

# **GROWTH DYNAMICS IN CHINA:**

**TUSIAD-Sanbanci University**

**Competitiveness Forum**

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## **Topics**

- **Facts and perspectives: Infrastructures and FDI**
- **India's emerging advantage**
  - **Microeconomics**
  - **Soft infrastructures**
- **What India should not learn from China?**
  - **Shanghai model?**
  - **China's building boom**
- **Challenges**

# CONVENTIONAL WISDOM: HARD INFRASTRUCTURES TRANSLATE INTO HUGE GROWTH ADVANTAGES

*“The tiger in front,” The Economist, March 3rd, 2005:*

*“China's other big advantage over India is its infrastructure. It has 30,000km (19,000 miles) of expressway, ten times as much as India, and six times as many mobile and fixed-line telephones per 1,000 people.”*

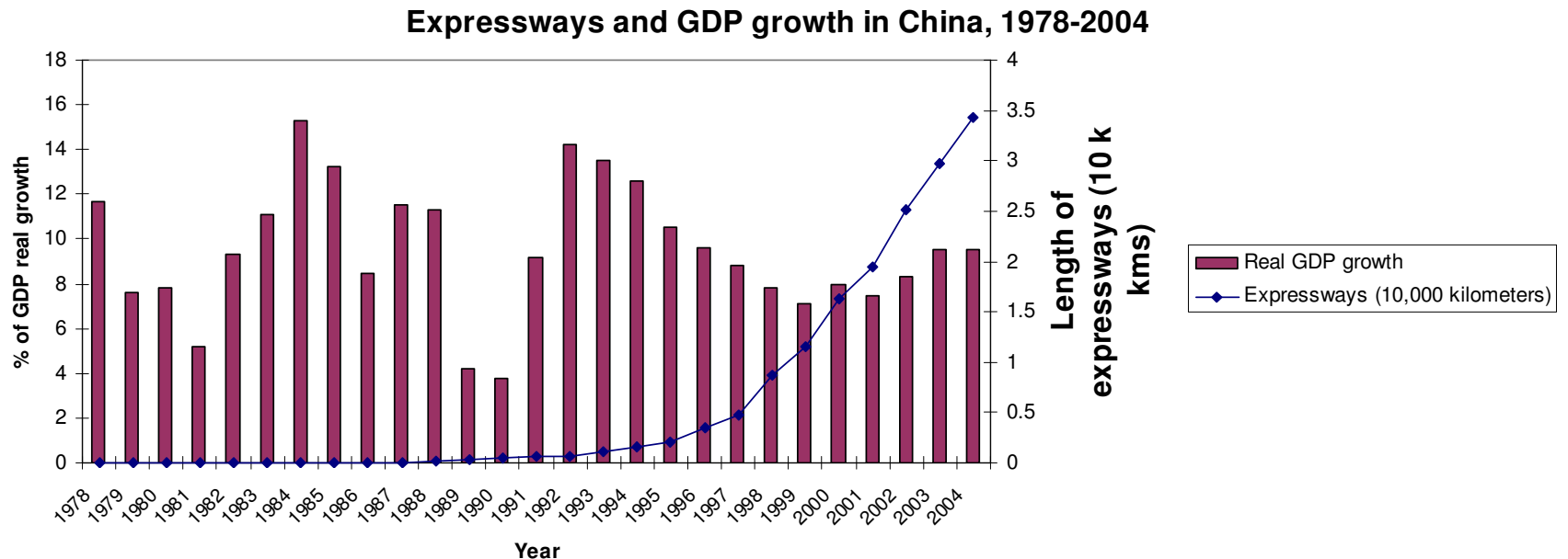
# ***ASSESSING CONVENTIONAL WISDOM:*** **WHICH OF THE FOLLOWING TWO COUNTRIES IS CHINA?**

- Telephones (1989):
  - Country 1: 107 telephone sets per 1,000 persons
  - Country 2: 10 telephone sets per 1,000 persons
- Length of paved roads (1989):
  - Country 1: 1.4 million kilometers
  - Country 2: 862,000 kilometers
- Length of railways (electrified railways)
  - Country 1 (1980-1): 61,240 kilometers (5,345 kilometers)
  - Country 2 (1981): 53,900 kilometers (1,700 kilometers)

# **COUNTRY 1 HELD SYSTEMATIC ADVANTAGES IN INFRASTRUCTURES OVER COUNTRY 2 BUT COUNTRY 2 IS CHINA**

- Telephones (1989):
  - The former Soviet Union: 107 telephone sets per 1,000 persons
  - China: 10 telephone sets per 1,000 persons
- Length of paved roads (1989):
  - India: 1.4 million kilometers
  - China: 862,000 kilometers
- Length of railways (electrified railways)
  - India (1980-1): 61,240 kilometers (5,345 kilometers)
  - China (1981): 53,900 kilometers (1,700 kilometers)

- China only began to have a sizeable expressway system in the late 1990s:
  - 1999: 11,600 kilometers
  - Much of the 1980s: No expressway at all
- GDP Growth
  - 1978-1989: 9.7%
  - 1990-1998: 10.0%
  - 1999-2004: 8.3%
- Growth first and then infrastructures



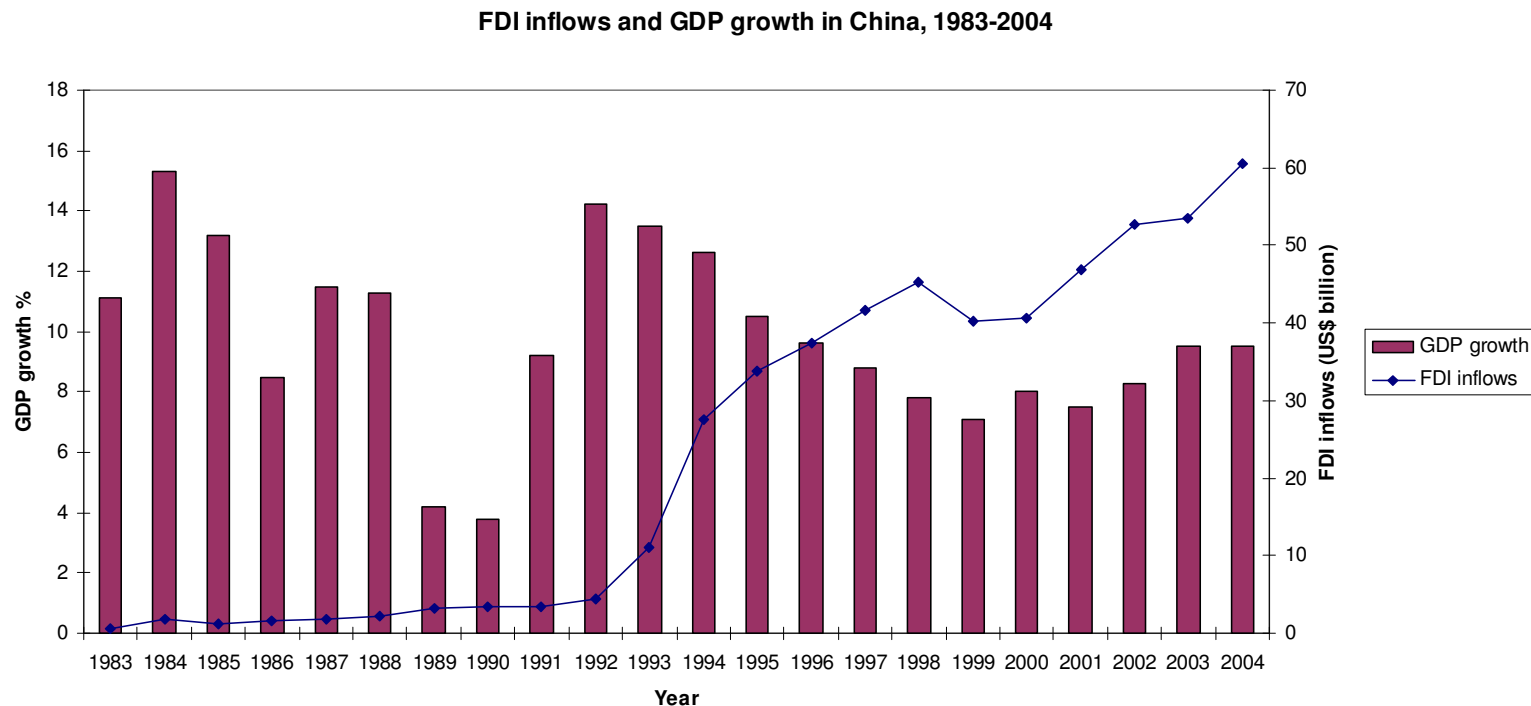
*The Economist, March 3<sup>rd</sup>,  
2005: “FDI inflows, no  
contest.”*



