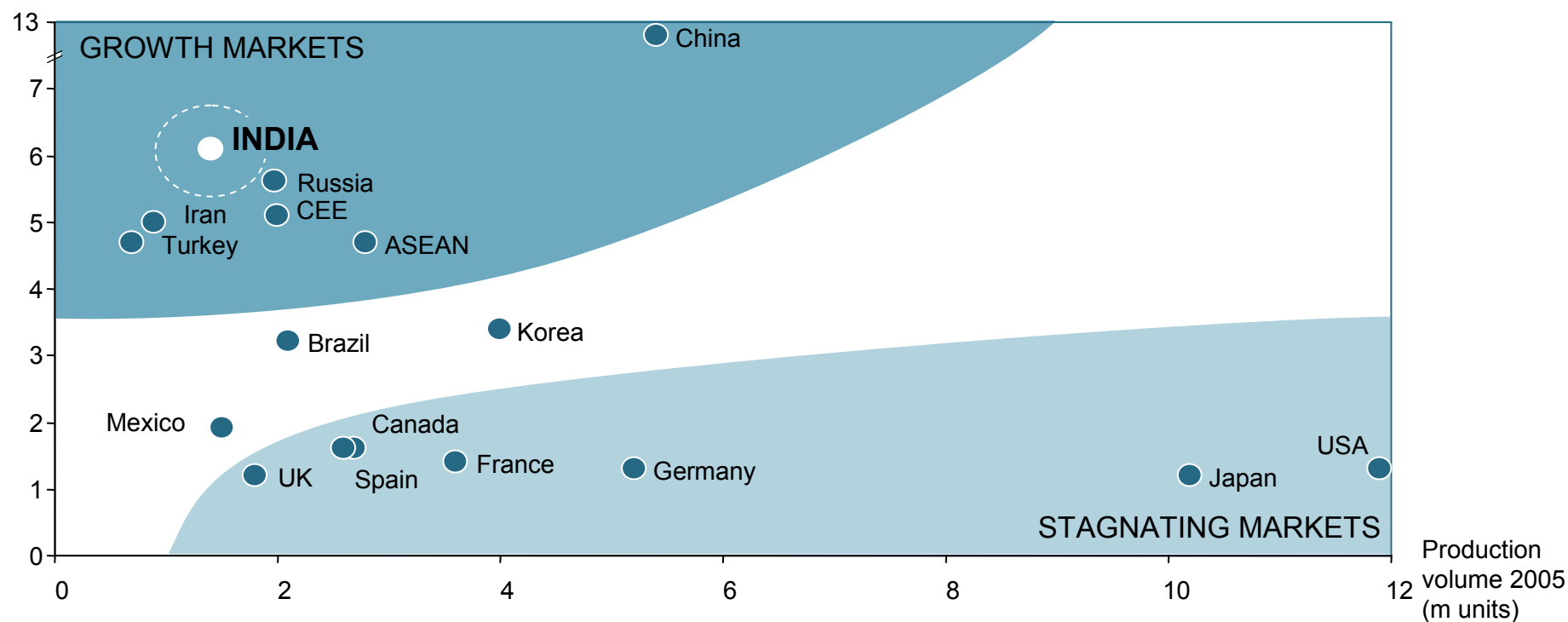
Development of Indian passenger car industry

1950-1983	1983-1993	1993-2002	2002 and beyond
<p>Protectionist era</p> <ul style="list-style-type: none"> No foreign investment Poor quality, high cost domestic cars Car volume stagnated at 30-40,000 units per year Just three domestic manufacturers <div>   </div>	<ul style="list-style-type: none"> Only one foreign entrant - Suzuki permitted via Joint venture - Maruti Suzuki Maruti grew to capture an 80% market share <div>  </div>	<ul style="list-style-type: none"> Foreign investment permitted, but with minimum capital investment and other restrictions Entrants <div>  </div> <ul style="list-style-type: none"> Indian auto parts manufacturers start to strive for global standards 	<ul style="list-style-type: none"> Unrestricted foreign investment Indian companies start exporting activities BMW, Volkswagen, Nissan, Renault plan to enter Hyundai plans to use India as an export hub Indian auto parts manufacturers reach quality levels required for export <div>  </div>

On a worldwide basis, the Indian passenger car industry is projected to be the second highest growth market

