

**DIRECTORATE FOR SCIENCE, TECHNOLOGY AND INDUSTRY  
STEEL COMMITTEE**

**INDIA**

**INDIAN STEEL OUTLOOK**

**Joint India/OECD/IISI Workshop, New Delhi (India), 16-17 May 2006.**

*Presentation by Mr. A.D. Baiyal, Vice President, Raw Materials, Tata Steel.*


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# INDIAN STEEL OUTLOOK

IISI-OECD CONFERENCE  
Date: 16<sup>th</sup> May, 2006



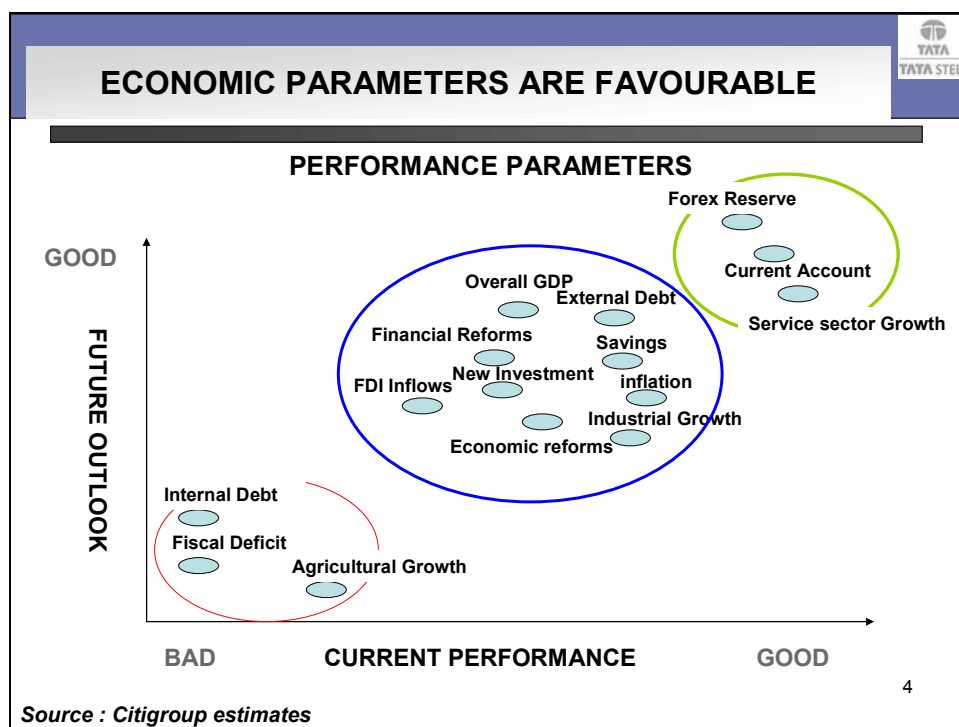
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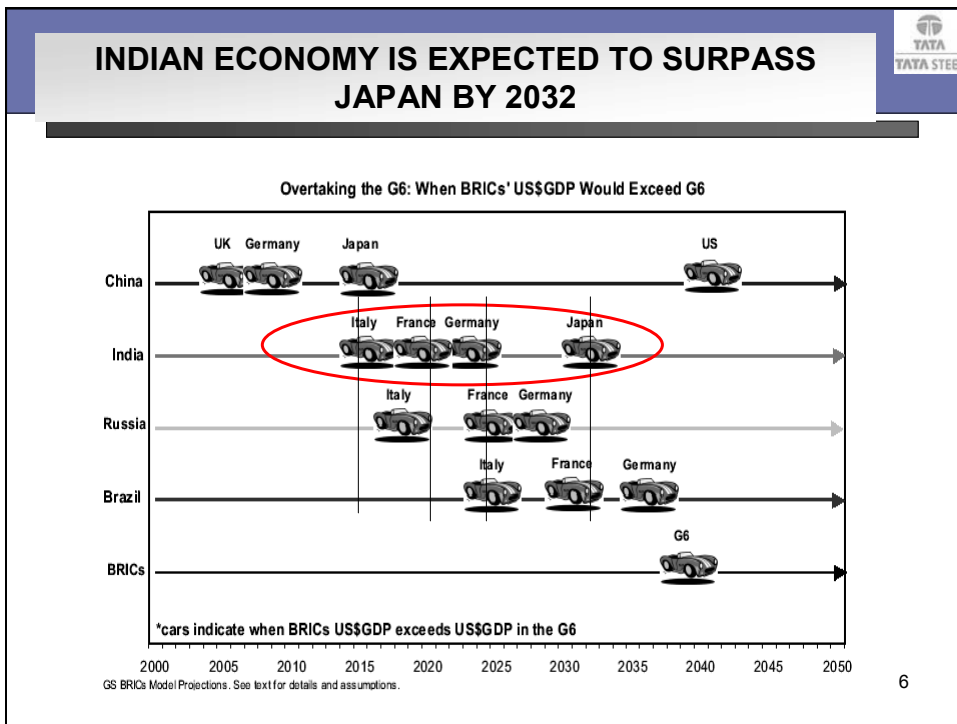
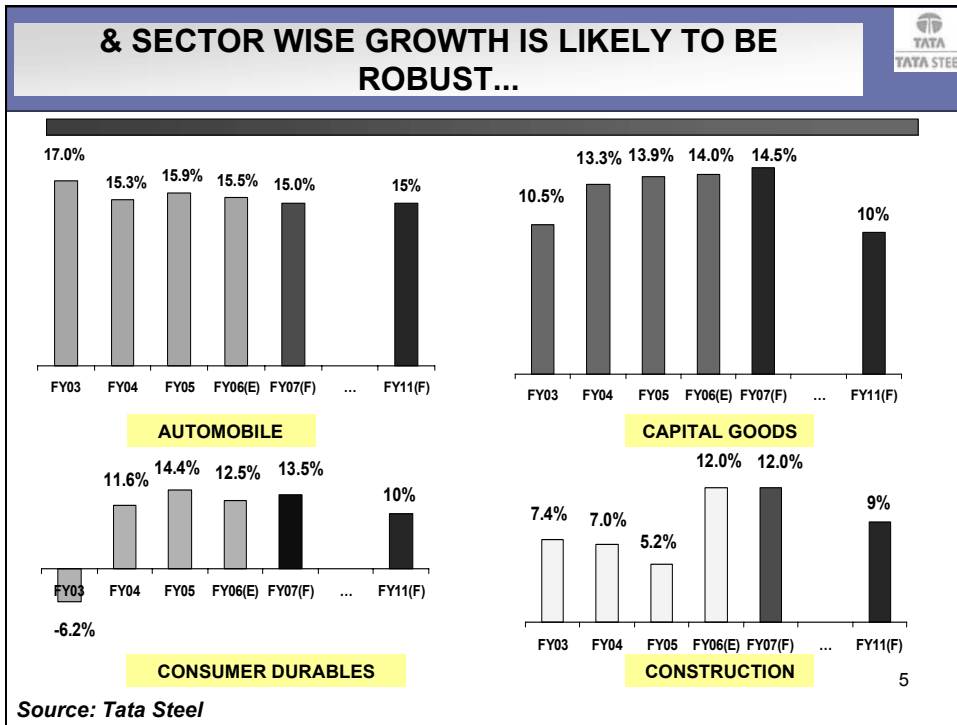
- MACRO ECONOMIC ENVIRONMENT
- STEEL : DEMAND ANALYSIS
- STEEL : SUPPLY ANALYSIS
- SUMMARY