*“In China, provinces compete to lure investment. Paran Balakrishnan, of India's Telegraph newspaper, once accompanied a party of Indian businessmen to China and explains that they were flabbergasted, on approaching the northern town of Datong, to find their bus joined by the local mayor and given a police escort. Few Indian state officials or politicians go out of their way to attract foreign investors.”*

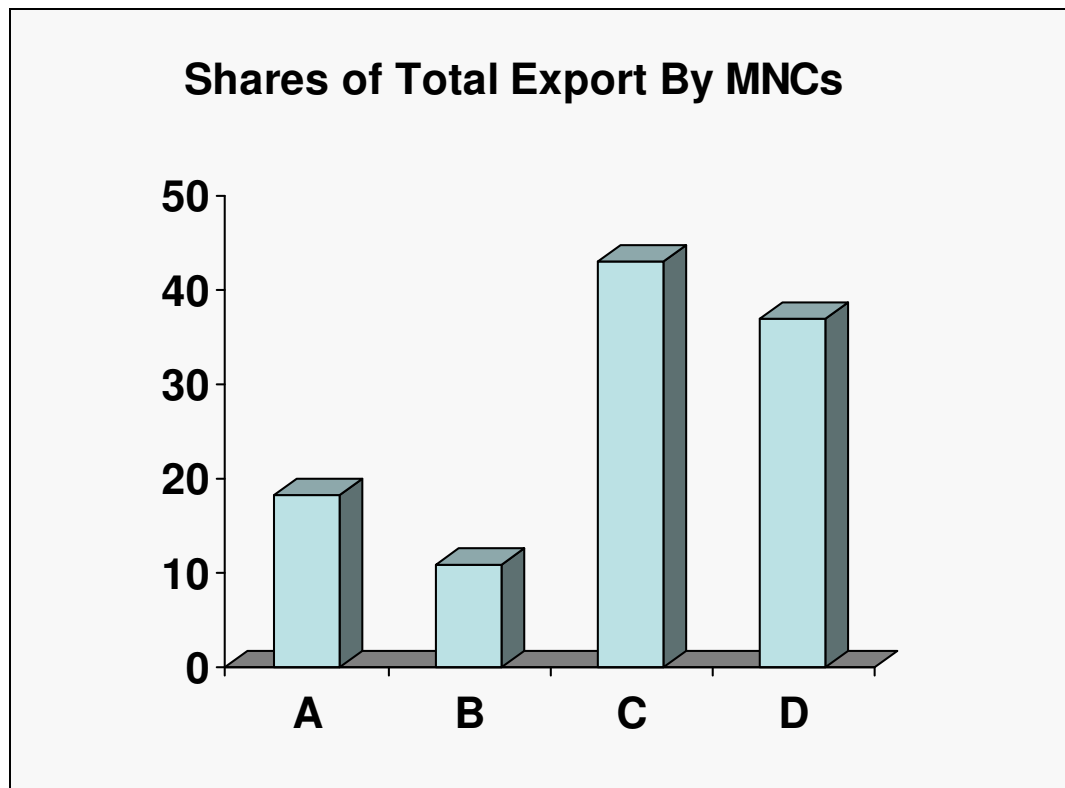
# FDI AND CHINA'S GDP GROWTH

- In the 1980s, China got very little FDI
  - But GDP growth was very strong
  - 60 to 80% of the poverty reduction occurred in the first five years of the 1980s
  - FDI played no role in China's best performing province, Zhejiang
- Growth first and then FDI



# THE GREAT VIRTUES OF FDI: PROMOTING EXPORT COMPETITIVENESS

Which two economies were more successful growth stories?

