

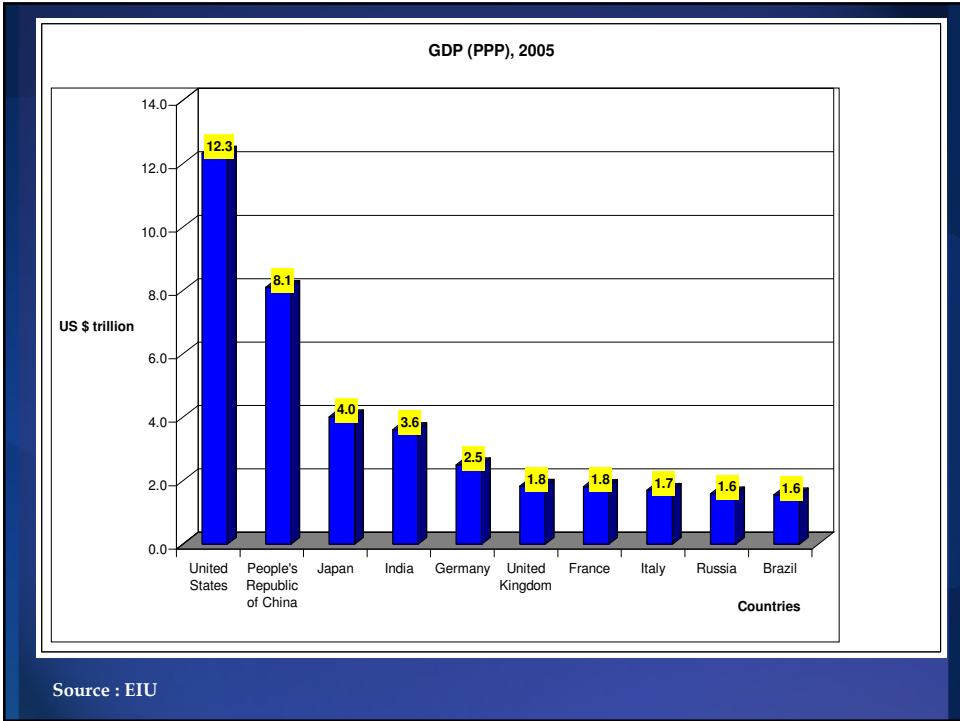
# The Rise of India: A Broad Macroeconomic Overview

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## 1. The Giant Awakens

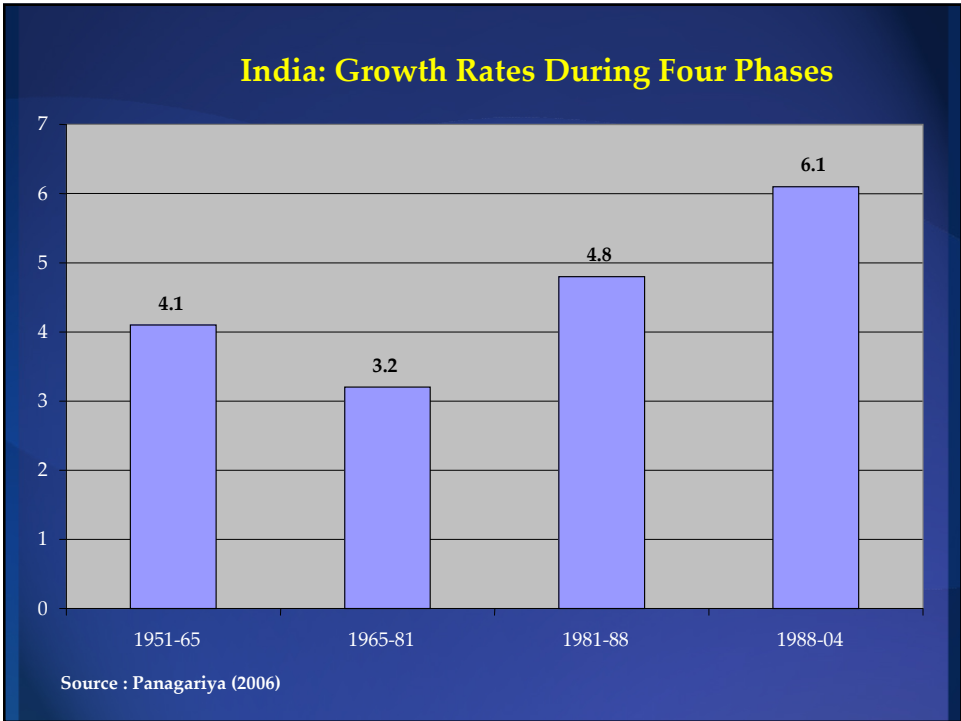
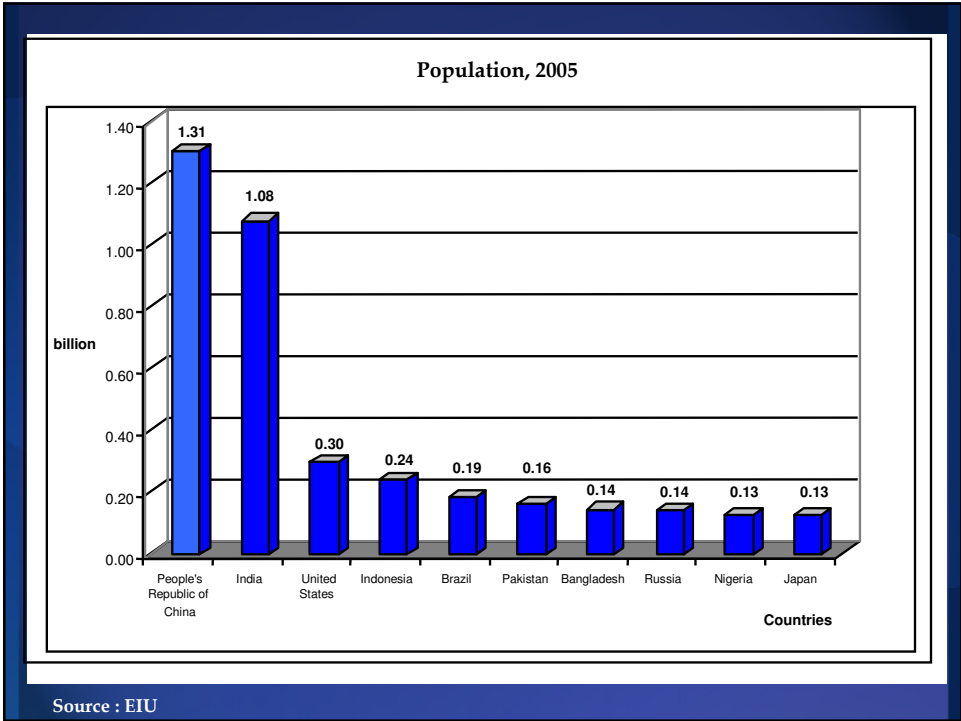
- India is the 2nd most populous country in the world and the 4th largest economy in the world based on GDP in *PPP* terms.
- Since early 1990s India has been growing robustly at an average of about 6-7 percent.
- If current growth trajectories persist India is on its way to becoming the 3rd largest, displacing Japan by the end of this decade.