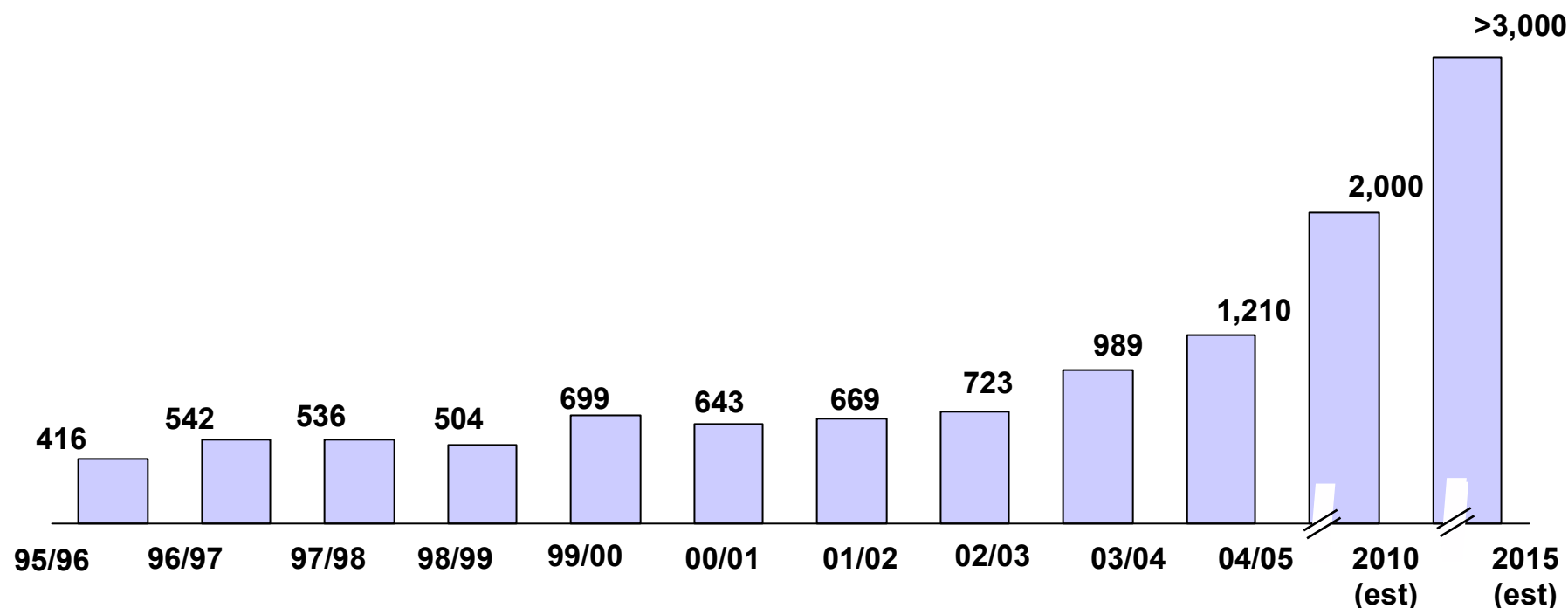
Car production forecast for selected countries/regions 2005-2012

Annual growth rate
2005-2012 (%)



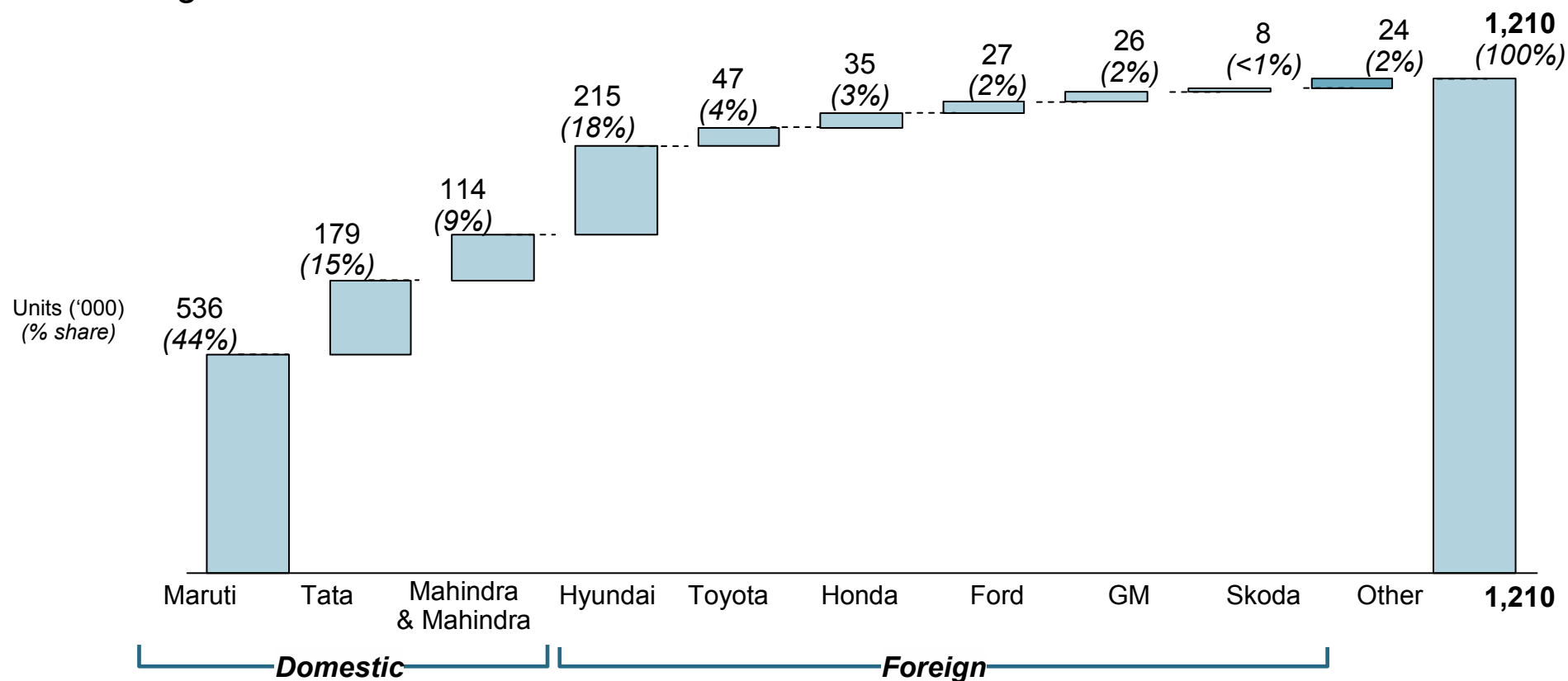
The passenger vehicle market has steadily evolved and is expected to touch 2 million by 2010 and 3 million by 2015

India passenger car and MUVs development 1995-2015 ('000 units):



Currently, domestic OEMs still have approx. 65% market share

Passenger vehicles market share in 2004/05¹⁾



1) Percentages may not add up to 100 because of rounding.