# MACRO ECONOMIC ENVIRONMENT- INDIA

## IISI-OECD CONFERENCE







## IN SUMMARY THE FUTURE IS UPBEAT



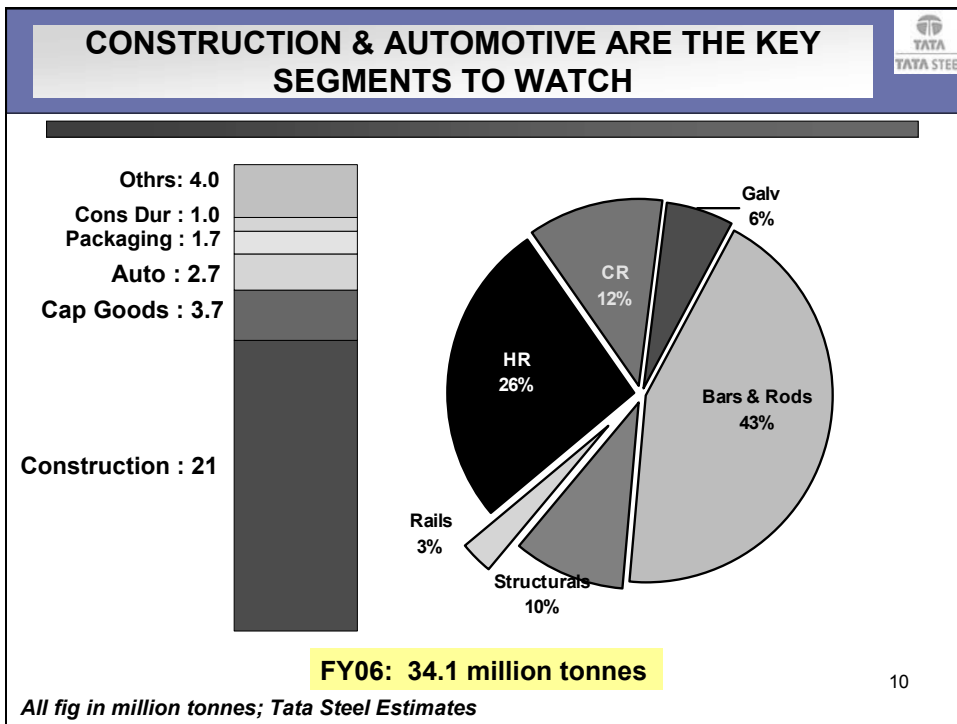
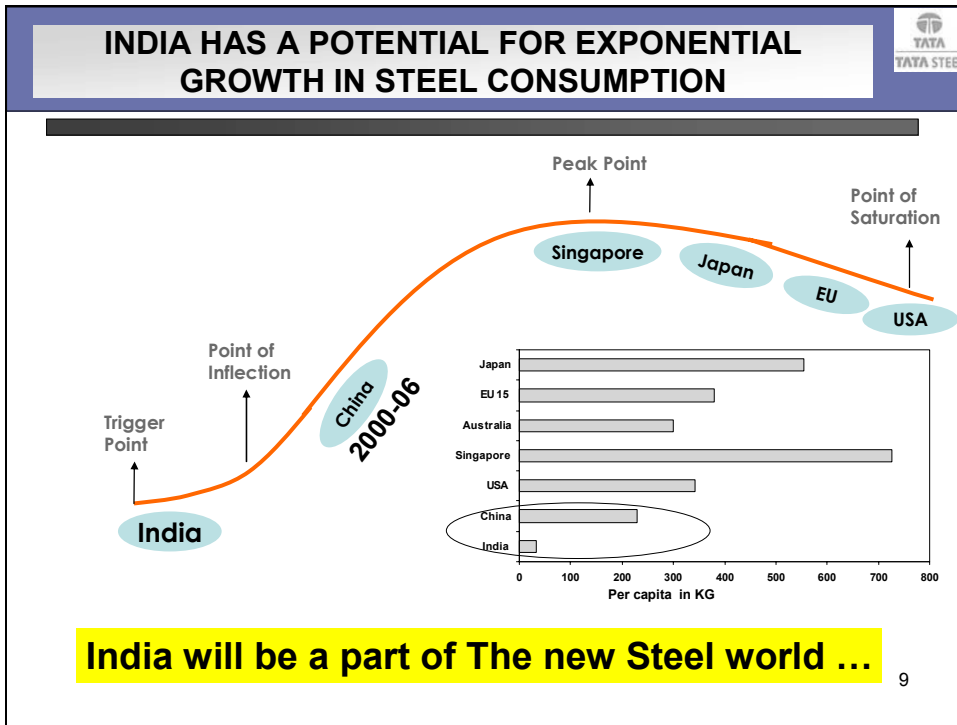
- **Ranked 4<sup>th</sup> in the world on GDP - Purchasing Power Parity basis, 11<sup>th</sup> in absolute terms. (IMF)**
- **> 8% GDP growth targeted in 2006-07 - second only to China; aspirational 10 % growth looks possible**
- **Continuously improving macro economic factors**
- **A strong demographic profile : with a large consumer base**
- **Growing urbanization**
- **Stable social and political environment**

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**STEEL : DEMAND ANALYSIS, INDIA**

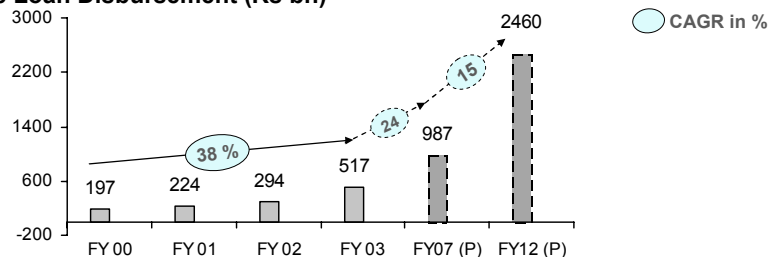
**IISI-OECD CONFERENCE**



## GROWTH IN CONSTRUCTION IS LEAD BY RAPID GROWTH IN HOUSING SECTOR & ...



### Home Loan Disbursement (Rs bn)



- A growth of 24% expected till FY 07, with an expenditure of Rs 1,400 bn
- Housing shortage of 41 million units estimated as per 10<sup>th</sup> five year (02-07)
- There is a need to invest over Rs.4,000 bn over 10 years
- Estimated that every INR 1 invested in housing / construction adds 78 paise to the GDP