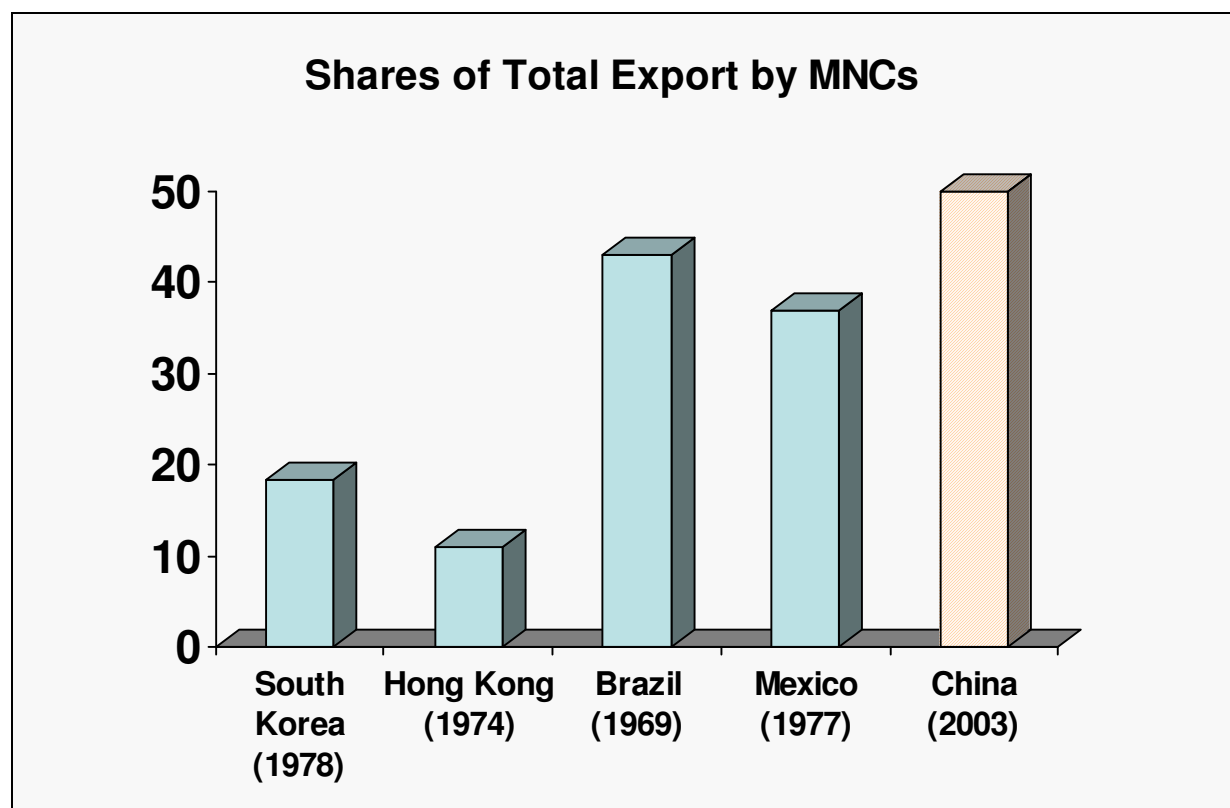




# AN FDI-DRIVEN MODEL

The contrast between the East Asian model and the Latin American model

- China is far closer to the Latin American model



# GETTING THE CHINA STORY RIGHT: GROWTH NEEDS TO COME FIRST

## □ How China did it?

- Grow your economy first
- A deeper question is how growth happens, not how infrastructures get built and how China got FDI

# GETTING THE CHINA STORY RIGHT: GROWTH NEEDS TO COME FIRST

- ❑ An very important implication: What is the causal sequence?
  - Why so many Western business analysts under-estimated India a few years ago?
  - They only looked at India's hard infrastructures without any understanding of its soft infrastructures: 1) property rights and 2) a *relatively* efficient financial system.
  - The Wenzhou model in China
    - Good soft infrastructures
    - But poor hard infrastructures until recently.
- ❑ For China now, would massive **state-led** investment programs undermine property rights security and financial efficiency?

# THE TRUE CHINA MIRACLE

## A solid social foundation

### ❑ Life expectancy:

#### ▪1965:

- China: Men at 54 years and women at 55 years
- India: Men at 46 years and women at 44 years

#### ▪1985:

- China: Men at 68 years and women at 70 years
- India: Men at 57 years and women at 56 years

#### ▪2005:

- China: Men at 70.1 and women at 73 years
- India: Men at 62 years and women at 64 years

# THE TRUE CHINA MIRACLE

## A solid social foundation

- ❑ Infant mortality under 5 (1988-1993):
  - China: 54 per 1,000
  - India: 122 per 1,000
- ❑ Primary education (gross enrollment ratio, female):
  - China: 115 (1970-75) and 114 (1980-85)
  - India: 62 (1970-75) and 80 (1980-85)

# THE TRUE CHINA MIRACLE

## Earlier and broad-based economic liberalization in China

- ❑ Timing:
  - China: 1978
  - India: 1992-3
- ❑ Pace of reforms
  - Extremely rapid in the countryside: De facto privatization of control right of land occurred among 80 to 90% of rural households between 1980 and 1985
  - Vibrant rural industrialization
  - Substantial financial support for private sector fixed asset investments: 25% as early as 1982
  - Rapid development of *domestic* private sector activities (mainly in the rural areas)

# THE TRUE CHINA MIRACLE

## Rural industrialization driven by entrepreneurs:

- ❑ Rapid transition from agriculture to industry and service:
  - Employment at township and village enterprises (TVEs): 100 million (1990), 135 million (1996), 131 million (2001) and 142 million (2005)
  - Other rural firms: Another 30 to 40 million
  - Share of total rural labor force: 3% in 1983 and 34% in 2001 and 39% in 2005
  - Very well educated: 85 percent of entrepreneurs in the 1980s finished at least middle school
  - Very high gender equality: 30 to 40 % of first-generation entrepreneurs were women.

# THE TRUE CHINA MIRACLE

## Contrast with India:

- ❑ Low non-farm rural employment:
  - 40 million in 1983; 60 million in 1994 and 70 million in 2000
- Low share of total rural employment:
  - Between 15 to 20% of rural labor force
  - A huge gender bias



# CHINESE GARMENT FACTORY





# ROLE OF WOMEN IN THE WORKFORCE: WORLD BANK SURVEY EVIDENCE

% of female workers			
	China		India
Basic production workers	65.4	Skilled workers	27.0
Auxiliary production workers	48.6	Unskilled workers	40.2
Engineering	35.9	Professionals	20.7
Management	47.1	Management	31.2
Total		Total	26.3

# INDIA'S OTHER HUGE DISADVANTAGES

## □ Growth fundamentals

- Geography: Tropical vis-à-vis temperate zones
  - Sachs (2001): All of India=tropical; 50% of China=tropical
- Savings rate: 50% of China's savings rate and 10% of China's FDI
- Policy stability and continuity: Constant political instability and ethnic violence
- Education: Lower educational attainments, especially rural girls
- Social practices: Terribly destructive social practices (such as untouchability)
- Regulatory regime: Still extremely cumbersome regulations
- Political objective: Lack of single-minded pursuit of economic goals
  - GDP growth vis-à-vis GDP per capita growth: The political effects on fertility rates

# THE MICROECONOMIC ADVANTAGE OF INDIA

- An emerging contrast between macro and micro indicators
- Global competitiveness report 2007-2008
  - Overall ranking: China at 34<sup>th</sup> place and India at 48<sup>th</sup> place
  - But a huge discrepancy between macro and micro rankings
  - Micro ranking favors India:
    - Business competitiveness index (BCI): China at 57<sup>th</sup> place and India at 31<sup>th</sup> place
  - Dynamic BCI:
    - China: 42<sup>th</sup> in 1998, 47<sup>th</sup> in 2004 and 57<sup>th</sup> in 2007
    - India: 44<sup>th</sup> in 1998, 30<sup>th</sup> in 2004 and 31<sup>st</sup> in 2007

# SUBSTANTIAL MICROECONOMIC STRENGTHS OF INDIA

- Generation of income vis-à-vis generation of wealth:
  - Income ratio of the two countries: 2 to 1 (China to India)
  - Intangible capital measure by World Bank (2005): China at \$9,387 per capita and India at \$6,820 per capita
  - Intangible capital ratio: 1.37 to 1 (China to India)

# SUBSTANTIAL MICROECONOMIC STRENGTHS OF INDIA

- CLSA's corporate governance measure
  - India at 6<sup>th</sup> (5.4 out of 10); China at 19<sup>th</sup> (3.4)
  - Singapore with 7.4; Hong Kong with 6.8
  - Taiwan with 5.3: Not due to linguistic and cultural bias
- Quality of firms
  - Patent, quality certification measures: Indian strengths go beyond software
  - Forbes List of “exciting new firms”
    - 2002 list: 13 from India and 4 from China (all in Hong Kong)
    - 2003 list: 13 from India and 1 from China
  - Far Eastern Economic Review ranking of leadership: Lowest Indian score is higher than the highest Chinese score (Haier)