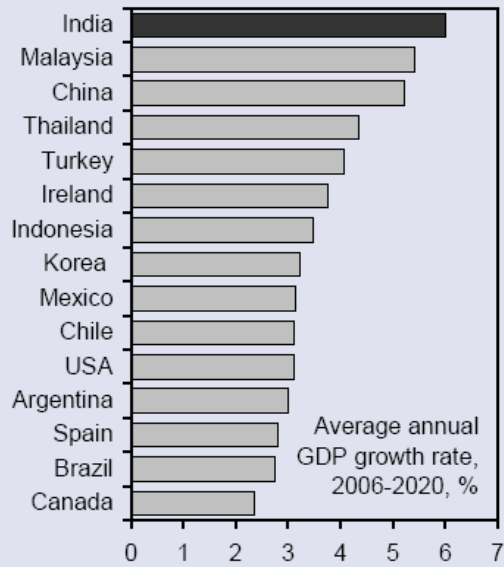
### World's Largest Economy's (GDP at market exchange rate)

2006		2026	
United States	1	United States	1
Japan	2	China	2
Germany	3	Japan	3
China	4	Germany	4
United Kingdom	5	India	5
France	6	United Kingdom	6
Italy	7	France	7
Canada	8	Russia	8
Spain	9	South Korea	9
Brazil	10	Canada	10
	...		
India	13		

Source : Accenture (2006)

