

# ASIA 2015 – Closing the Infrastructure Gap



Jeffrey Gutman – World Bank  
March 6, 2006

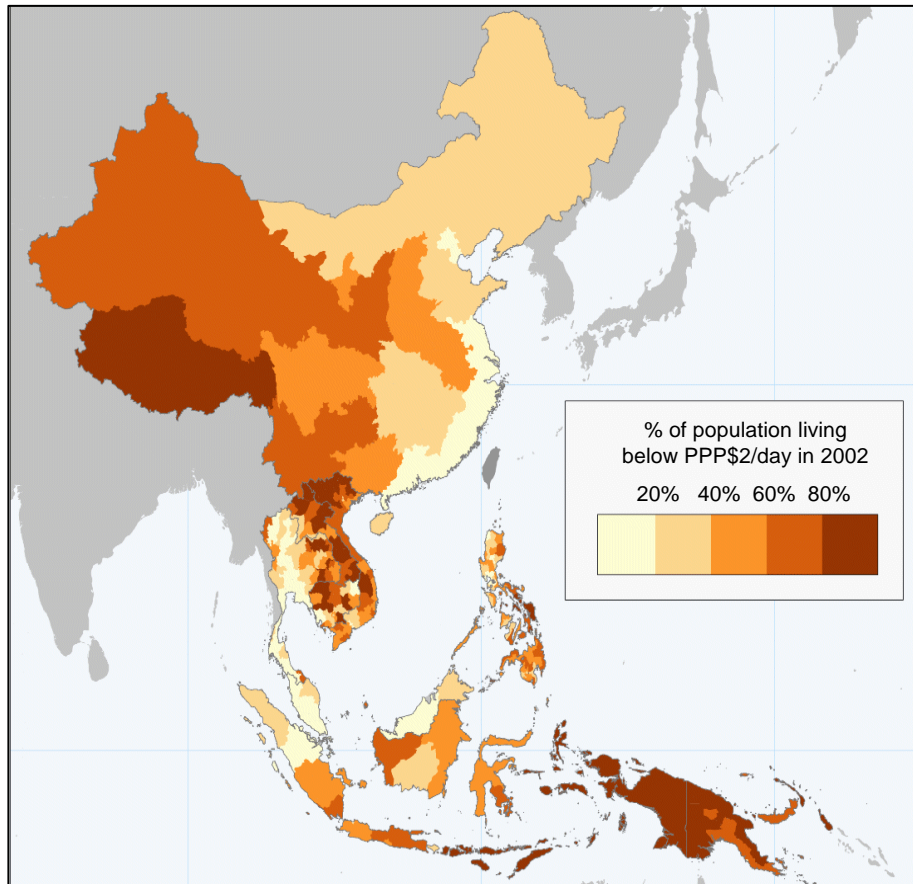
# Key Drivers of Infrastructure Needs in East Asia

- High economic growth
- Growing regional integration
- Increasing spatial inequality
- Rapid urbanization