# CAPITAL MARKETS: CORPORATE GOVERNANCE

	<b>CHINA</b>		<b>INDIA</b>		<b>JAPAN</b>		<b>S. Korea</b>	
1)	Haier Group	5.48	Infosys Technologies	6.34	Toyota Motor Corporation	6.05	Samsung Electronics	6.14
2)	Legend Group	5.38	Reliance Industries	6.31	Canon	5.70	POSCO	5.43
3)	Shanghai Baosteel Group	5.19	Hero Honda Motors	6.05	Seven-Eleven Japan	5.54	Samsung SDI	5.43
4)	COSCO	5.14	Wipro	5.92	Nissan Motor	5.49	Samsung Life Insurance	5.37
5)	Shanghai Automotive Industry Corp	5.13	Hindustan Lever	5.83	Sony Corporation	5.44	Samsung Corporation	5.31
6)	China National Offshore Oil	5.01	HDFC Bank	5.80	Honda Motor	5.39	Hyundai Motor	5.29
7)	China National Petroleum Corp.	4.94	Ranbaxy Laboratories	5.78	Yamato Transport	5.33	LG Electronics	5.18
8)	Sinopec Group	4.85	Dr. Reddy's Laboratories	5.73	NTT DoCoMo	5.22	Kookmin Bank	5.17
9)	China First Automobile Works Group	4.84	Indian Oil	5.71	Asahi Breweries	5.22	SK Telecom	5.15
10)	COFCO	4.71	ICICI Bank	5.69	Sharp Corporation	5.11	Samsung Fire& Marine Insurance	5.15

Source: Far Eastern Economic Review: Dec 25, 2003-Jan1, 2004; 166,51;ABI/INFORM Global pg. 44. Courtesy of Tarun Khanna.



# BENCHMARKING CHINA WITH INDIA:WBES

- ❑ India is ahead of China in soft infrastructure, in property rights security and most noticeably in the financial arena
  - Major financial constraints on private firms: China at 80%; India at 50%
  - China is one of the most dependent on retained earnings: 56.6% compared to India (27.1%) and Philippines (50.8%)
  - NPLs: China at 25-40%; India at 10-15%
- ❑ India is not ahead of China in all areas
  - Labor regulations are more rigid
  - Tax regulations are more cumbersome
  - Efficiency of legal system and bureaucracy are comparable
  - Orientation of the legal system

## Descriptive data from WBES and statistical evidence from Huang (2006)

**Table 1 Perception of general financing constraints (GFC ), China, India, and selected countries**

General financing constraints (GFC) based on Question 38a in the WBES: "Please judge on a four-point scale how problematic are the following factors for the operation and growth of your business:" 1=No obstacle, 2=Minor obstacle, 3=Moderate obstacle, 4=Major obstacle			
Countries	% of firms giving a score of 4	% of firms giving a score of 3 or 4	Per capita dollar (PPP), 2001
<b>China</b>	<b>66.3</b>	<b>80.2</b>	<b>4,260</b>
<b>India</b>	<b>25.5</b>	<b>52.1</b>	<b>2,450</b>
<b>South Asia</b>			
Bangladesh	37.0	54.5	1,680
Pakistan	47.5	83.1	1,920
<b>East and Southeast Asia</b>			
	41.0	50.0	2,940
	22.1	41.0	8,340
Indonesia	22.1	57.0	4,390
Malaysia	35.0	30.3	24,910
Philippines	9.1	75.3	6,550
Singapore	41.3		
Thailand			
<b>Transitional economies:</b>			
	51.8	79.5	8,660
Russia	59.4	80.5	5,980
Romania	54.9	82.3	8,083
Belarus	56.7	73.3	5,950
Bulgaria	58.7	81.0	8,440
Croatia	58.1	78.3	2,860
Georgia	48.8	79.5	6,370
Kazakhstan	64	87.2	2,710
Kyrgyzstan	35.9	69.8	7,610
Lithuania			

Source: WBES. Per-capita income data are from Table 1 of World Bank (2003).

# PRIVATE SECTOR DYNAMICS

- China has a weak microeconomic foundation
  - OECD estimate: 70 percent of GDP in private sector and over 50 percent industrial value-added (2003 data)
  - These ratios were exceeded by successful commanding-heights economies of the 1970s such as Tanzania, Mexico, and India (of Indira, not of Manmohan).
  - Purely private share of fixed asset investments in 2005: 33%
  - India in 1984: 58% (World Bank 1989)

# WHY MICROECONOMICS MATTERS?

- China's growth is increasingly investment driven:
  - Investment/GDP ratio: 30-35 % in 1980s but rose to 40-45% in the 1990s
  - Investment/GDP ratio in 2004 and 2006: 44% -50%
    - Fixed asset investment in 2005: \$1.07 trillion
    - India's GDP in 2005: \$720 billion (exchange rate conversion)
- India's growth is consumption driven and more efficient

Data are from China statistical yearbook, various years

# TFP SLOWDOWNS SINCE THE LATE 1990S

Table 1 Estimates of the annual TFP growth in the Chinese economy (%)

Sources of estimates	Level of data	Reference periods				
		1980s		1990s		2000s
		First half	Second half	First half	Second half	First half
(Heytens and Zebregs 2003)	National-level GDP data	2.78 (1979-84)	2.11 (1985-89)	2.81 (1990-94)	2.30 (1995-98)	
(Zheng and Hu 2004)	National-level GDP data	3.26 (1978-95)			0.32 (1995-2001)	
(Kuijs and Wang 2005)	National-level GDP data	3.74 <sup>a</sup> (1978-93)			2.7 (1993-2004)	
(Miyamoto and Liu 2005)	Provincial-level GDP data	5.45 (1981-85)	1.73 (1986-90)	6.28 (1991-95)	2.91 (1996-2000)	
(Wu 2004)	Provincial-level GDP data	n/a	n/a	1.88 (1993-97)	1.19 (1993-2002)	
(Wu 2003)	Provincial-level GDP	2.35 (1982-85)	0.43 (1986-91)	1.75 (1992-97)		
(Ren and Sun 2006)	Industry-level data	6.45 (1981-1984)	3.14 (1984-88)	3.83 (1988-1994)	0.52 (1994-2000)	

Notes:

<sup>a</sup>: (Kuijs and Wang 2005) estimated TFP growth to be 3.3% for the 1978-2004 period and 2.7% for the 1993-2004 period. I have calculated the TFP growth to be 3.74% for the 1978-93 period on the basis of their estimates.

Sources: See the table for citation information.

# SOCIAL PERFORMANCE

- A substantial deterioration of social performance
  - Rapid growth combined with improving income distribution in the 1980s
    - Gini coefficient declined in the 1980s due to narrowing of urban/rural gap
  - Income distribution worsened in the 1990s
    - Gini: 37.6 in 1992 but 44 in 2002 (and 45 in 2004)
      - ❑ India: 33.8 in 1992 but 32.5 in 2000
    - Benchmarks:
      - ❑ South Korea: 31.6 (1993)
      - ❑ Brazil: 59 (1997)
      - ❑ Philippines: 46.2 (1997)
    - Large-scale and some violent protests against forcible land seizures and corruption (87,000 cases in 2005)
    - 30 million grievance petitions in recent years compared with only 20,000 after the Cultural Revolution (WSJ Chinese edition)

# WHAT SHOULD INDIA NOT LEARN FROM CHINA?

- The Shanghai model
- The massive urban building boom

# WHAT IS THE SHANGHAI MODEL?

- To the Indians, Shanghai is the symbol of China's success
- Prime Minister Manmohan Singh:
  - When I spoke of turning Mumbai into a Shanghai, many wondered what I had in mind. It is not my intention to draw a road map for Mumbai's future. But I do believe that Mumbai can learn from Shanghai's experience in reinventing itself; in rebuilding itself; in rediscovering itself.
- Should Mumbai be more like Shanghai?