Source: National Housing Bank, HDFC, Cris-Infac, www.dwge.com

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## .. INVESTMENT IN INFRASTRUCTURE SEGMENT



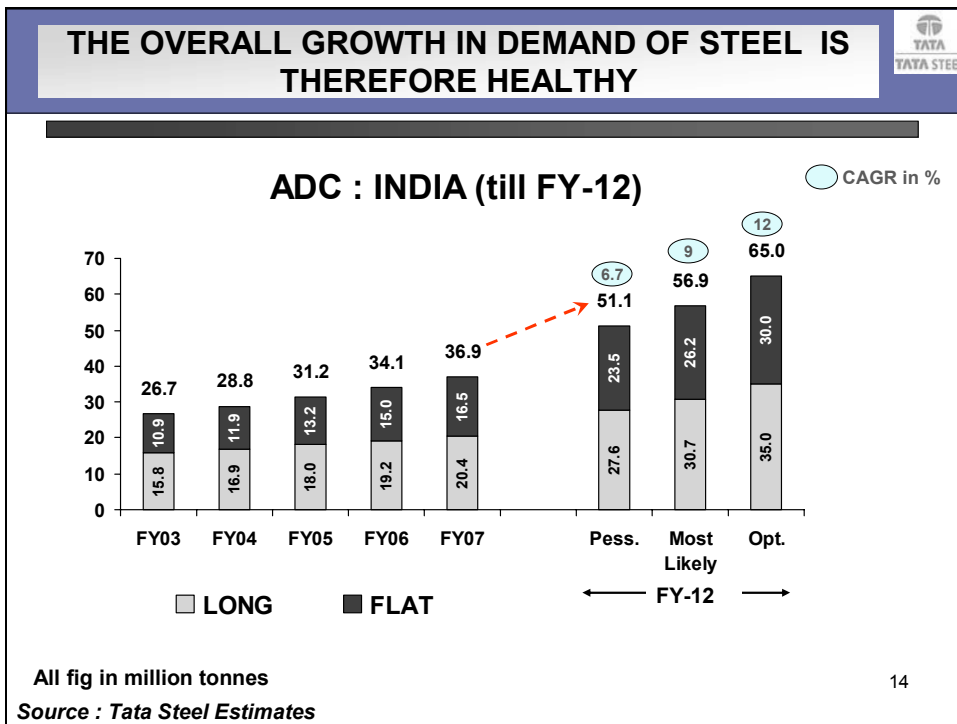
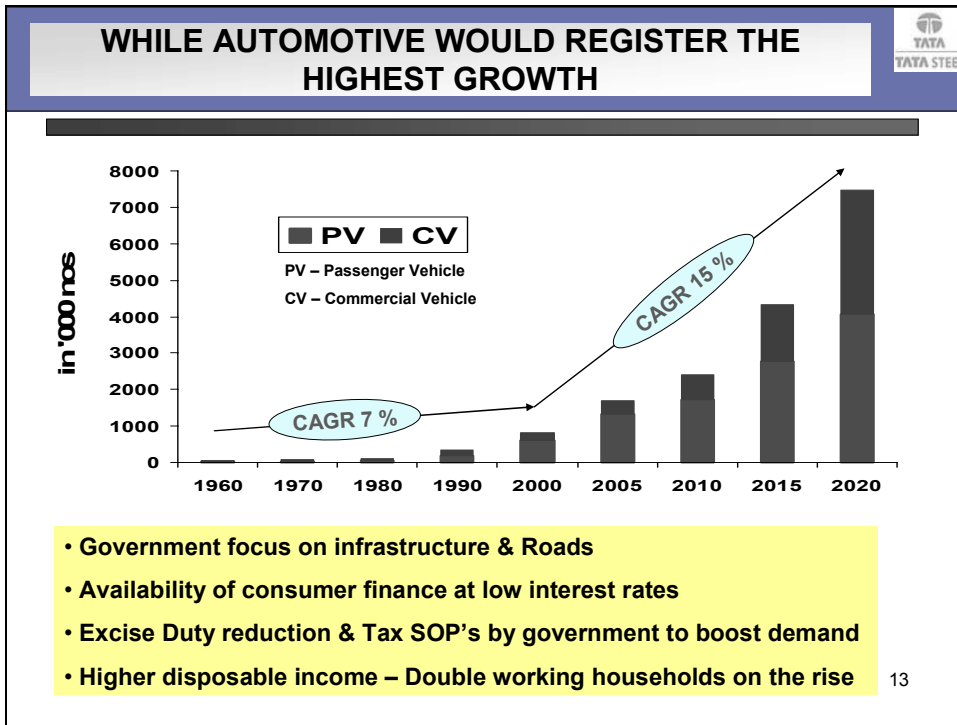
### PROJECTED INVESTMENT Till 2012 by Committee on Infrastructure

RS Billion	FY 03	FY 04	FY 05	FY 06	FY 07 F	Planned Exp in next 5 years
Airports	20	15	15	24	25	400
Irrigation	151	139	208	222	252	1300
Ports	7	5	5	10	20	500
Power	232	312	340	350	346	2000
Railways	121	135	153	146	140	750
Roads	206	190	199	212	213	1700
Telecom	133	126	89	116	116	800
Urban Infra.	162	174	184	220	250	1400

India has potential to absorb US \$ 150 billion in next five years in the infrastructure sector alone.

The tenth plan investment in infrastructure has been revised to Rs. 11,088 Billion from earlier 10,894 Billion during mid term appraisal.

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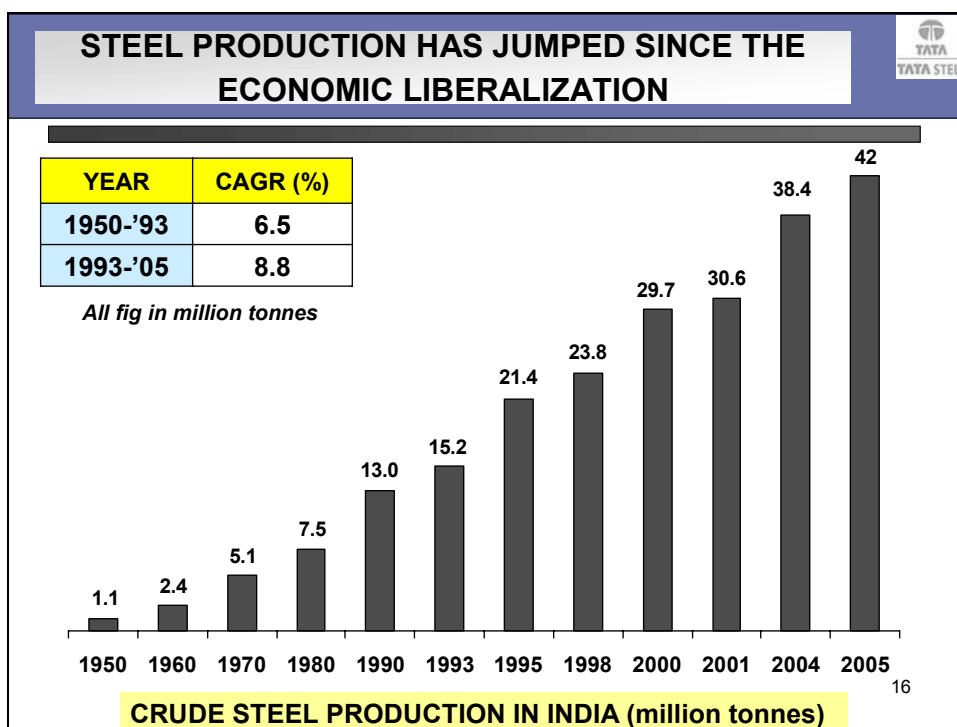