Segment leaders in the Indian passenger car market

Segment positioning
based on volume

1

2

3

A Segment

Maruti
Alto



Maruti
800



Hyundai
Xing



B Segment

Tata
Indica



Maruti
WagonR



Maruti
Zen



C Segment

Honda
City



Ford
Ikon



Hyundai
Accent



D Segment

Skoda
Octavia



Honda
Accord



Hyundai
Sonata



MUV

Toyota
Qualis



Mahindra
Scorpio

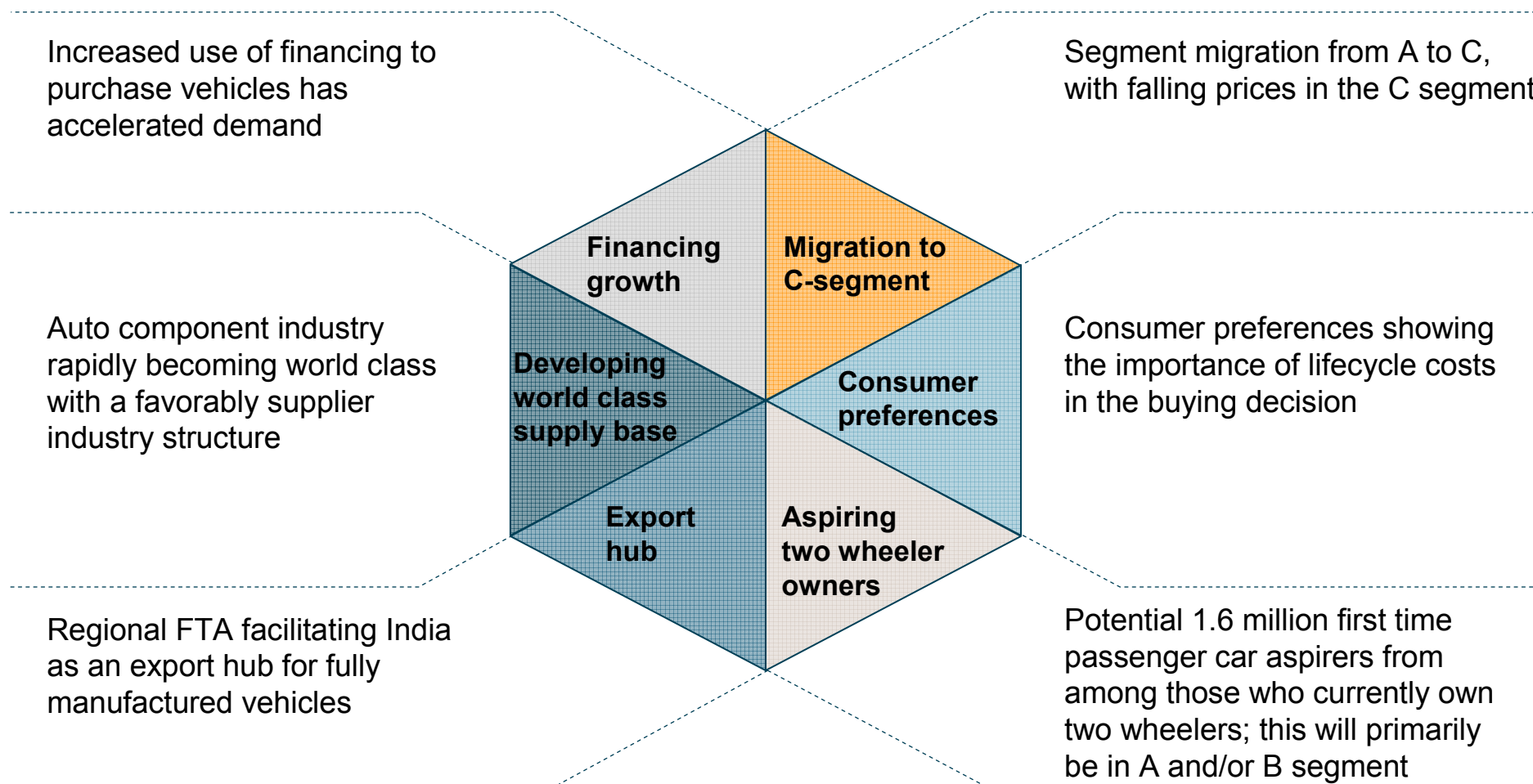


Tata
Sumo



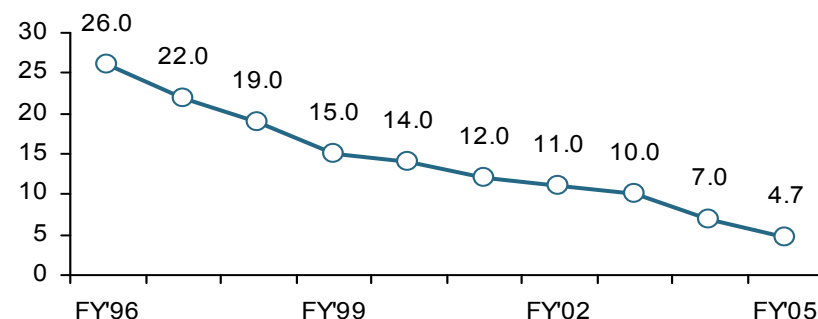
3. Six key trends in the Indian passenger car industry