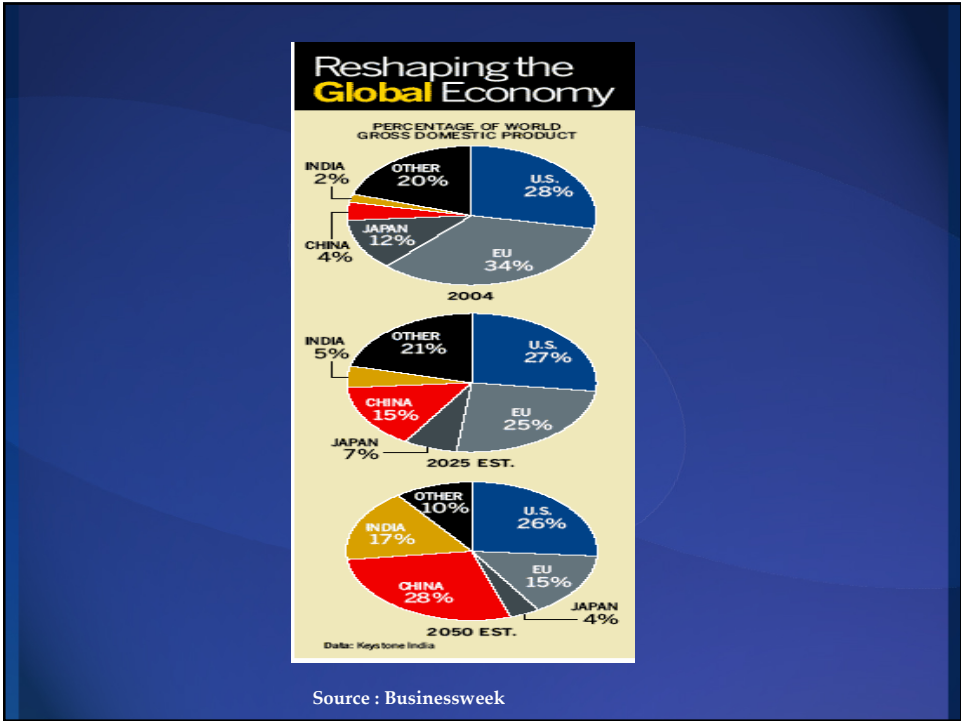


### India: Top growth performer

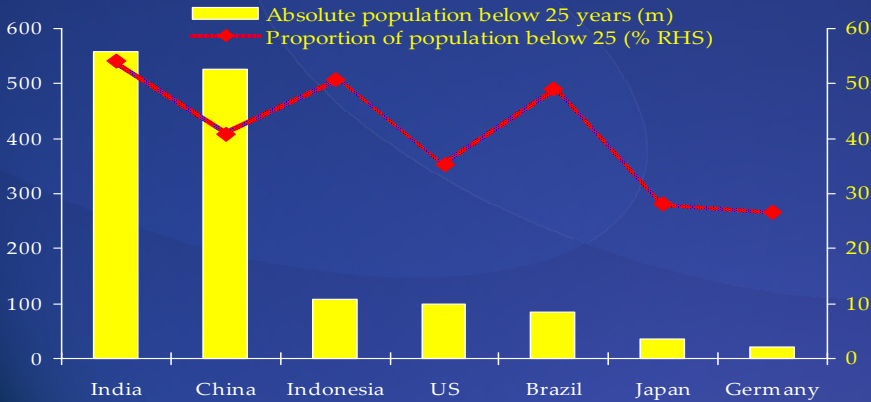


Source : Deutschebank

- Among “significant” economies only China has grown faster than India in the last decade.
- Significant medium and long term bullishness about India (GS, DB, Citi, etc). Why?
- Beyond unharnessed potential, the big issue is “demographic dividend”.



- One quarter of world's youth live in India and over half the Indian population is less than 25 yrs of age.
- By 2020 India will have 270mn people (more than today's total US population) between ages 15 - 35.



Source : www.childrendatabank.org

## India has among the World's Youngest Workforce

Exhibit 60

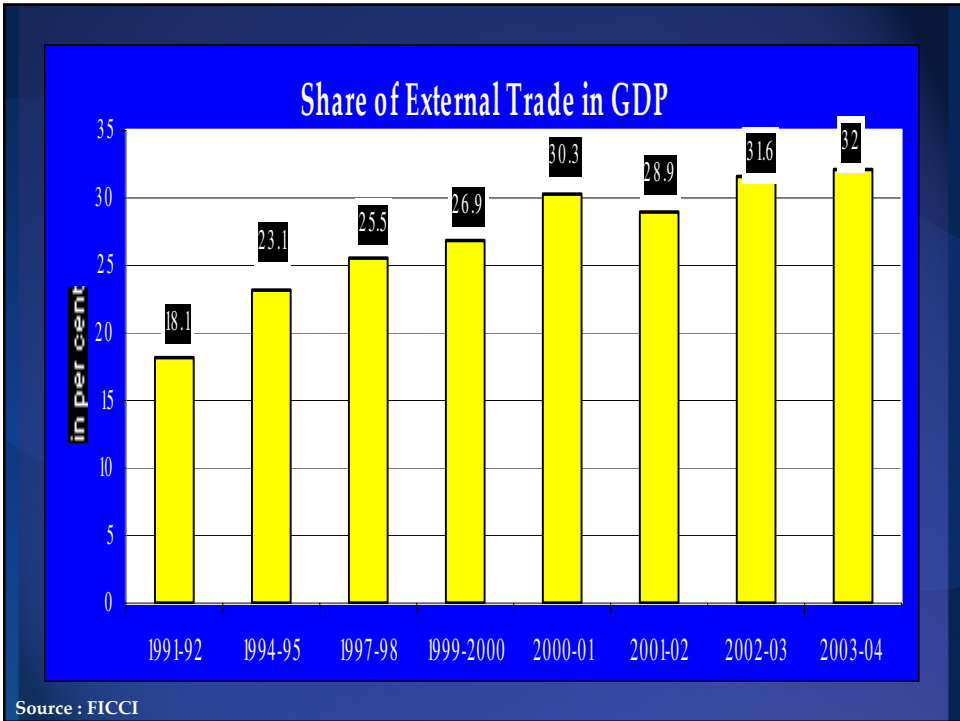
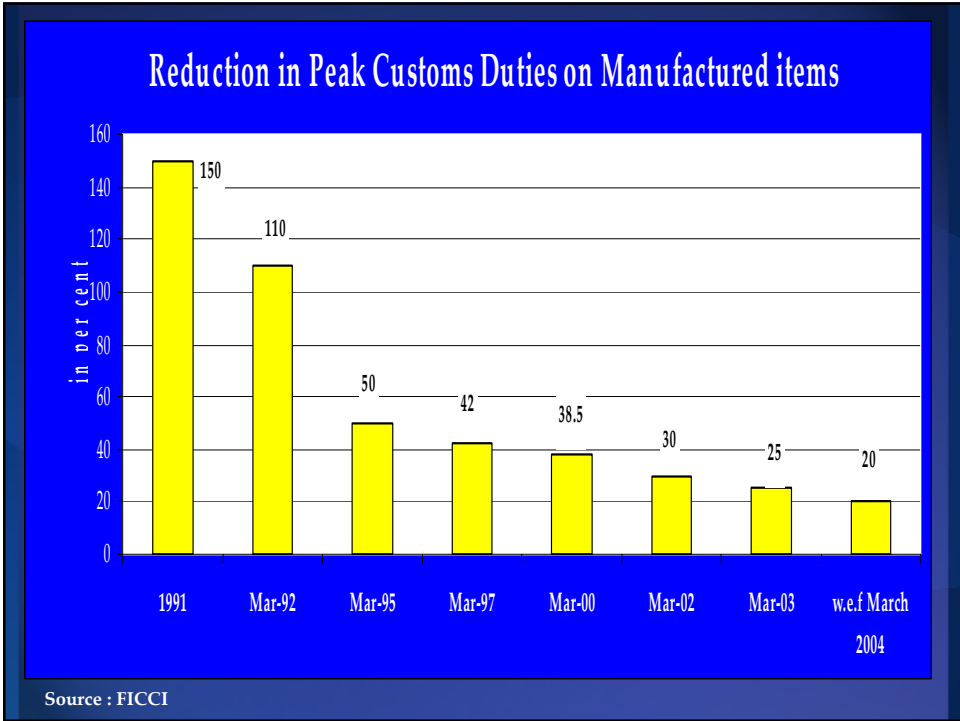
### Major Countries: Median Age (years)