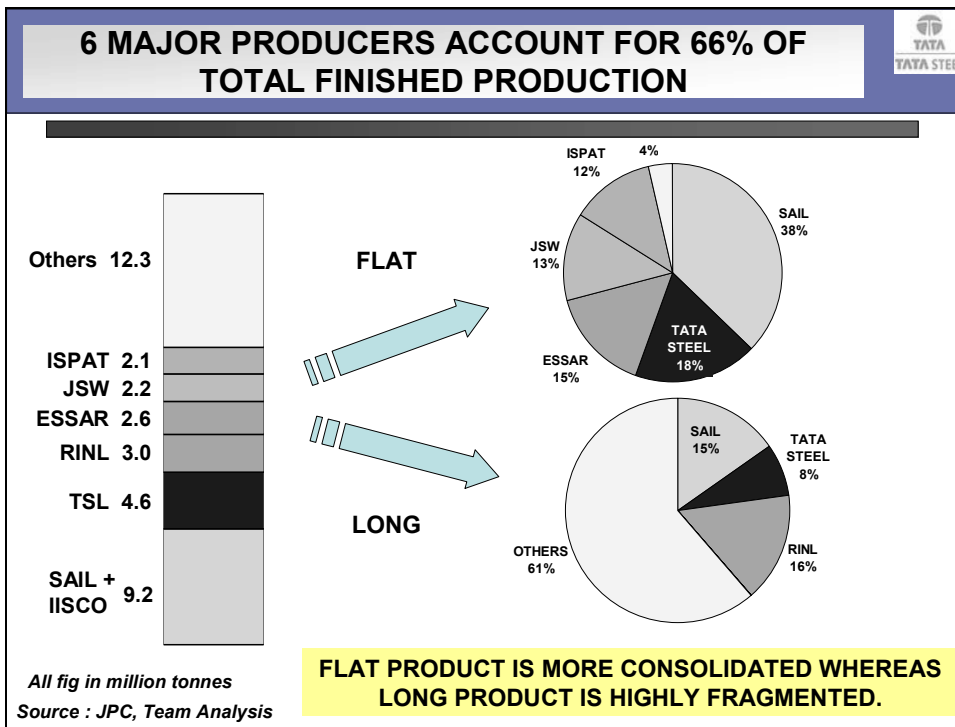




# STEEL : SUPPLY ANALYSIS, INDIA

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### CAPACITY UTILIZATION ARE STRETCHED..

	SECTOR	No. of Units	Total Capacity	Working Capacity
<b>CRUDE STEEL</b>	BF/BOF Steel	10	21	21
	EAF	38	13	7
	Indn. Fce	750	16	12.4
	Corex	1	1.6	1.6
<b>TOTAL</b>				<b>42.0</b>


*All fig in million tonnes*  
*Source : JPC, Tata Steel est.*


**THUS SIGNIFICANT CAPACITIES ARE EXPECTED IN THE MEDIUM TERM**

Both by Capacity Expansion by existing players \* . . . .

and

New Entrants with the Greenfield projects...