Indian passenger car industry is experiencing six key trends

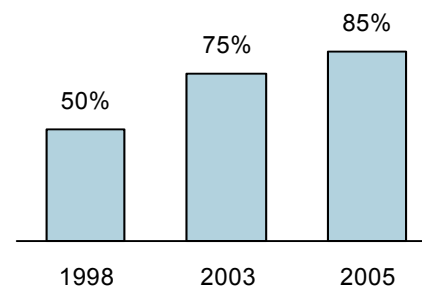


Financing is rapidly becoming the most common means of purchasing vehicles in India

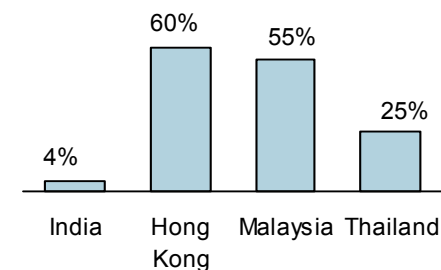
Interest rates for car loans



Percentage of total cars financed



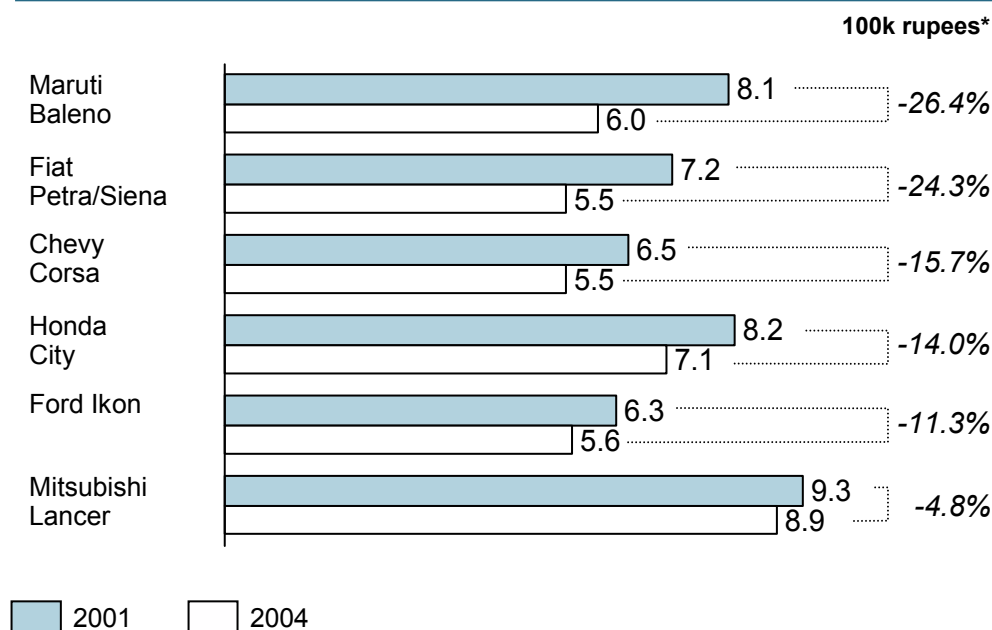
Consumer credit (as % of GDP)



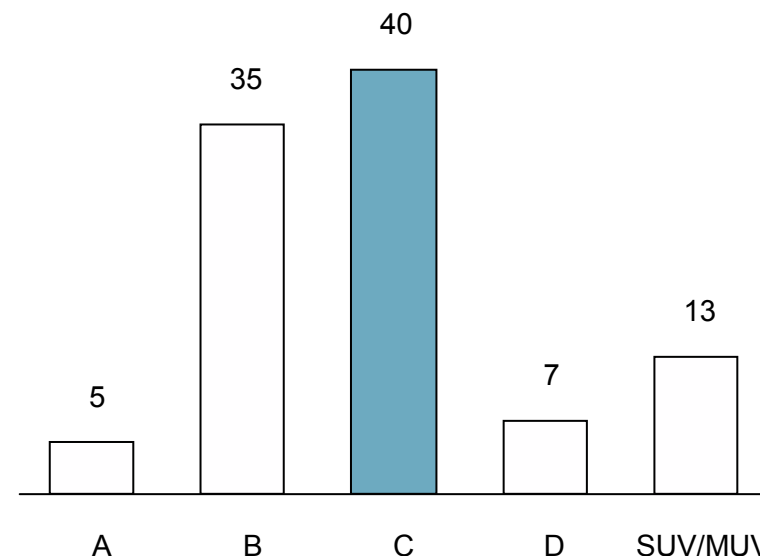
Financing is a dominant criteria for purchase of vehicles and companies that do not carry auto financing instruments or arrangements will be at a competitive disadvantage.