Sources: Singh's speech is printed on the website of Indian embassy to the United States. See [http://www.indianembassy.org/newsite/press\\_release/2006/Mar/35.asp](http://www.indianembassy.org/newsite/press_release/2006/Mar/35.asp), accessed on August 23, 2006.



# ASKING THE RIGHT QUESTION: IS SHANGHAI SUCCESSFUL?

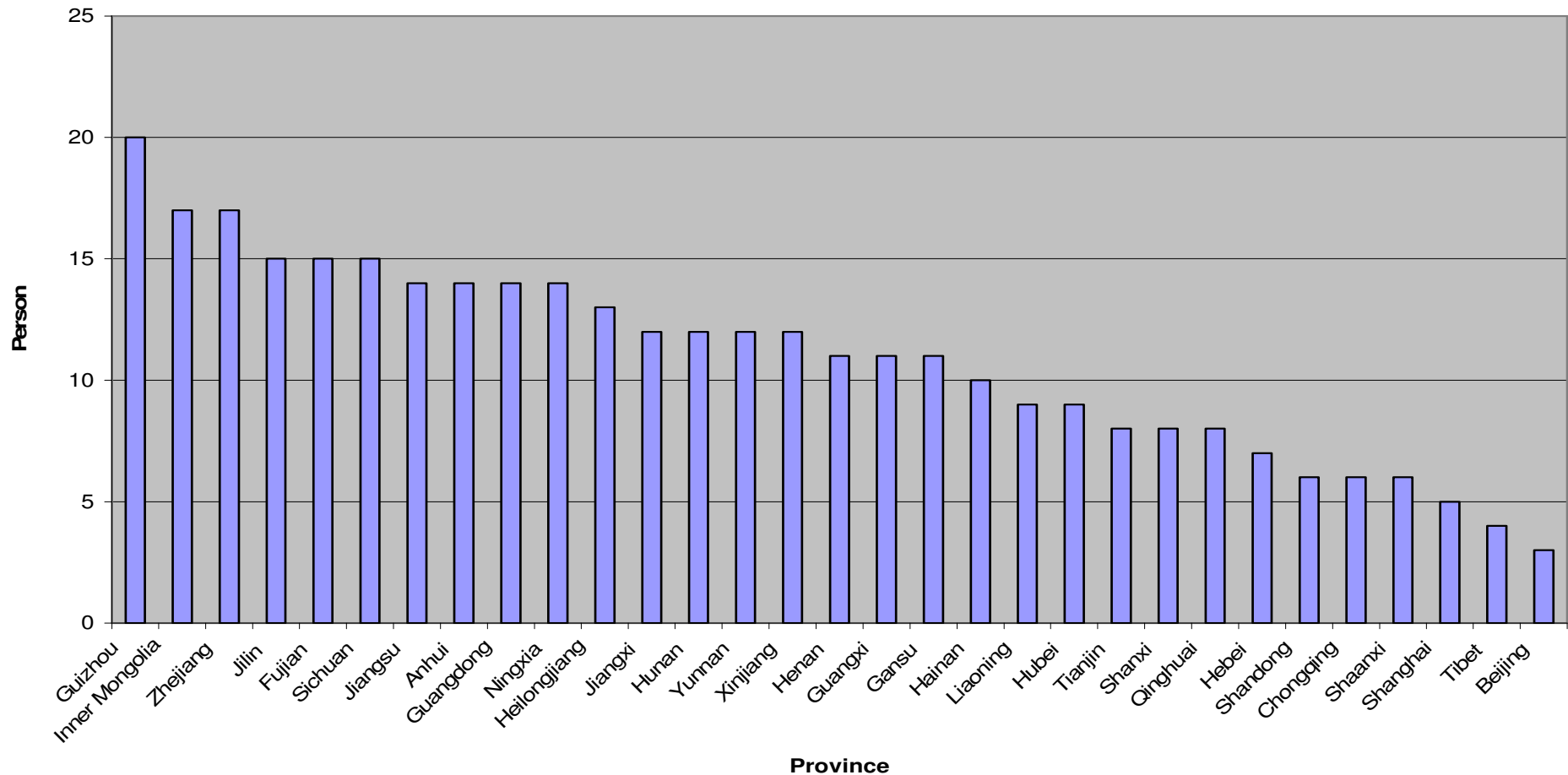
- Shanghai has the extreme version of China's development strategy of the 1990s:
  - Massive government investments in hard infrastructures
  - A technocratic industrial policy approach
  - State-led growth
  - Massively subsidized FDI inflows
- Shanghai's visible achievements
  - Dramatic urban landscape
  - Urban infrastructure investments:
    - 1981: 14.4% of total fixed asset investments
    - Late 1990s: Nearly 30%
  - The rise of Pudong
    - A farmland only some 16 years ago

# THE SHANGHAI MODEL: MASSIVELY UNDERDEVELOPED SOFT INFRASTRUCTURE

- Crony capitalism:
  - The recent corruption scandals:
  - Involvement of highest level officials
  - A huge amount of capital involved in the misuse of public funds: 400 million dollars in one case
  - Substantial social and political implications: Using pension funds to underwrite private acquisitions
- A very weak corporate sector
  - Shanghai was the home of China's industrial and entrepreneurial base in the 1930s
  - Today Shanghai cannot claim any iconic businesses of its own
  - Serious problems in innovation, competitiveness and corporate development

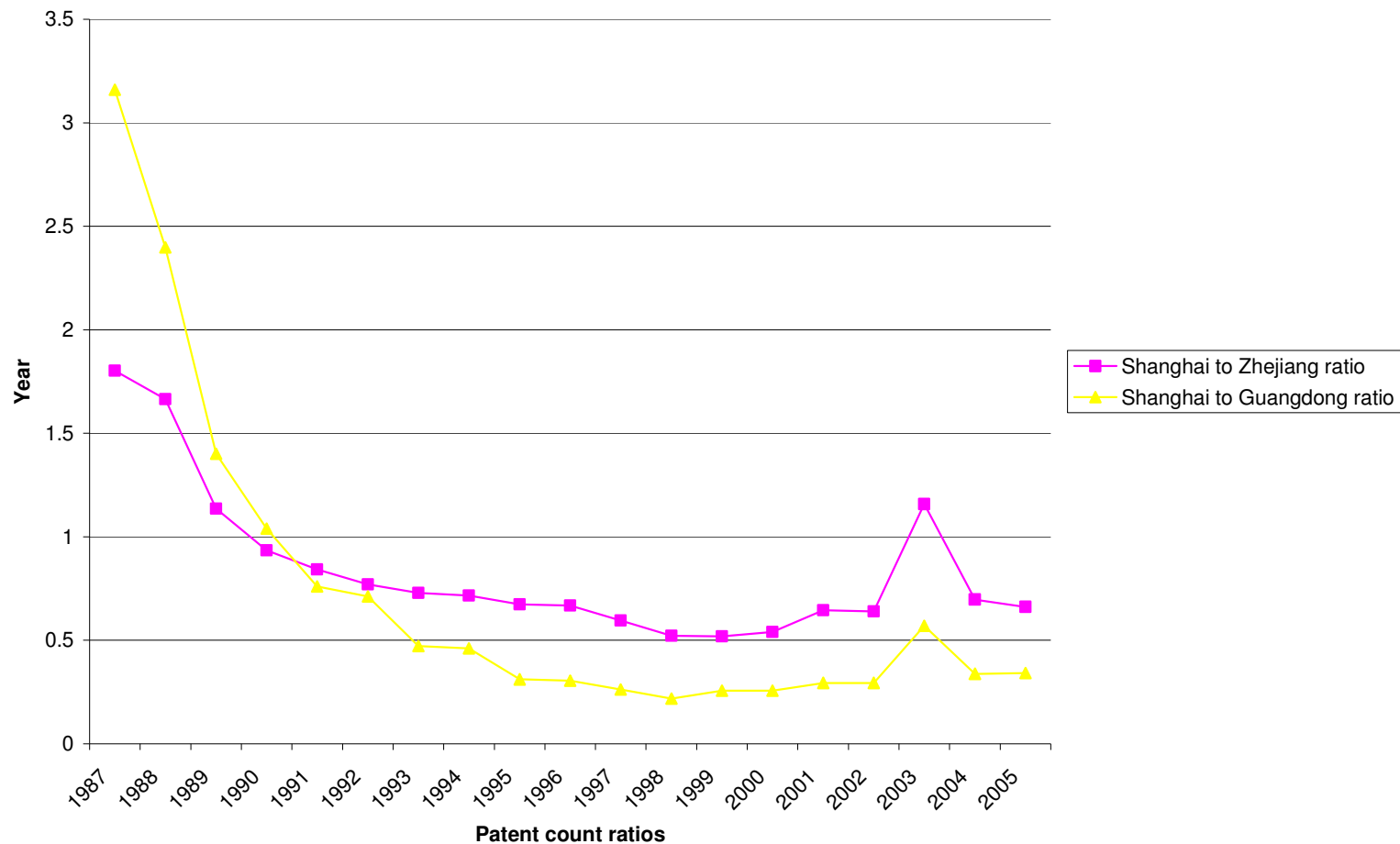
# THE STORY OF SHANGHAI: AN EXTREME STATE-LED MODEL