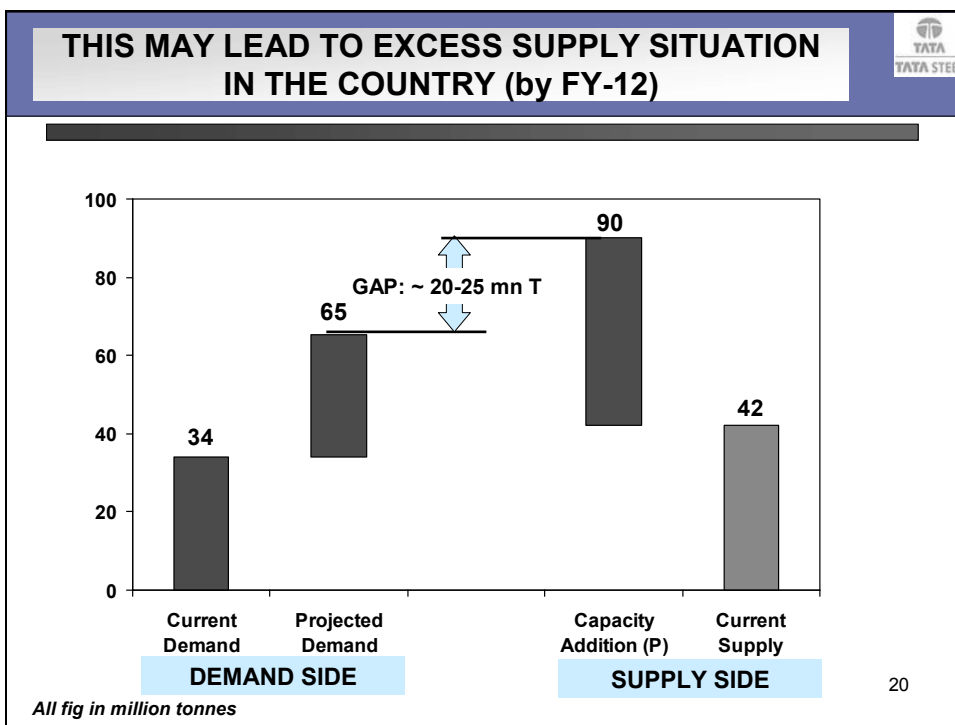


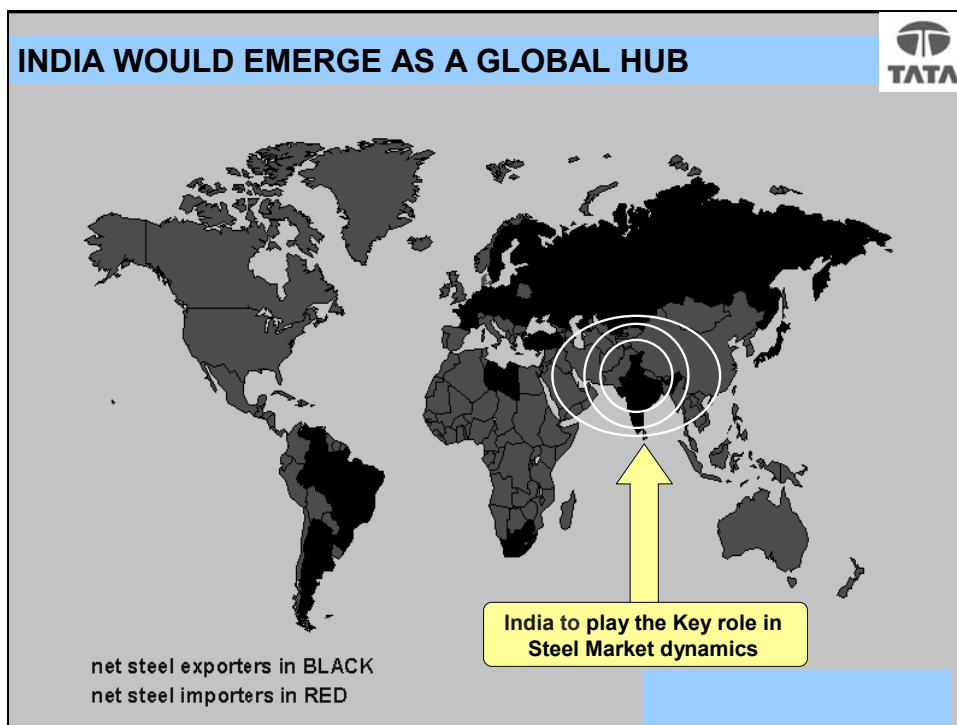
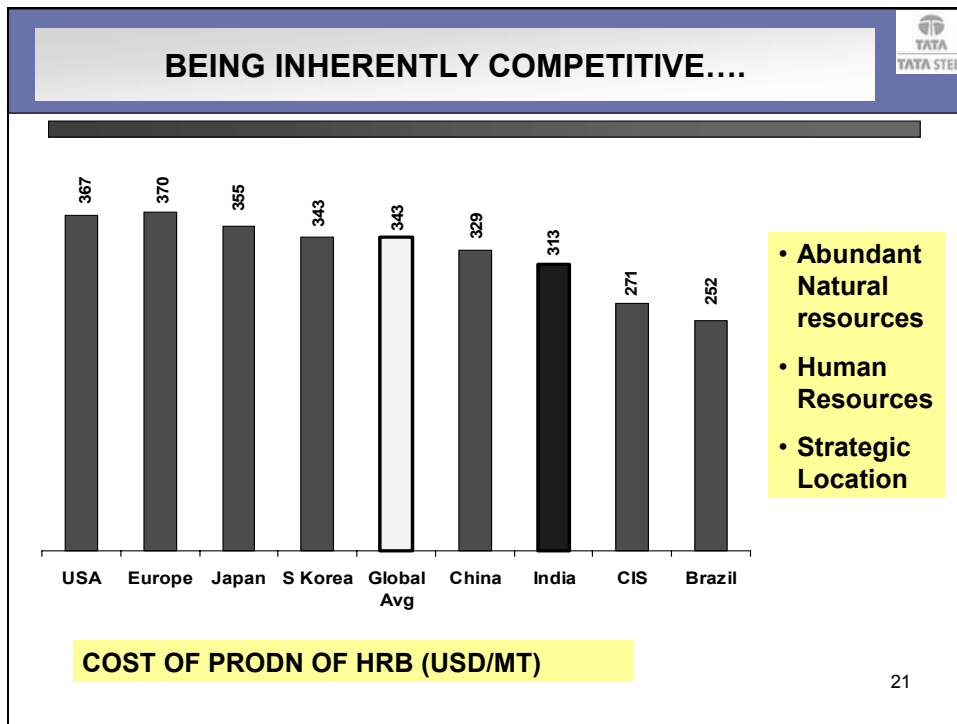


\* Incl their Greenfield Projects

Capacity Addition projected : ~ 50 Mill T in next decade.

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**IN SUMMARY..**

**TATA**  
**TATA STEEL**

- **The economic indicators are all favorable for Growth.**
- **Indian steel industry exudes optimism**
- **Investment in infrastructure is crucial to step up demand for steel.**
- **Supply may have to be rationalized in line with the demand (Dom + exports)**
- **Integrated Mills would hold the key in future growth of Indian Steel supplies.**
- **New technologies to use indigenous natural resources would have to be developed.**

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Backup




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- India will become the fastest growing economy out of 34 developed and emerging markets and 3<sup>rd</sup> largest economy by 2020.
- Current GDP per capita is USD 2500 and expected to be USD 5000 in 2020.
- Poverty ratio dropped from 50% of population in 1950 to 26% in 2005.
- Economic growth rose from 3.7% in 50s & 60s to +6% in 1980s.
- Current population growth rate of 1.5% to decrease to 1.3% in 2020.

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Backup



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- Household savings rate to increase to 30% from current 23%.
- About 100,000 MW new capacity (90% of present) will be added in power sector in next 7 years. This should also act as strong driver of steel growth.
- The Fiscal Responsibility and Budget Management Act, 2002 binds fiscal managers to specific deficit targets each year with a goal to bring down the total deficit and revenue deficit to 3% and 0% of the GDP by 2008-09.

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Backup

- Literacy standards in 1951 was 18% and currently it is 65%.
- FDI inflow is 0.5% of GDP (USD 3 bn) in recent years as compared to 4% of GDP for China (USD 45 bn)
- One of the lowest electricity consumption at 365 units per capita as compared to 893 in China and 1729 in Brazil.

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### The Global Economic Forecast: Asia poised to be the emerging power house of growth

**GDP in 2020 according to Formel-G**

Country (Rank)	GDP (USD trn)
USA (1)	17.5
China (2)	14.5
India (3)	7.5
Germany (5)	3.5
France (6)	2.5
Canada (11)	1.5
Spain (13)	1.2
Thailand (15)	1.0
Turkey (16)	0.8
Malaysia (19)	0.5
Ireland (28)	0.2