There is considerable activity in the C segment – falling prices and shifting sales from A and B segment

Trend towards falling prices in segment C



Future purchase preferences by segment¹⁾ (%)



- Between 1999 and 2004, sales of cars in the C segment tripled, with six models delivering their best results in 2004 – Ford Ikon, Honda City, Maruti Esteem, Tata Indigo, Maruti Baleno and Chevy Optra
- The NFO-MBL study (2003) showed that 40% of the car owners in the A segment planned to upgrade to the (lower) C segment

1) Timeframe of intended purchase varied between six months to three years

*1 EU = 53.7 Rupees approx

Market research shows emphasis on lifecycle costs and a surprising lack of emphasis on price

Important attributes in a future car as surveyed¹⁾

Attributes	Ranks
Driving comfort	1
Maintenance	2
After sales service	3
Fuel economy	4
Price	5
Interior features	6
Appearance	7
Other	8
Resale value	9

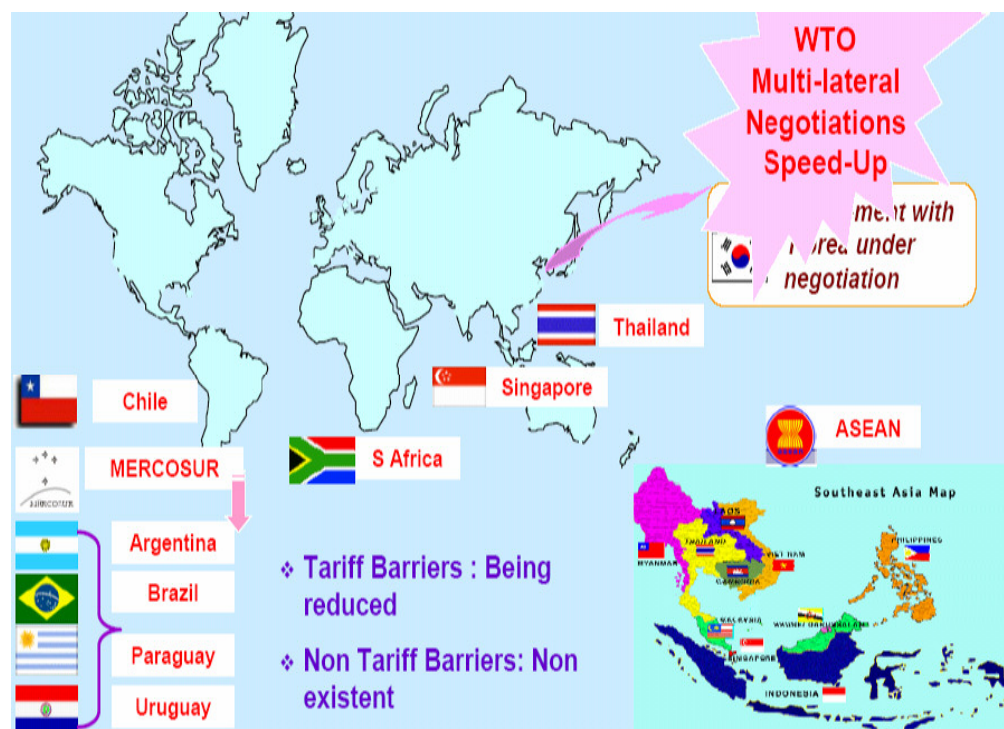
Lifecycle
Costs

- **Lifecycle costs** important buying attribute
- Typical attitude of an Indian buyer is to have **European quality at Asian prices**
- Resale value among the least important attributes because of the concept of “car ownership for life”, however the **used vehicle market is beginning to grow**
- **Driving comfort** an **essential** due to the long delays in traffic and due to lack of well developed infrastructure
- The **emphasis** on maintenance and after **sales service** underlines the advantages for OEMs who have a significant presence in the country

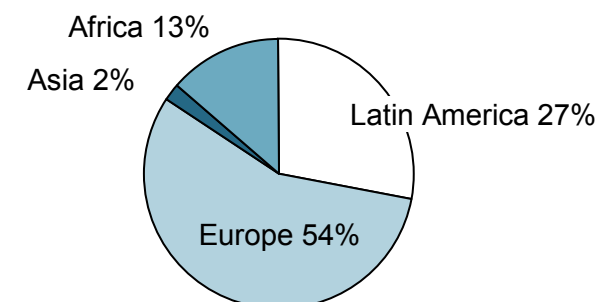
1) Rediff.com survey, 2004; 8841 responses from 25 major cities in India

Regional trade agreements have paved the way for strong export growth for fully assembled vehicles

Regional Trade Agreements

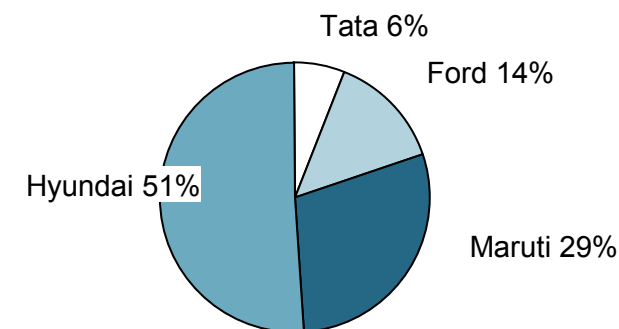


Export of fully produced vehicles to...