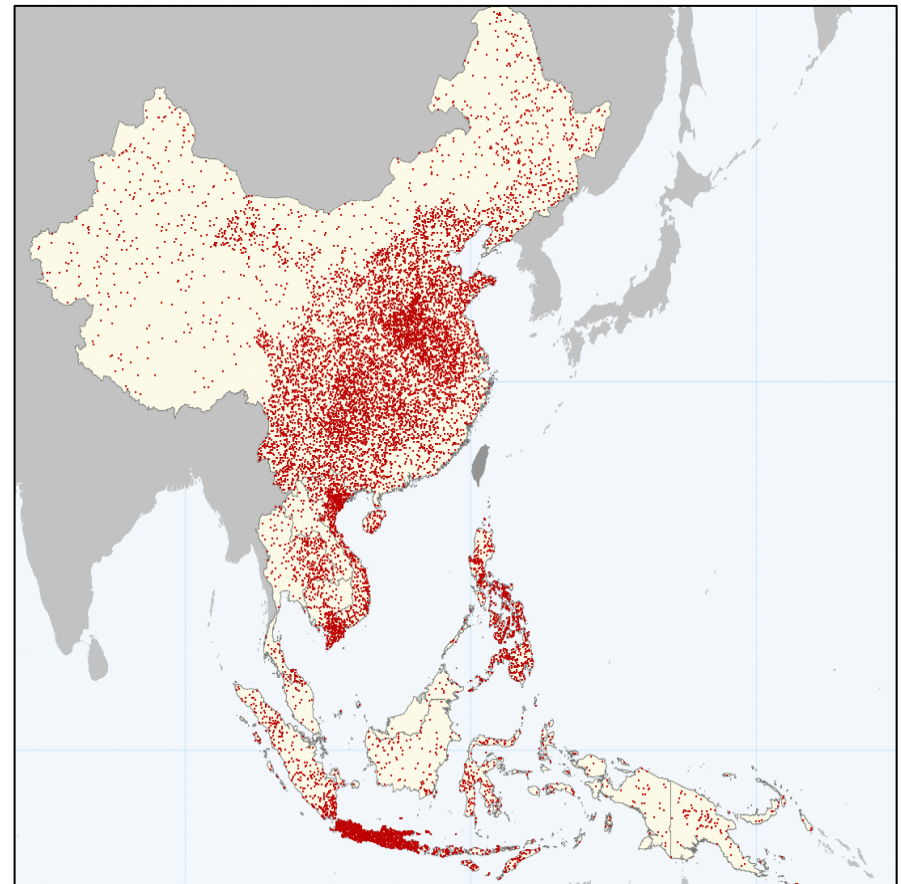
# Inequality – A Contrasted Picture

Significant variability persists within countries and across the region ...

Percentage population living below \$2 / day (by region)



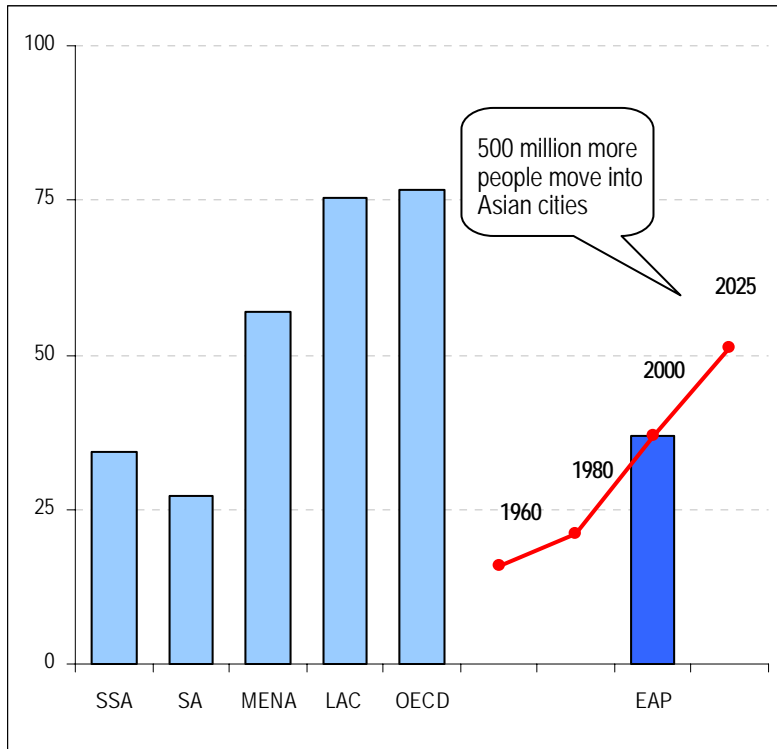
No. of population living below \$2 / day (each dot = 50 000 people)



# Urbanization Is the New Driver for Productivity and Infrastructure

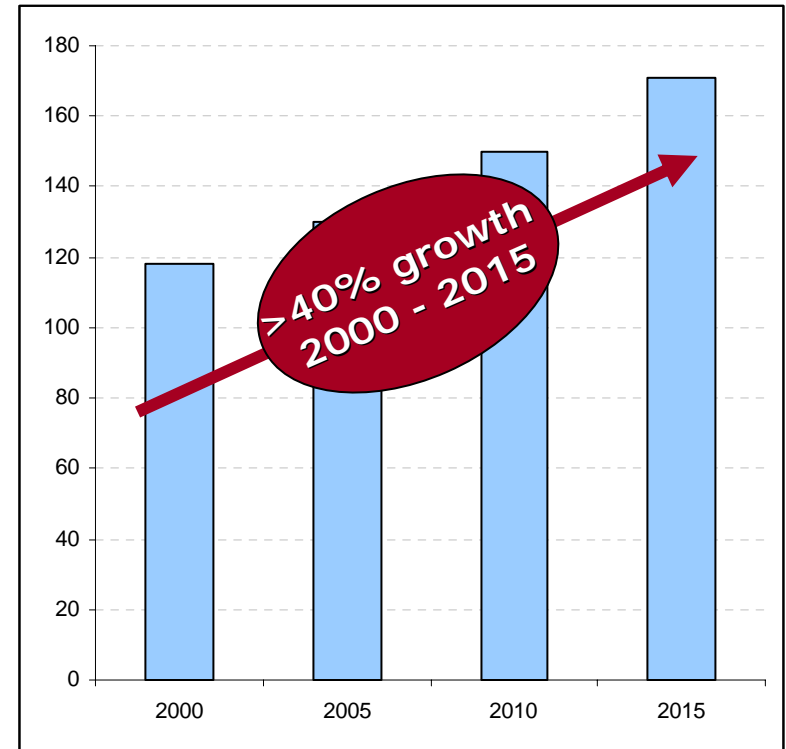
... in 20 years, East Asia will be an urban region