	2005	2010	2015	2020
India	24.3	25.6	27.1	28.7
China	32.6	34.9	36.5	37.9
USA	36.1	36.6	37.0	37.6
United Kingdom	39.0	40.3	40.9	41.2
Western Europe	40.7	42.4	44.0	44.9
Japan	42.9	44.4	46.1	48.0

Source: United Nations

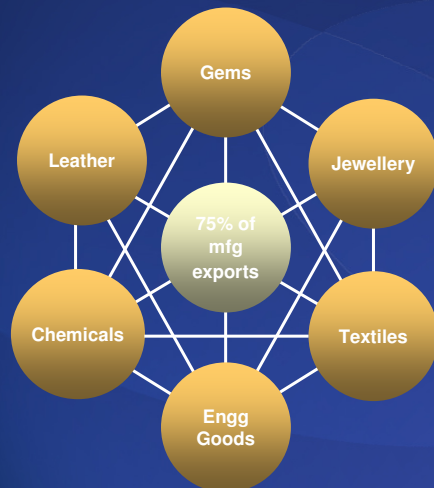
## 2. External Linkages: Trade and Finance

- India is gradually integrating with the global economy after decades of near isolation.



- Major merchandise exports: textiles, gems and jewellery, engineering goods, chemicals, leather manufactures.
- Main Export Partners (2003) USA 18.4%, China 7.8%, UAE 6.7%, UK 4.8%, Hong Kong 4.3%, Germany 4.0%.
- Major merchandise imports: crude oil, gems, machinery, fertilizer, chemicals.
- Main Import Partners: USA 7.0%, Belgium 6.1%, China 5.9%, Singapore 4.8%, UK 4.6%, Australia 4.6%, Germany 4.5%.

### A handful of sectors contribute to 75% of India's manufacturing exports

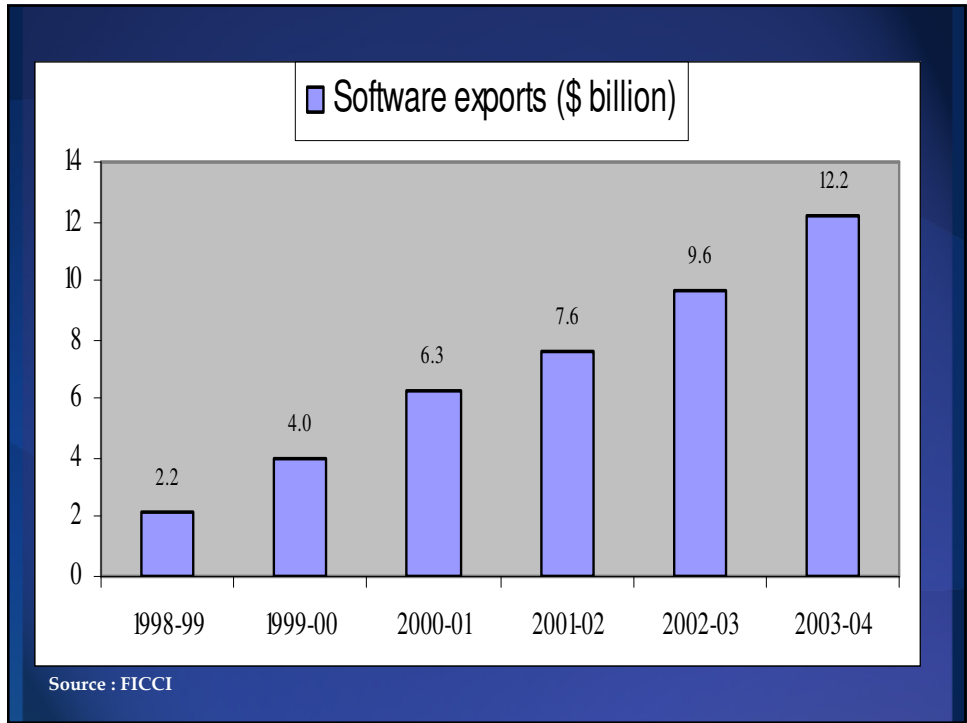


The balance 25% exports are from sectors like:

- 1) Automotive
- 2) Cement
- 3) Food Processing
- 4) Drugs/Pharmaceuticals
- 5) Telecom equipt
- 6) IT hardware/Electronics
- 7) Paper
- 8) Minerals and Metals

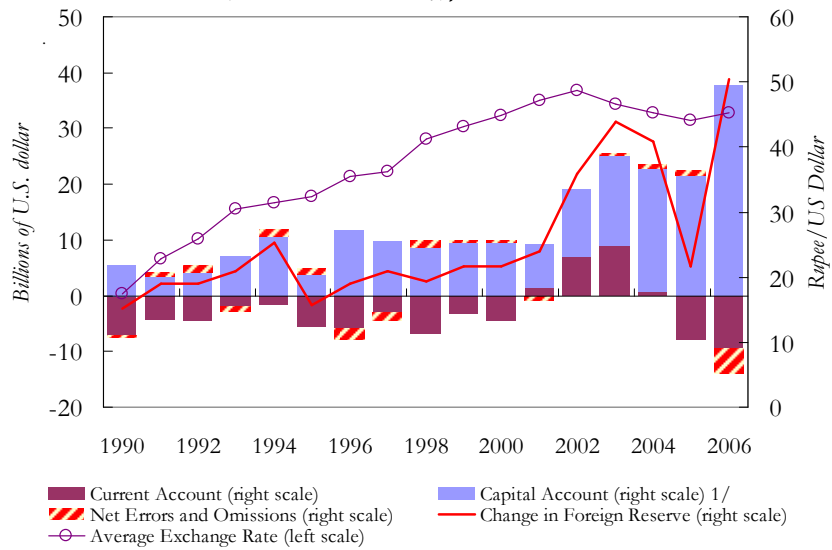
➔ Indian manufacturing is forecasted to grow at 12%-14% over the next decade and sectors like Automotive, Food Processing and Pharmaceuticals are expected to be the growth drivers