Number of self-employers per 100 urban households, 2004 (persons)



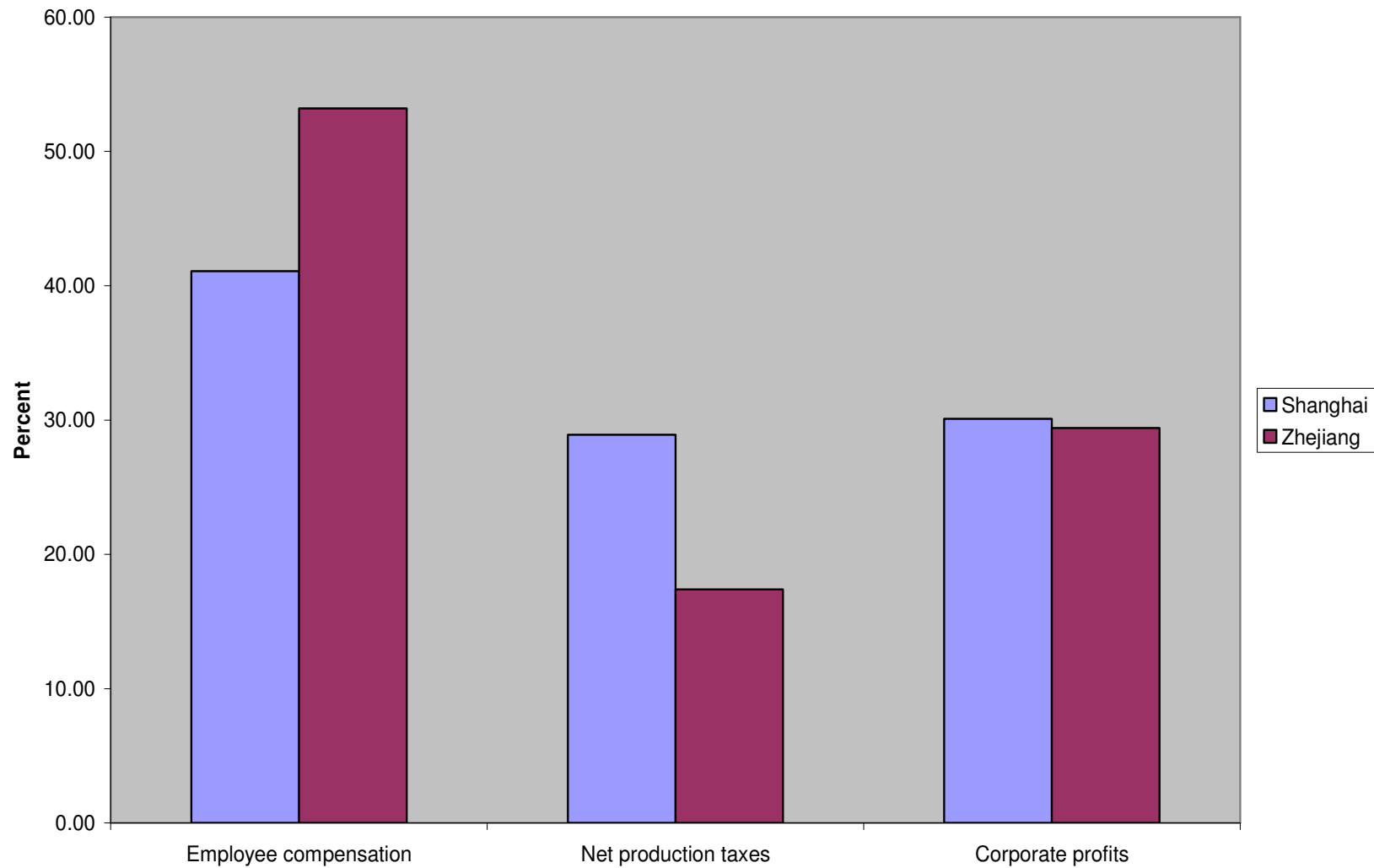
# THE STORY OF SHANGHAI: AN EXTREME STATE-LED MODEL