Total 2004/05: 130,000

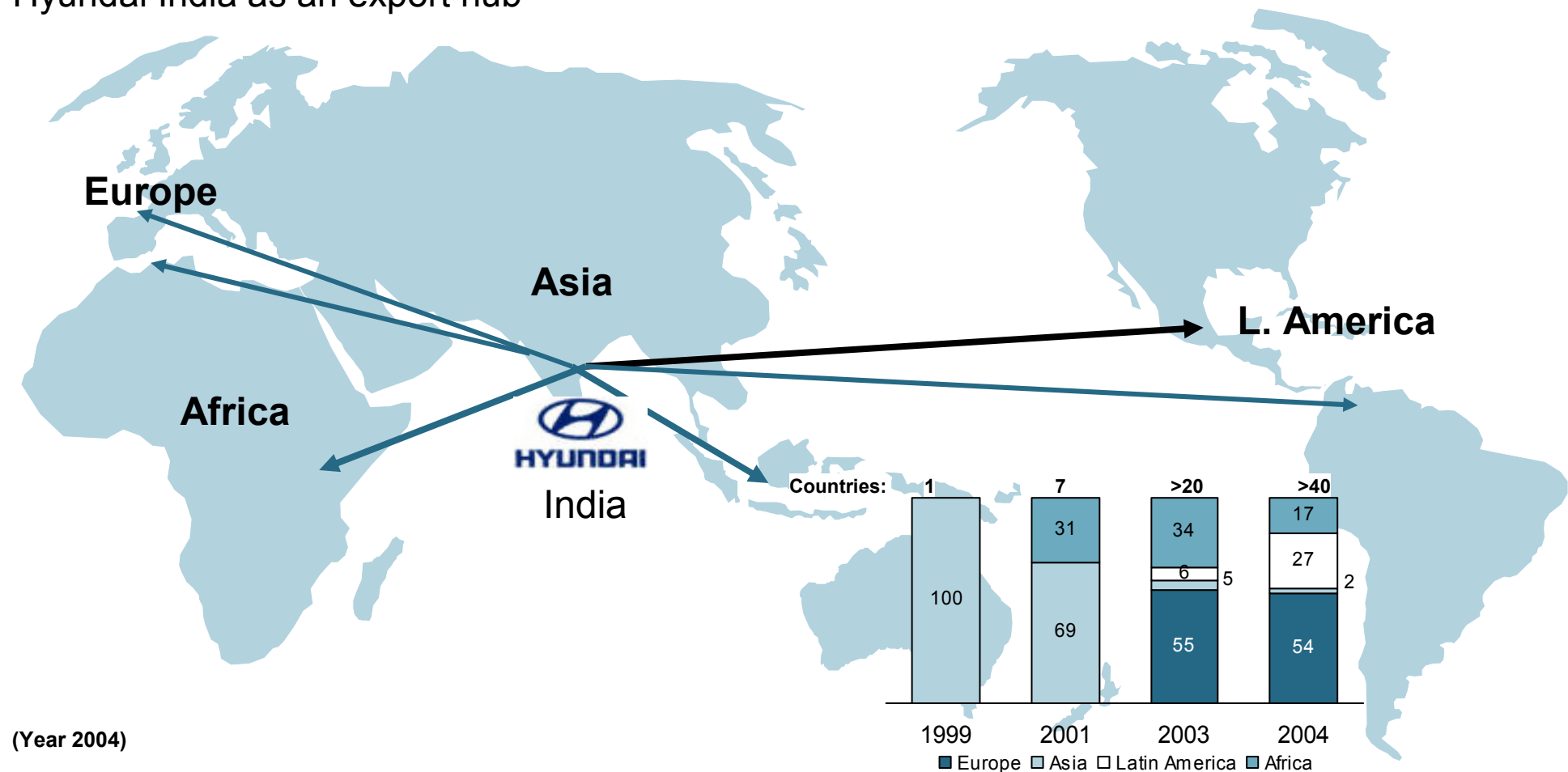
... by OEMs



Total 2004/05: 130,000

Hyundai India is an integral part of the Globalization plan and is an export hub for compact cars

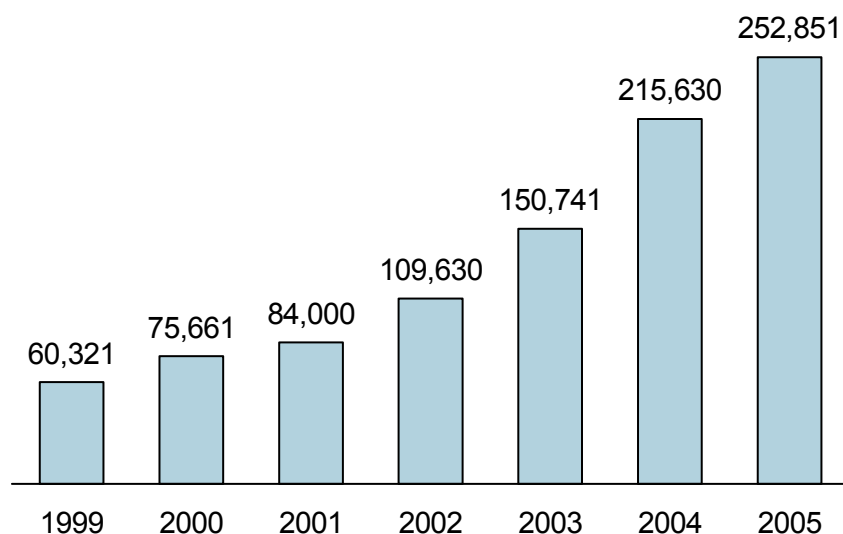
Hyundai India as an export hub



Hyundai has shown exceptional performance in India while simultaneously exporting vehicles