Source: IBED based on National Manufacturing Competitiveness Council



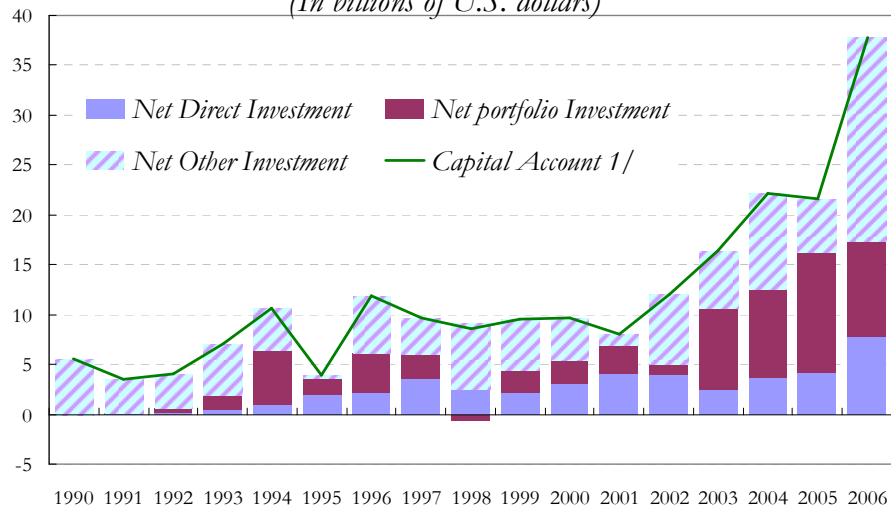
- Sharp pick up in exports and capital inflows (FIIs) contributing to balance of payments surpluses and reserves buildup (fifth largest in world).
- Large FII inflows leading to bull run on Indian stock market. (Market capitalization at over USD150 billion).
- But some concerns about Rupee value and inflation.

### Trends in India's Balance of Payments Transactions (Billions of US\$), 1990 – 2006



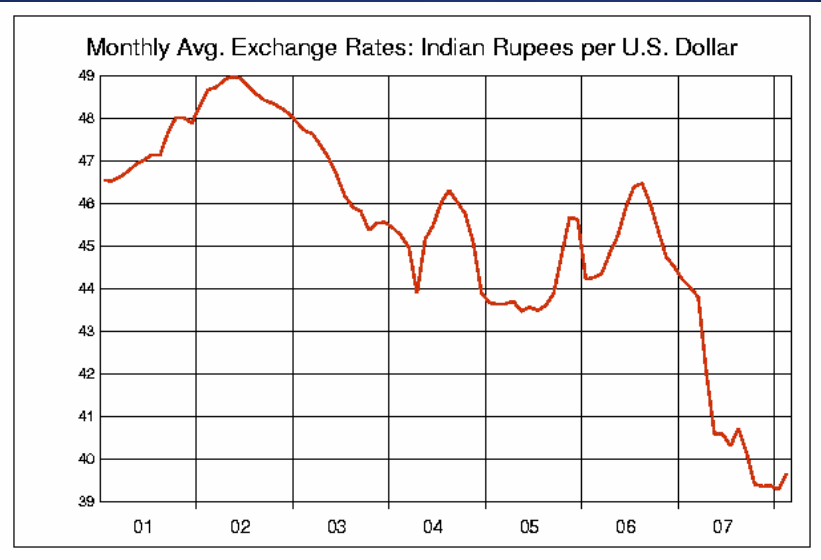
Source: IMF International Finance Statistics Yearbook.  
1/ Capital Account is defined as Financial Account.

### India's Capital Account, 1990-2006 (In billions of U.S. dollars)



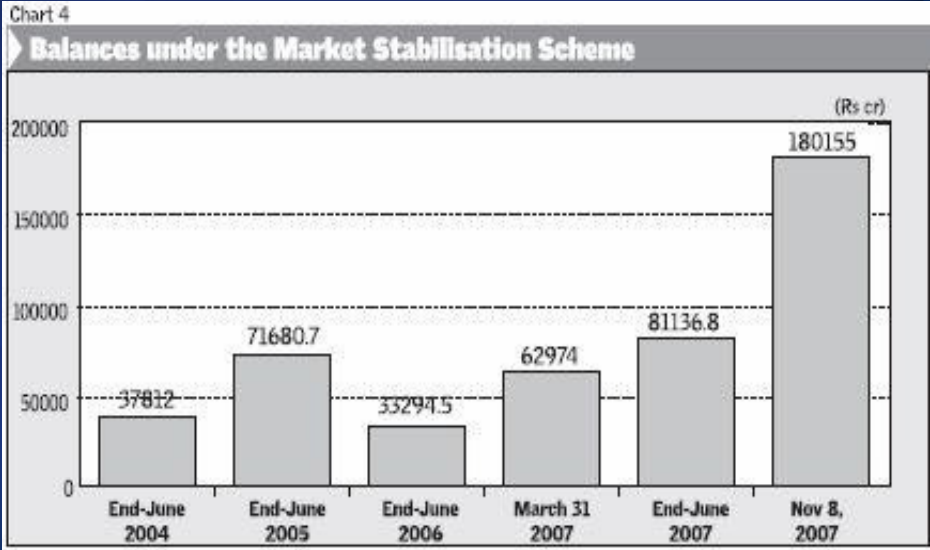
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## INR/US\$ Rate, 2001-2007