Panel (1) Patent count ratios: Shanghai/Zhejiang and Shanghai/Guangdong



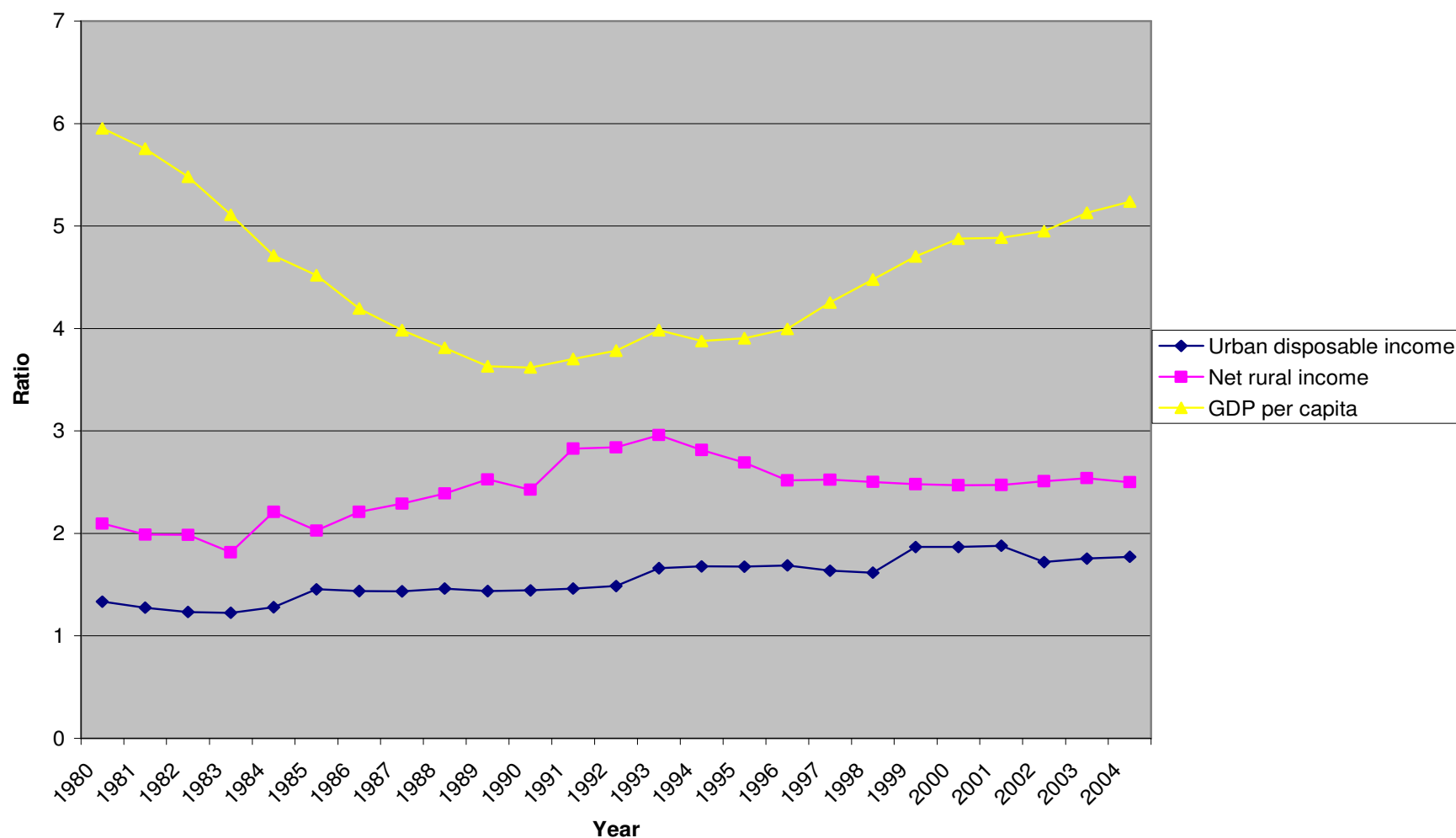
# IS SHANGHAI RICH?

Components of net national product: Shanghai and Zhejiang (2002)



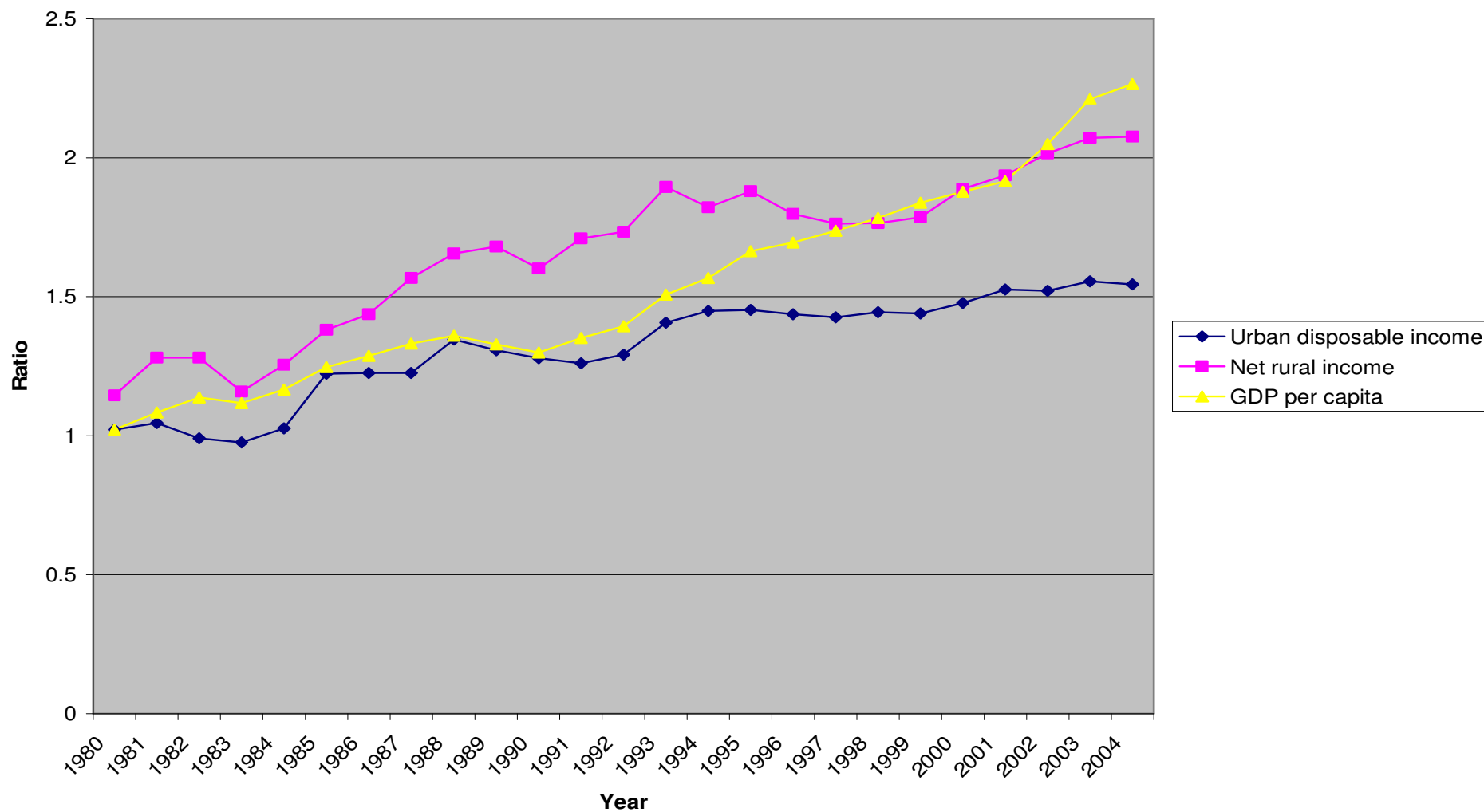
# IS SHANGHAI RICH?