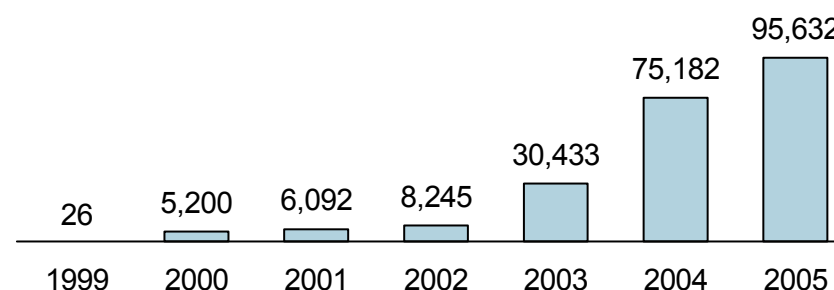
Development of Hyundai volume

Volume of cars manufactured in India (units)...



- Number of dealerships: 200
- Total cumulative sales: 1,000,000 vehicles in 90 months since inception
- Profitable from the first year of operation

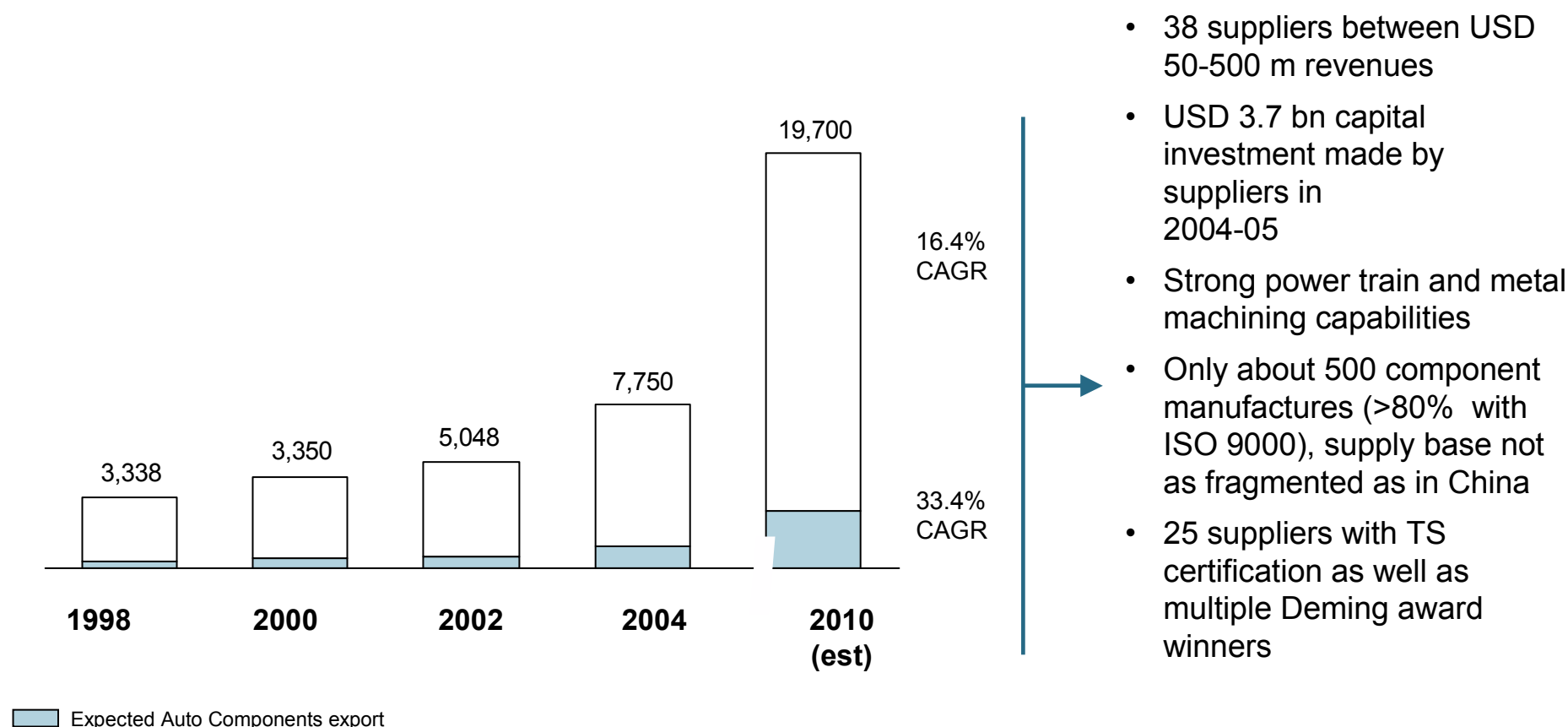
... of which exports are sizeable portion



- 27.2% increase in exports in 2004 over the previous year
- Account for over 50% of all cars exported from India in 2004