Source: Pacific Exchange Rate Services

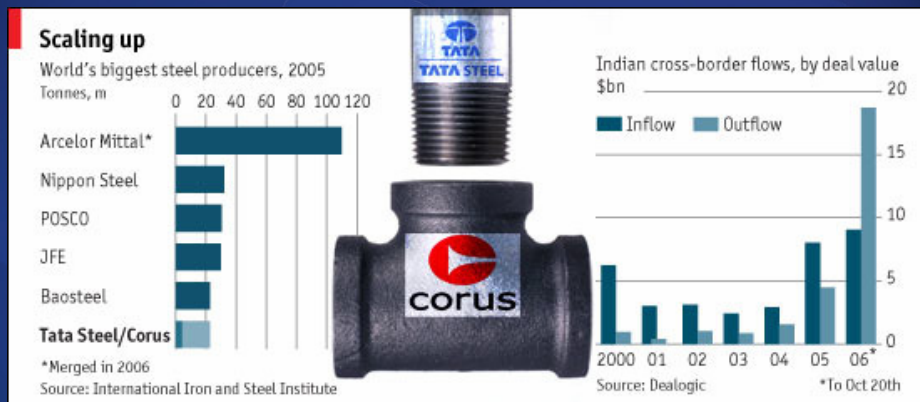
## Open Market Operations



Source: Business Line (Nov. 13, 2007)

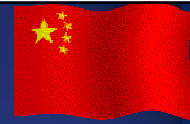
- India has a relatively strong financial sector and buoyant capital markets – in contrast to many of its developing East Asian neighbours).
- Banking Sector reforms – prudential norms stiffened.
- Independent regulators in place for Insurance sector (IRA) and Capital Markets (SEBI).
- Mature Capital Market – BSE fifth largest in terms of number of trades and second largest in terms of companies (8,000 companies listed on the BSE, second to NYSE).

- Indian companies are aggressively investing overseas.



### 3. Growth Strategy

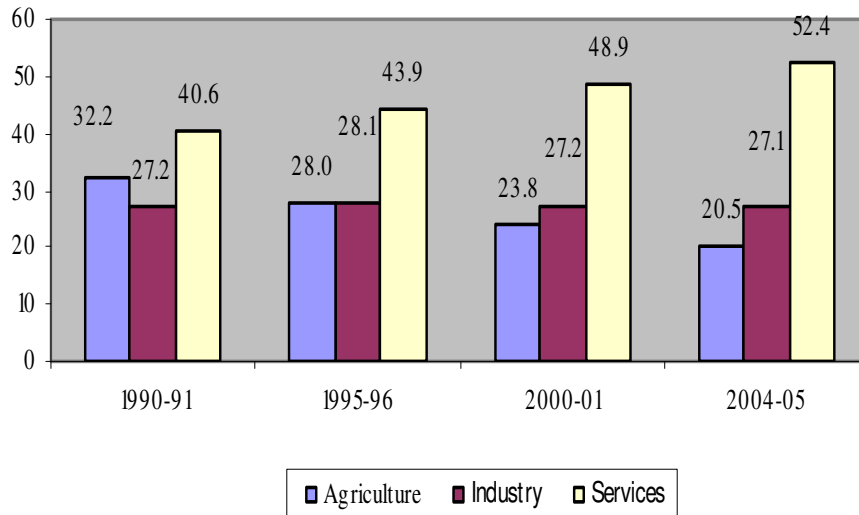
- India's key medium-term strength: Growth led primarily by local corporates/entrepreneurs as in Japan, Korea and Taiwan.
- This distinguishes India's growth strategy from that of China and ASEAN that are more FDI dependent.
- Infosys, Wipro, TCS, Ranbaxy, Hindalco, Tata Steel are emerging global leaders in their respective niches.
- Services versus Manufacturing?



#### ➤ India versus China: Stephen Roach of Morgan Stanley:

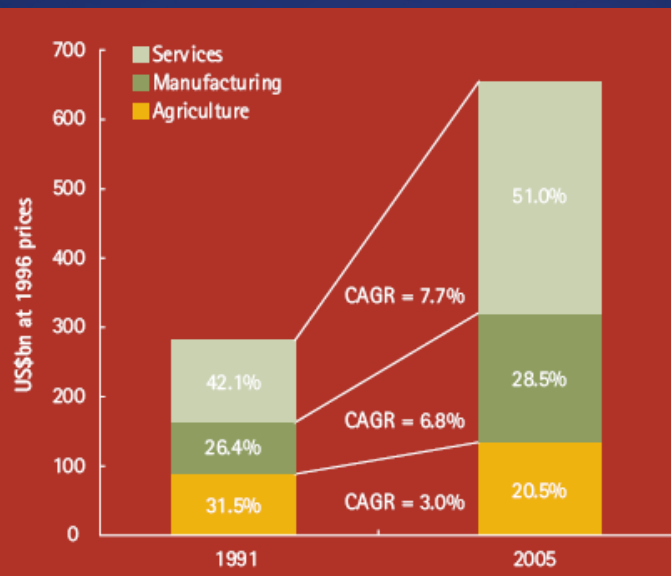
*It's tempting to make the China-India comparison... I see no reason to frame this in such black and white terms... I am inclined to argue that it's not China or India but, in fact, China and India. Each of these two nations has a distinctly different recipe for economic development—recipes that are complements rather than substitutes as they fit into the broad mosaic of globalization...China has an outward-looking development model...India has much more of a home-grown development model that is now gaining global reach...I have long been a big fan of China's remarkable accomplishments. India's awakening is equally impressive.*

## India's Sectoral Share of GDP (%)



Source : FICCI

## Structure of the Indian Economy



Source : EIU

- Agriculture still dominates employment but service output now constitute 50% of the economy after growing at an average annual growth rate of 8% over 1990-2003.
- This is unusual among developing countries – more consistent with developed countries.
- Low labour productivity in agriculture and low employment elasticity of services an issue.