Source: Deutsche Bank Research Formel-G

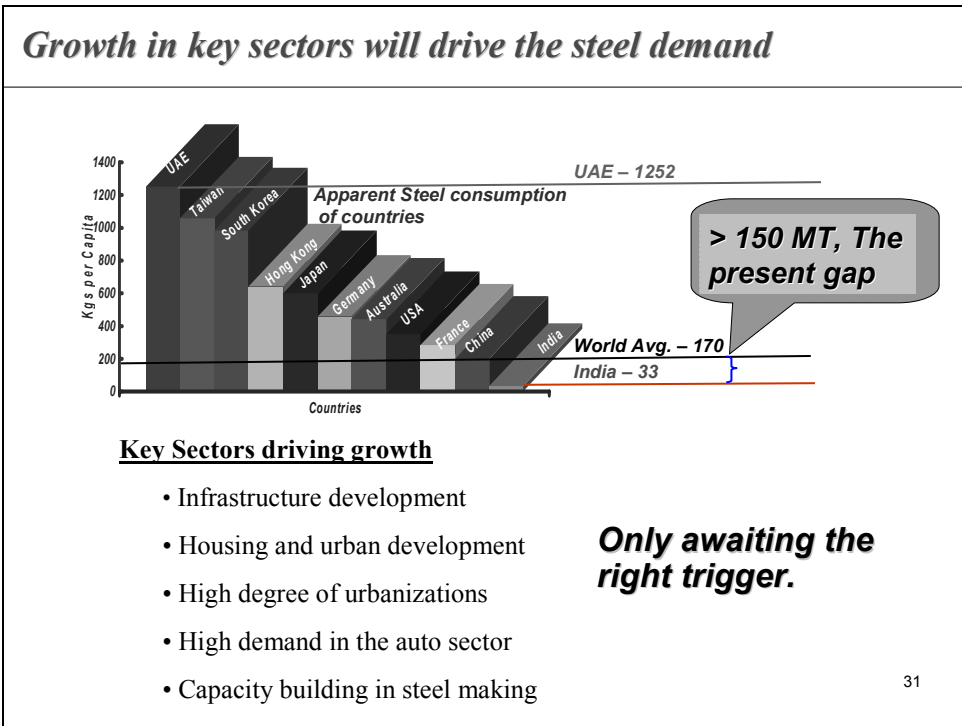
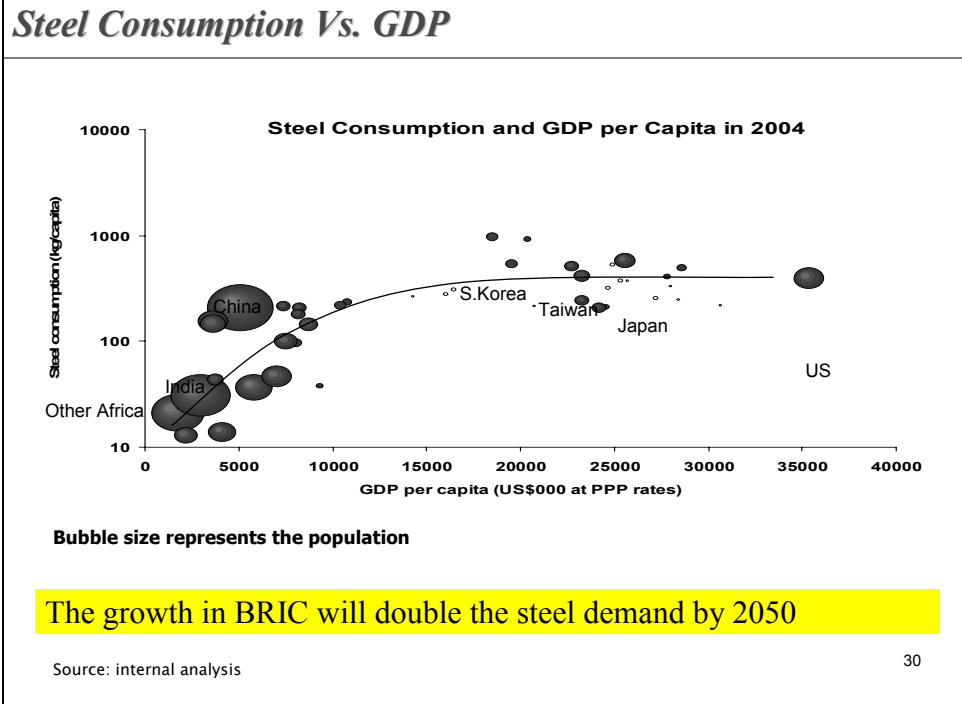
**Ranking of overall GDP growth 2006-20**

Country (Rank)	Total Growth (% yoy. p.a.)
India (1)	5.5
Malaysia (2)	5.0
China (3)	4.8
Thailand (4)	4.5
Turkey (5)	4.0
Ireland (6)	3.5
USA (11)	3.0
Spain (13)	2.5
Canada (15)	2.0
France (16)	1.8
Germany (27)	1.5

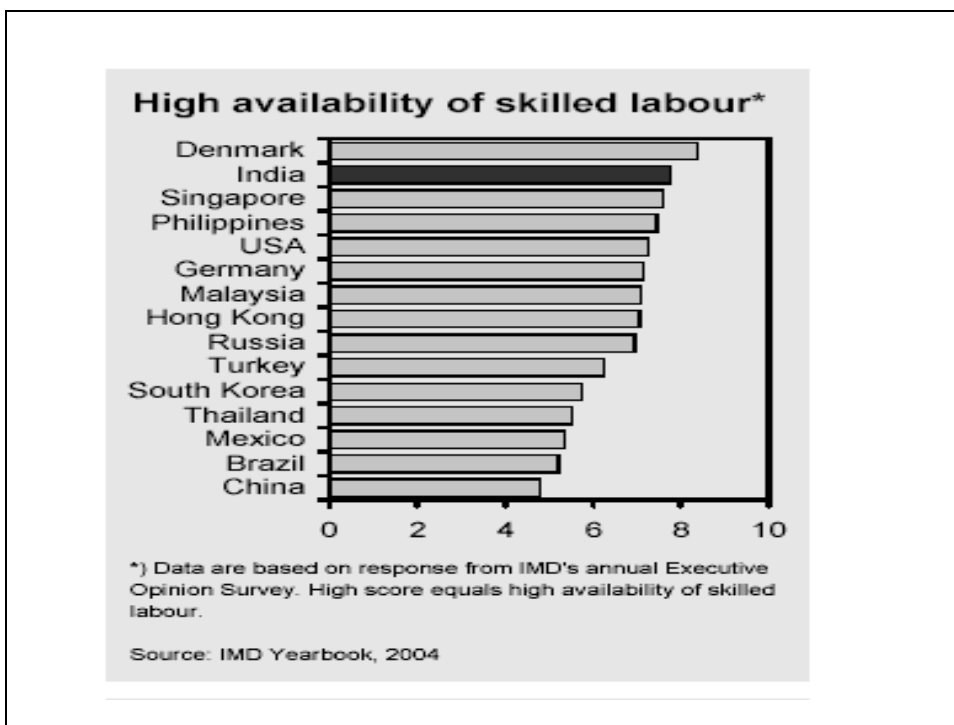
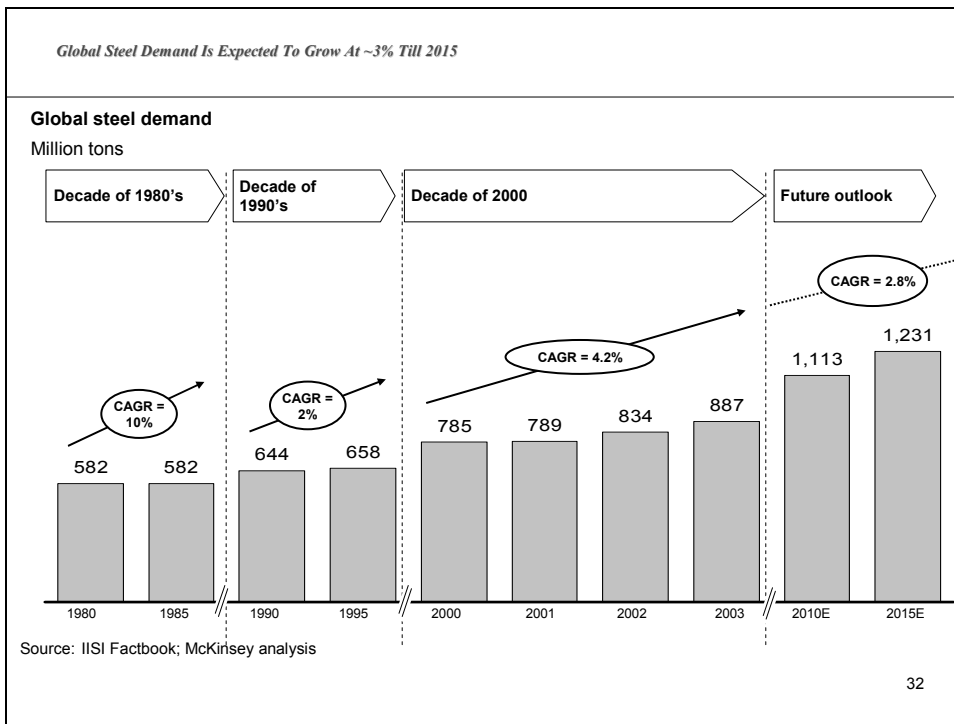
Source: Deutsche Bank Research Formel-G