Urban population (% total population)



Source: World Development Indicators, 2004; United Nations World Urbanization Prospects, 2003

Growth in number of cities over one million inhabitants



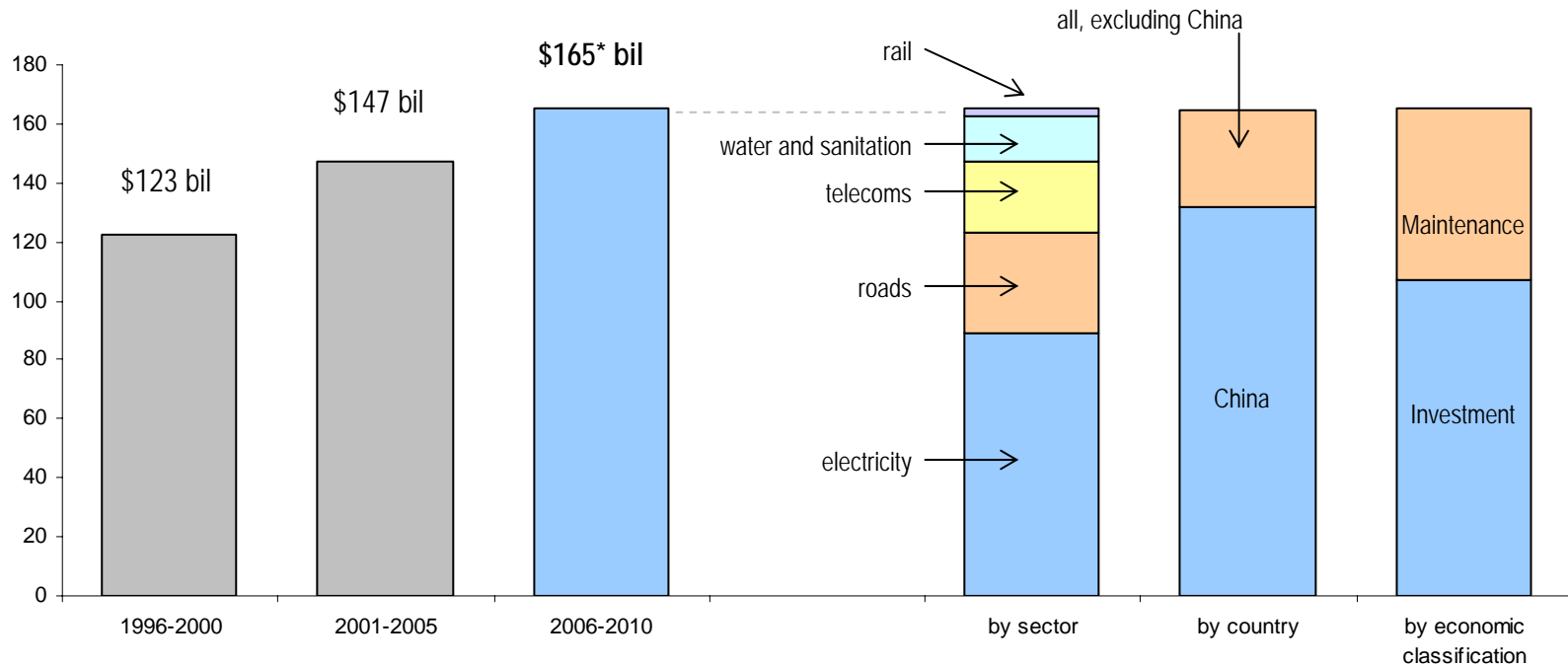
Source: United Nations World Urbanization Prospects, 2003

# State of Infrastructure in East Asia

- Infrastructure quality compares well with the rest of the world
- But there is variation in infrastructure investments across countries...
- ...variation in access to infrastructure services
- ...and infrastructure financing needs are enormous