- India is the destination of choice for Business Processing Operations (BPOs) and IT operations for many of the world's leading corporations.

WHERE <b>INDIA</b> IS MAKING AN IMPACT	
<p><b>SOFTWARE</b> India is now a major base for developing new applications for finance, digital appliances, and industrial plants.</p>	<p><b>IT CONSULTING</b> Companies such as Wipro, Infosys, and Tata are managing U.S. IT networks and re-engineering business processes.</p>
<p><b>CALL CENTERS</b> Thousands of Indians handle customer service and process insurance claims, loans, bookings, and credit-card bills.</p>	<p><b>CHIP DESIGN</b> Intel, Texas Instruments, and many U.S. startups use India as an R&amp;D hub for microprocessors and multimedia chips.</p>
... AND WHERE IT'S GOING <b>NEXT</b>	
<p><b>FINANCIAL ANALYSIS</b> Research for Wall Street will surge as U.S. investment banks, brokerages, and accounting firms open big offices.</p>	<p><b>INDUSTRIAL ENGINEERING</b> India does vital R&amp;D for GE Medical, GM, engine maker Cummins, Ford, and other manufacturers plan big engineering hubs.</p>
<p><b>ANALYTICS</b> U.S. companies are hiring Indian math experts to devise models for risk analysis, consumer behavior, and industrial processes.</p>	<p><b>DRUG RESEARCH</b> As U.S. R&amp;D costs soar, India is expected to be a center for biotechnology and clinical testing. <small>Data: BusinessWeek</small></p>

Business Week 2003, December 8.

- But India's growth story is no longer just about tradeable services or to IT in particular.
- Indian manufacturing industry is in the midst of renaissance -- witnessing a substantial boost in manufacturing exports, outsourcing contracts and new investments.

- Emerging strengths areas like pharmaceutical and biotechnology sectors, automobiles, auto parts and accessories as well as machine tools.
- Agriculture, Handicrafts, Handloom, Gems & Jewellery, Leather & Footwear are thrust areas of New Foreign trade Policy (2004-2009).

- India is much more than IT or Services!
  - 4<sup>th</sup> largest pharmaceuticals producer in world (8% share of global production by volume) and over 100 Indian formulations have received United States FDA approval.
  - More than 900 companies involved in traditional biotech products.
  - Largest motorcycle manufacturer in the world, 2nd largest scooter and tractor manufacturer in the world and world's 2<sup>nd</sup> largest small car market.
  - Many leading MNCs have established Mfrg bases and R&D centers in India.

➤ Within Services, India is more than ICT!

- Largest producer of films and entertainment content in the world. Animation and special effects being outsourced to India (Spiderman and Gladiator!).
- More than 100 global companies outsource R&D facilities from India.
- Medical tourism / healthcare is one of the fastest growing sectors in India.

➤ Tourism, retail and property development among other areas for India to develop.

#### 4. Challenges Going Forward

- India to some extent is a micro level story – corporate and private sector driven from the bottom-up unlike China which was driven largely by large savings and huge investments.
- Growth has become self-sustaining and broad-based.

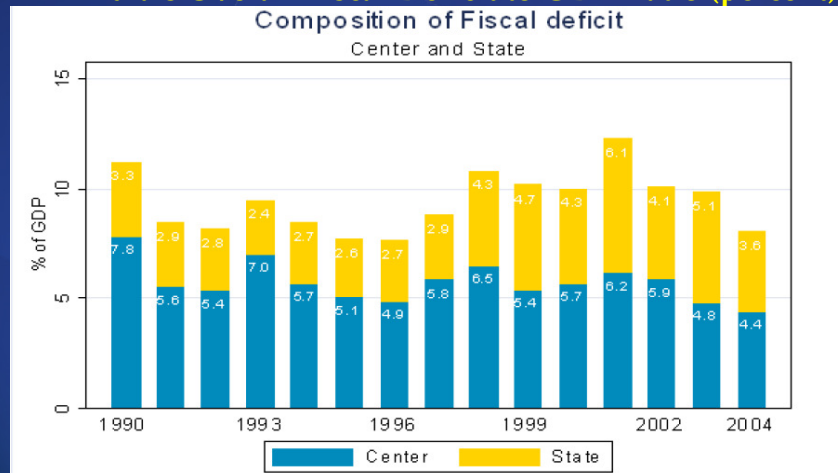
- Further push needed in areas of infrastructural development (ports, roads, airports, power etc)– especially important if India is to become a manufacturing powerhouse of the scale of China.
- Infrastructure in India is -- *gradually* -- beginning to improve but significant gaps remain, especially in power.

➤ Estimated that India needs over US\$ 330 billion in infrastructural investments in next decade.

- Power Generation - US\$ 143 billion.
- Power Transmission & Distribution – US\$ 116 billion.
- Roads – US\$ 40 billion.
- Ports – US\$ 20 billion.
- Railways – US\$ 15 billion.