Panel (1): Shanghai vis-a-vis national average: Per capita GDP, urban and rural income levels



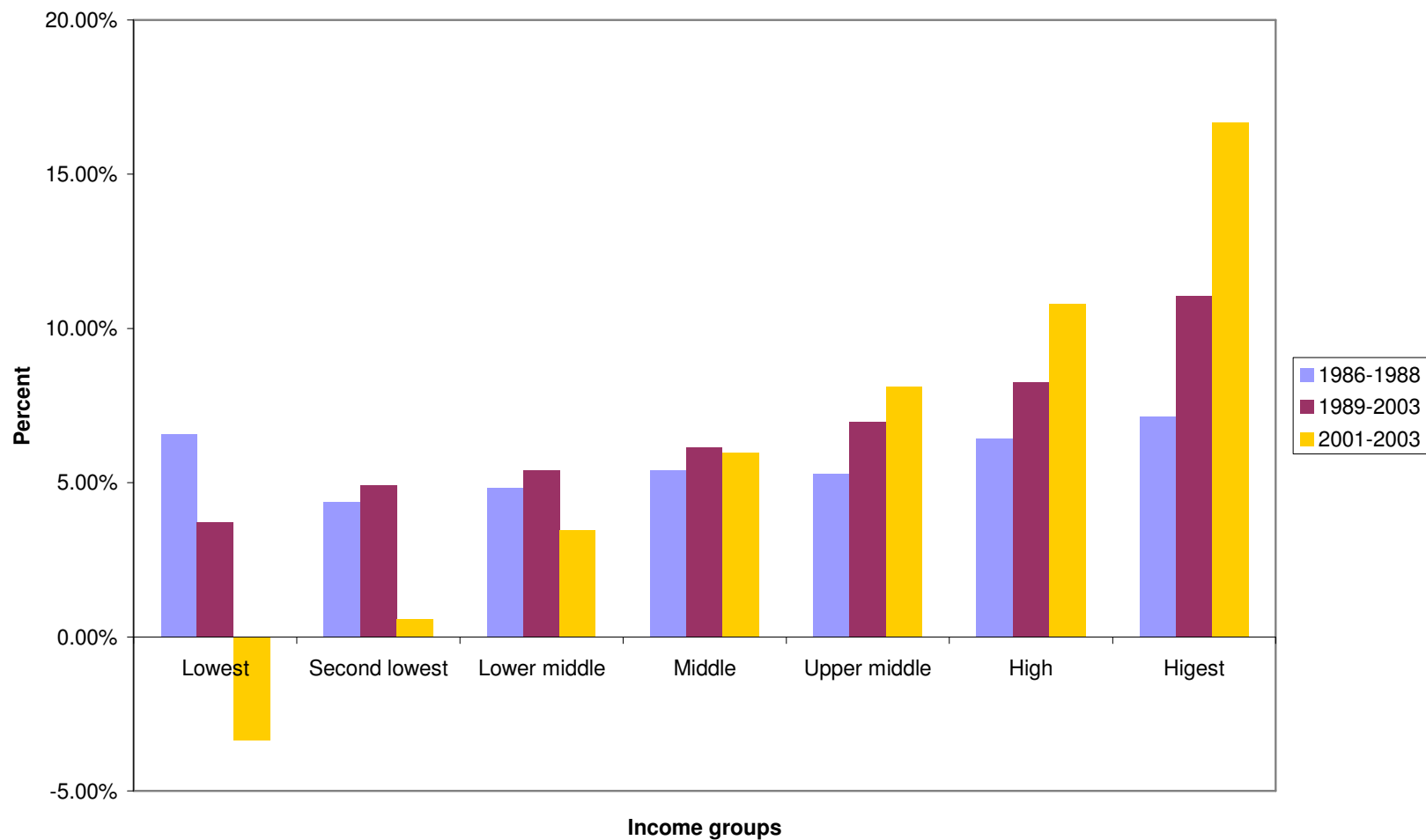
# IS SHANGHAI RICH?

Panel (2): Zhejiang vis-a-vis national average: Per capita GDP, urban and rural income levels



# IS SHANGHAI RICH?

Urban household income growth by income groups in Shanghai: 1) 1986-1988, 2) 1989-2003, and 3) 2001-2003





# CHINA'S REMARKABLE BUILDING BOOM



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# CHINA'S REMARKABLE BUILDING BOOM



# POWER OF IMAGES: IS THE BUILDING BOOM A SIGN OF A DYNAMIC, RISING CHINA

- Yes, according to The Economist, March 3, 2005: “If this is a race, India has already been lapped”
  - “RETURNING to visit Beijing or Shanghai after a few years' gap is a bewildering experience. After negotiating slick new airports, new expressways whisk you into town. Occasionally, through the new skyscrapers, a familiar building appears, lost in the concrete jungle. Parts of China have seen perhaps history's biggest construction boom.”
  - “A return to Delhi or Mumbai, by contrast, is a reassuring if frustrating experience. The only great innovation in the airports (and don't knock it) is an improved queuing system in the crowded immigration halls.... Whereas its neighbor has been transformed out of all recognition, India has, in most visible essentials, stayed the same.”



# SEEN BUT NOT KNOWN

- Each of these buildings is a government building
  - Some are district government buildings (equivalent to Queens Borough)
- Some of the buildings in China are astronomically expensive
  - Bank of China building and National Theater cost in excess of \$200 million
- Some are located in affluent regions but others are located in the poorest regions of China

# LEIYANG OF HUNAN: \$516 PER CAPITA GDP (ALL FOR 2002)



# ZHUZHOU OF HUNAN: \$1161 IN PER CAPITA GDP



# ZHUMADIAN OF HENAN: \$488 IN PER CAPITA GDP





# **HONGHE OF YUNNAN: ONE OF THE POOREST PROVINCES IN CHINA (PROVINCIAL PER CAPITA GDP: \$848)**



# JIAOZUO OF HENAN: \$1,034 IN PER CAPITA GDP





# JIAOZUO OF HENAN: \$1,034 IN PER CAPITA GDP

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# JIAOZUO OF HENAN: \$1,034 IN PER CAPITA GDP





# ASKING THE RIGHT QUESTION, “WHAT IS IT THAT CHINA IS NOT BUILDING?”

- A question of tradeoffs for a poor country:
  - If the government is investing so much in highways and urban buildings, it must be investing less in other things
    - Rural basic education
    - Private sector financing
- A question of costs for a poor country:
  - You can cut down the costs by underpaying for land
    - Land seizures on a massive scale since the late 1990s from rural residents
    - Rising social costs
    - Undermining of property rights security

# WHAT HAS HAPPENED TO CHINA'S RURAL EDUCATION?

- In the 1990's:
  - China had one of the lowest educational expenditure/GDP ratios
  - 100% of central government spending is on tertiary education
  - Between 1987 and 2003: Number of rural primary schools declined by some 35-45%
  - # of rural primary schools per 10,000 rural households: 37 in 1987 but 16 in 2002
  - Between 1998 and 2000: About 40% of fifth graders in the rural areas did not make it to the 6<sup>th</sup> grade
- The massive costs of China's building boom:
  - China Daily (04/02/07): "Illiteracy returns to haunt the country."
  - Number of illiterate Chinese rose by 30 million between 2000 and 2005
  - China spends 8 million yuan (=1 million dollars) on illiteracy eradication

# CHALLENGES FOR INDIA

- Put infrastructures ahead of investments in education and health
  - No prospect for broad economic success if India does not succeed in low-tech and labor-intensive industries
  - Poverty will remain high despite GDP growth
  - Manufacturing success critically depends on the quality of labor force, especially women.

# CHALLENGES FOR INDIA

- Is there an “Indian Dutch disease?”
  - Rupee appreciation by 15% since 2006
  - A textile worker quit his job to work as a security guard at Infosys
  - Solution: Alleviating supply constraints of human capital by graduating more students and more female students
- Framing the question correctly:
  - How to get growth going, not how to build infrastructures or how to get FDI
  - Infrastructures and FDI follow growth, not preceding growth
  - Labor market flexibility vital to China’s growth
    - Rural industrialization is a form of SEZs in creating labor market flexibility
    - The idea of SEZs: Creation of new institutions, not conversion of existing institutions
    - SEZs of the 1980s’ vintage, not of the 1990s’ vintage