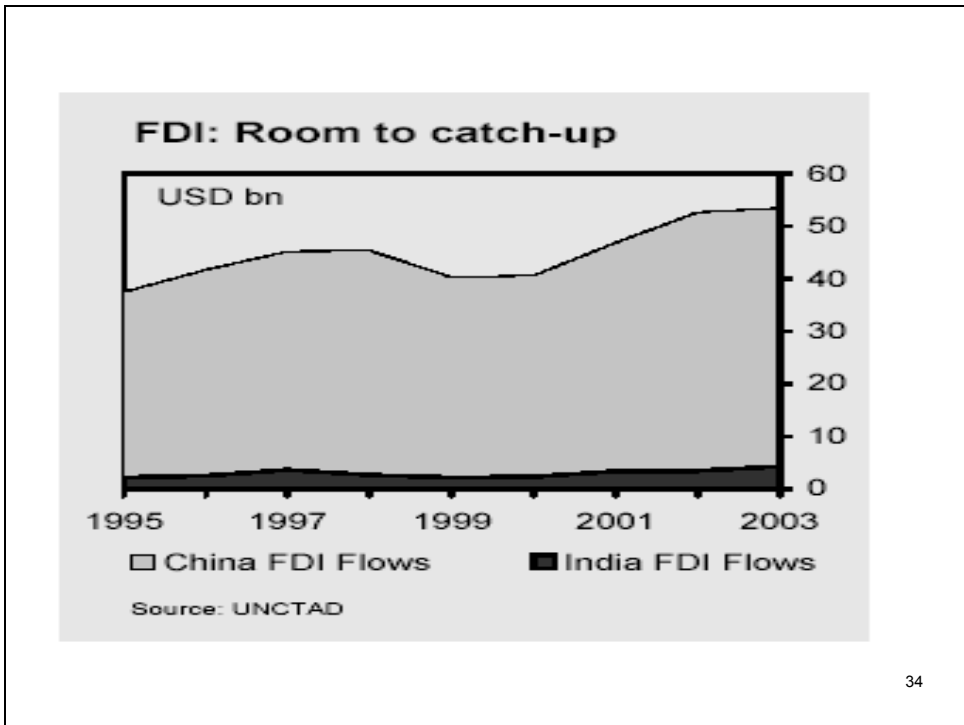
- In 2020, the US and China will still be the two largest economies in the world (in PPP)
- India leaves Japan behind and moves up to 3rd place
- India, Malaysia and China will post the highest GDP growth rates (above 5%) over 2006-20
- Ireland, the US and Spain are the rich countries expected to grow the most

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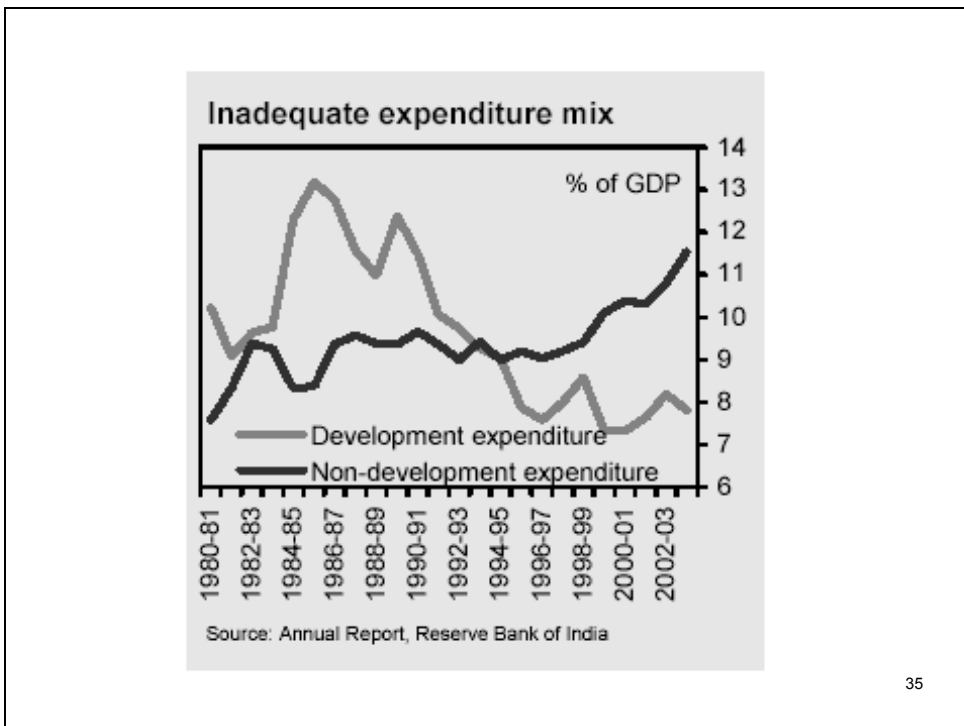








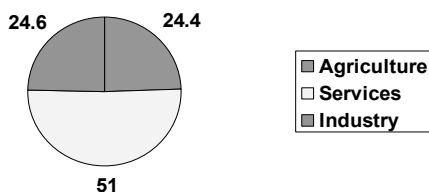
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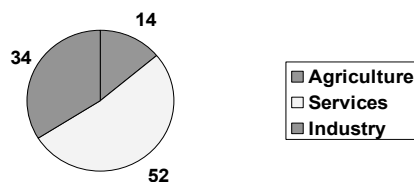
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### Raw Material demand in India to increase by 13% to meet the rise in steel demand

Sectoral Share % in 2004 - GDP growth 6%



Sectoral Share % in 2010 - GDP growth 8%

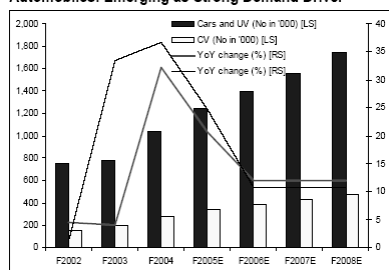


#### Imperatives for 8% GDP Growth

- Manufacturing must grow at 11%
- This means a growth of 13% for Mining Industry if it has to contribute 5% to GDP by 2010 instead of 2.5% at present.
- 13% growth in mining has to be driven by few lead minerals such as coal, iron ore, supported by other minerals.