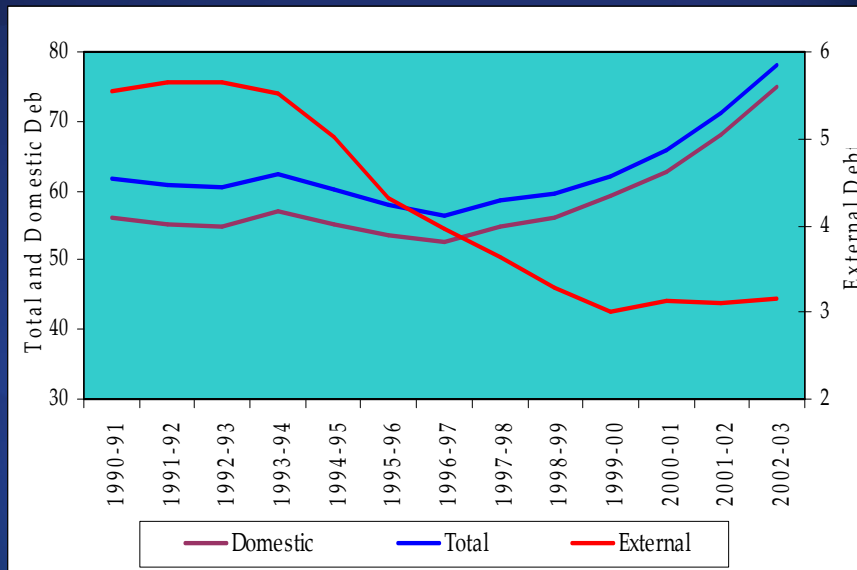
➤ State level fiscal indiscipline leading to rising public debt could become a concern if there is sharp economic slowdown.

### India's Overall Fiscal Deficit to GDP Ratio (percent)



Source: Bhalla (2005)

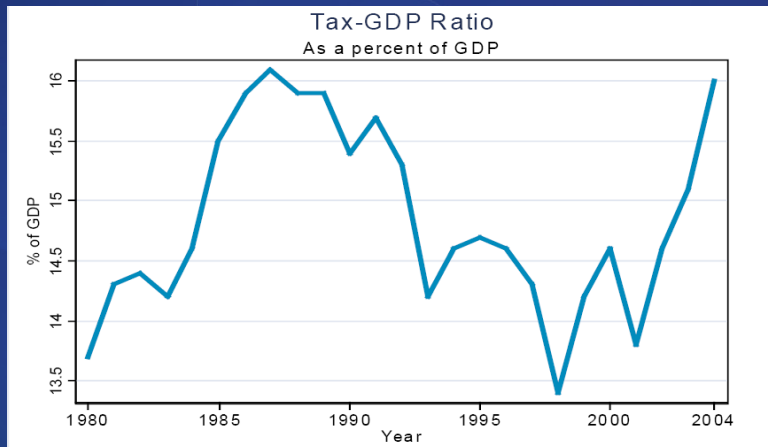
## India's Public Debt



Source: Handbook of Statistics, RBI and CSO

- Tax reform is imperative in India:
  - Rate rationalization.
  - Base-broadening.
  - Improved administration and enforcement of income taxes.

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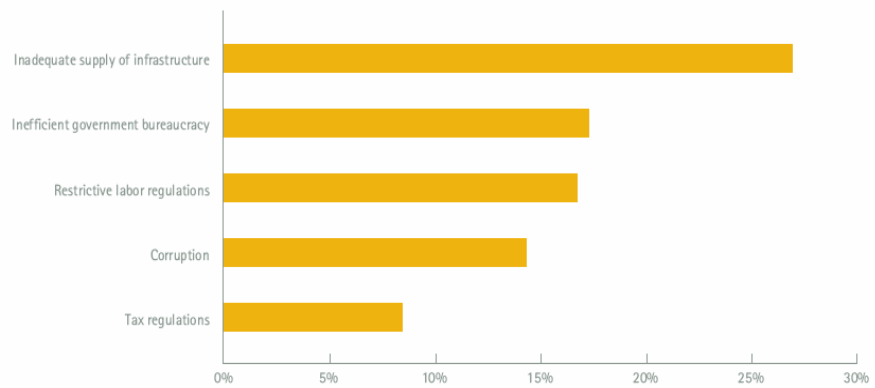


Source: Bhalla (2005)

- Poor political governance – pronouncements versus implementation.
- Need for simplifying rules and regulations as well as bringing about greater accountability of policy makers and civil servants.
- Lack of coordination between regions and centre.

- Revitalizing rural economy.
- Improving delivery of essential public services.
- Improved management of urban areas.

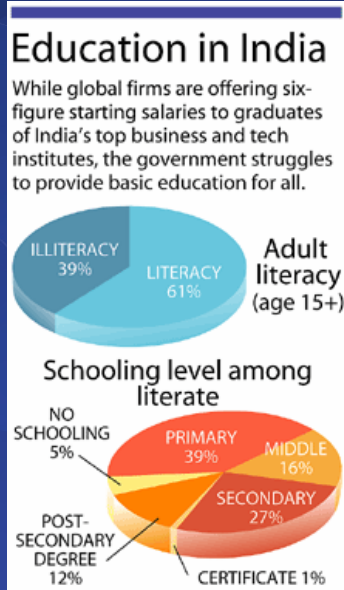
## Constraints on Indian Growth



Note: Respondents were asked to select the five most problematic factors for doing business in India. The bars show the responses weighted according to their rankings.

Accenture (2006)

- Imperative to keep in mind who the reforms are for...



## India Lags in Public Health Indicators

Indicators	US	South Africa	China	India
Population	290 million	43 million	1.3 billion	<b>1 billion</b>
% Urban	79%	49%	31%	<b>27%</b>
GDP/capita	\$36,300	\$10,000	\$4,700	<b>\$2,600</b>
Adult Literacy	97%	86%	86%	<b>60%</b>
Life Expectancy	77	46	72	<b>63</b>
MMR/100,000	17	230	56	<b>540</b>
<b>Adults: % HIV+</b>	<b>0.6%</b>	<b>18%</b>	<b>&lt;0.1%</b>	<b>0.9%</b>

Source: Amita Gupta (2006)

*Have fun in India!*