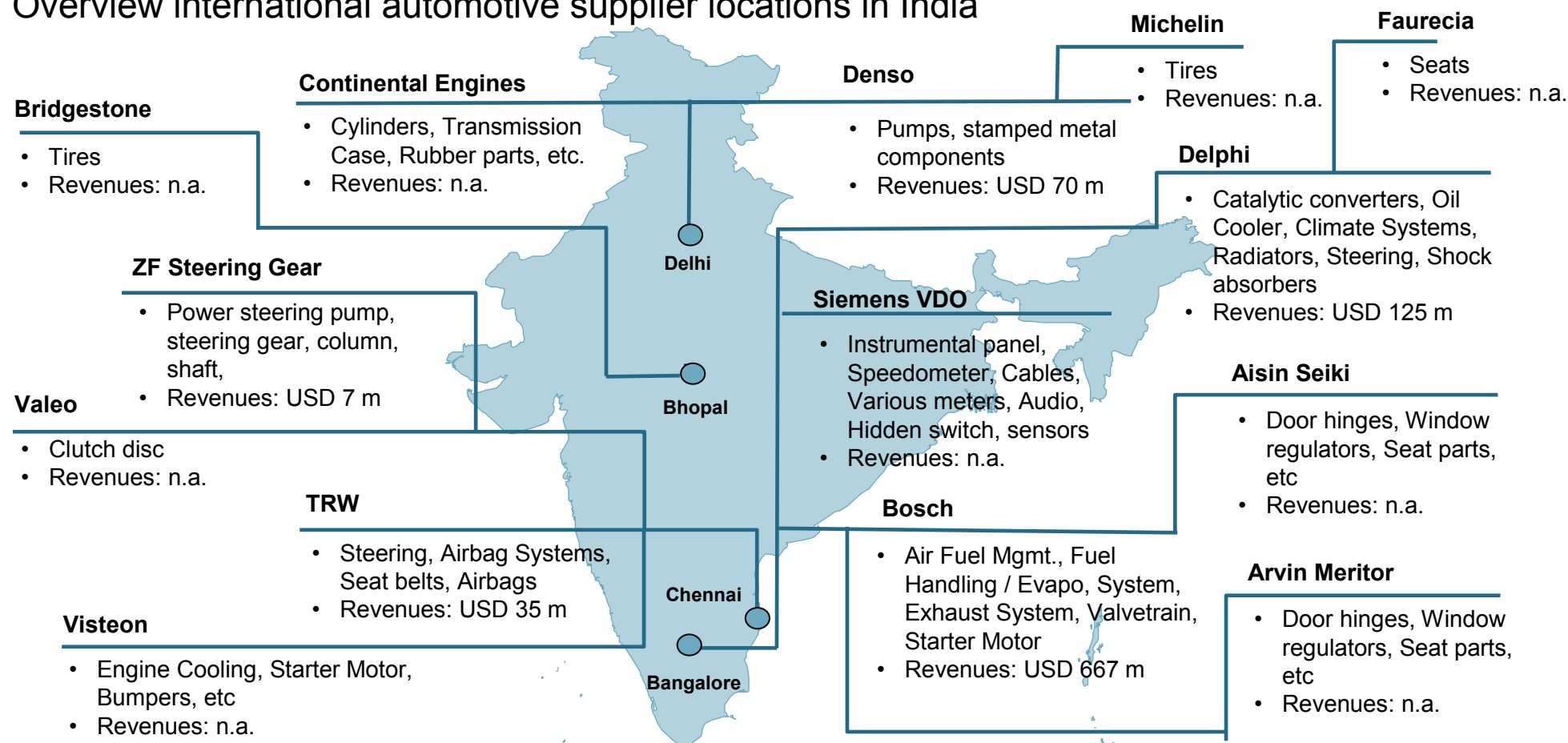
Auto component industry is well positioned for high quality supply of parts for the domestic and export market

Development of the Indian auto supplier industry revenues (USD m)



14 out of the top 20 international suppliers have localized production in India

Overview international automotive supplier locations in India



1) 2003 data

Source: Company Information, Roland Berger

5. Implications to Automakers and Suppliers

India is a unique market and automakers will require a tailored strategy to be successful in this hot market

Key implications to the automakers

- **Product portfolio should include B and C segment** vehicles to achieve critical mass in the Indian market
- **Ensure brand building** and create effective **dealership network** to assist in sales and top line growth
- Product competitive advantage in the Indian market can be achieved if one can provide a **world class quality with Indian cost structure**
- Utilizing Indian production facility as an **export hub** for SE Asia/Middle East/Africa will help in achieving fixed and variable cost economics
- **Integrating your Indian operations into a global network** for additional value added work such as design and engineering, tooling & prototyping, administrative functions will be a best practice
- However, companies should make efforts to **source and manufacture locally** rather soon to exploit first mover advantages such as access to best suppliers, talents and government support

Tremendous opportunities for suppliers, not only for domestic business but also for global contracts

Key implications to suppliers

- Tremendous **growth opportunity** especially for **Interior** and **Electronics** suppliers
- India is a much **more cost effective production** hub than China **if the engineering value added is high** and if the manufacturing process requires high level of technical interface
- India will force suppliers to develop cost effective product and process solutions which can be transferred to other parts of their global operations
- A **high level entrepreneurship in the Indian automotive supplier industry** and a better supplier structure allows for a sustainable and profitable supplier industry (EBIT margins of 15% to 20% are very common in the India supplier industry)
- Global OEMs are growing their share in the Indian market and are introducing vehicles that are developed for the global market (adapted to Indian conditions). **Indian presence will help the supplier to be in a better position to win global contracts**