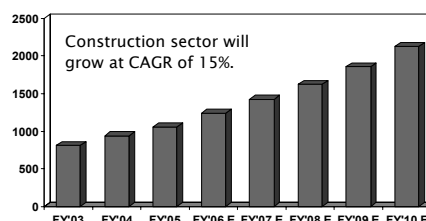
### Robust growth in infrastructure, power, construction and steel sectors will drive the Steel Demand

Automobiles: Emerging as Strong Demand Driver



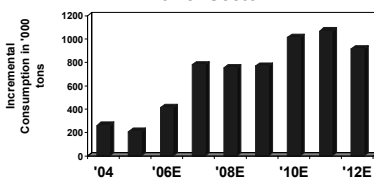
Source: S&P, E = Morgan Stanley Research Estimates

Investment in construction sector (Rs m)



Source: SSKISept'05 issue

Incremental Steel demand for Power Sector

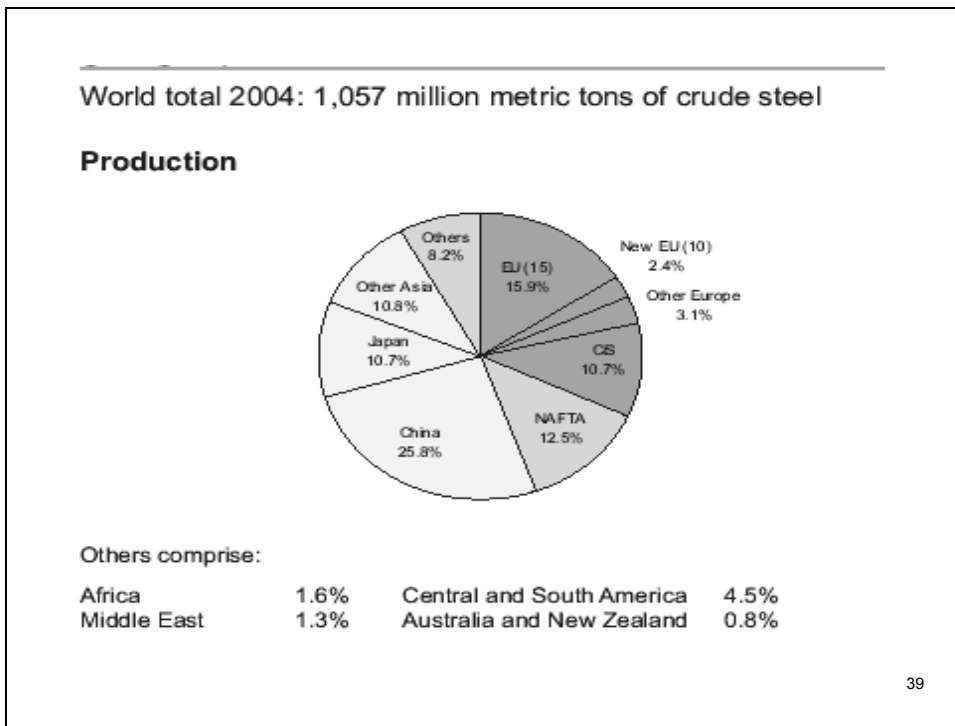
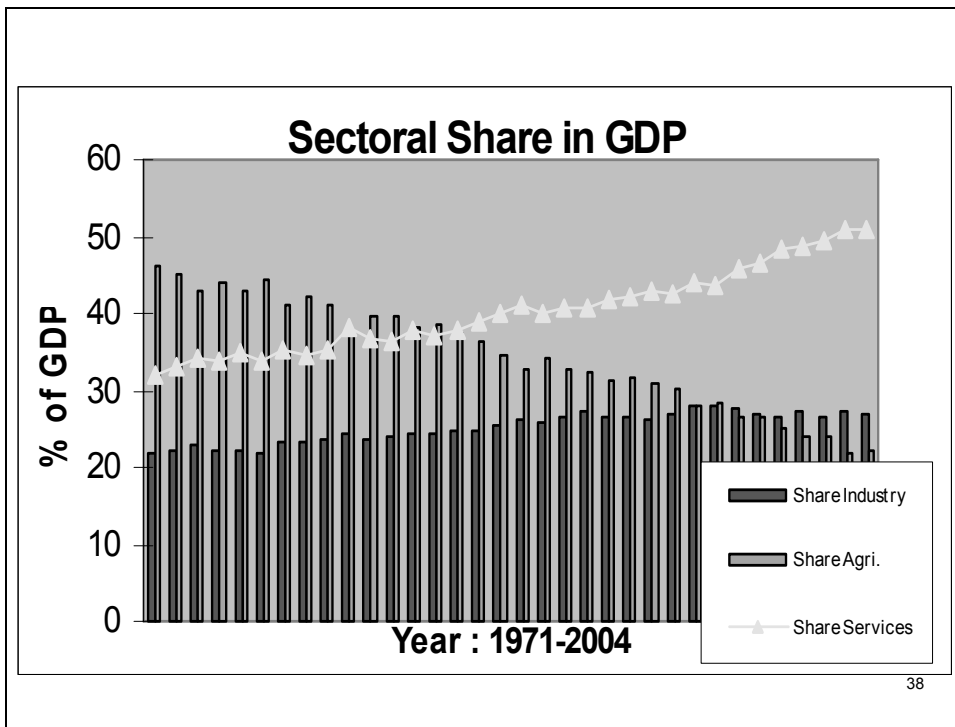


Expenditure on Infrastructure

(Rs bn)	FY03	FY04	FY05	FY06E	FY07E	FY08E	FY09E	FY10E
Airports	11	12	14	17	21	27	33	42
Ports	8	11	12	14	15	16	18	20
Power	210	226	260	282	306	332	360	391
Railways	113	119	123	128	133	139	144	150
Roads	193	228	239	323	403	484	581	697
Urban infrastructure	274	343	411	473	544	625	719	827
<b>Total</b>	<b>810</b>	<b>938</b>	<b>1,060</b>	<b>1,237</b>	<b>1,423</b>	<b>1,623</b>	<b>1,856</b>	<b>2,126</b>
% yoy change	12.2	15.9	12.9	16.7	15.1	14.1	14.3	14.6

Source: Cris Infac, SSKI research

**In addition there will be investment for additional 25 mt capacity in steel itself by 2010. Potential for steel - 25-30% of the investment cost.**



## Global steel demand poised for robust growth