# East Asia's Infrastructure Financing Needs Are Large and Increasing

East Asia, estimated infrastructure expenditure, actual and projected, 1996 – 2010 (\$ billion / year)



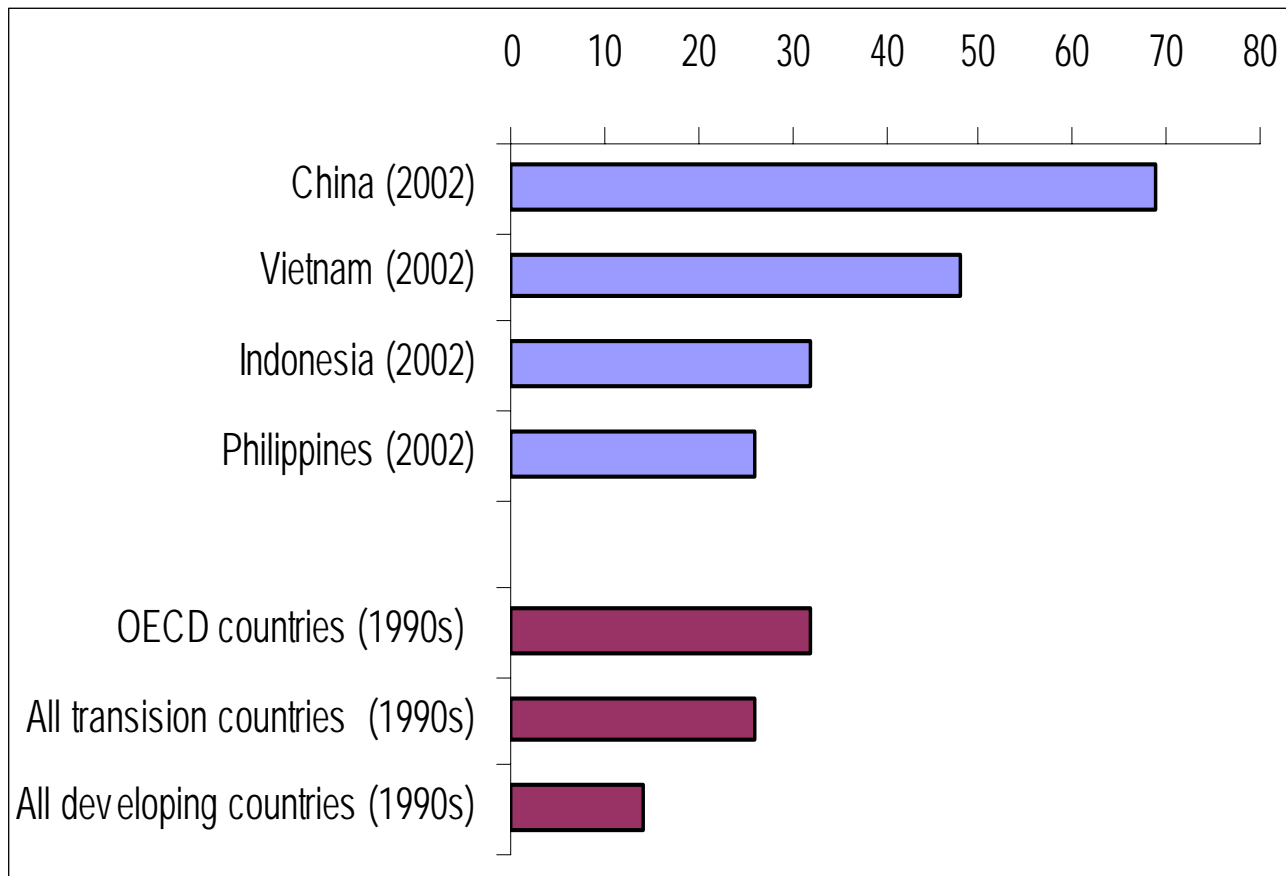
\* Based on econometric simulations consistent with projected regional growth, and efficiency prices. Due to data limitations, the simulation excludes a number of key infrastructure services, notably ports and airports, and all but major roads

# Emerging Challenges

- Most countries are implementing ambitious decentralization programs
- Governments have tended to retreat from infrastructure planning ...
- ...but private operators request more structured, predictable environments
- Increasingly open societies mean greater focus on accountability and corruption issues

# Sub-national Expenditures in East Asia

Expenditure decentralization – sub-national expenditure  
(% of total national expenditure)



Source: East Asia Decentralizes—Making Local Government Work, The World Bank



# Food for Thought

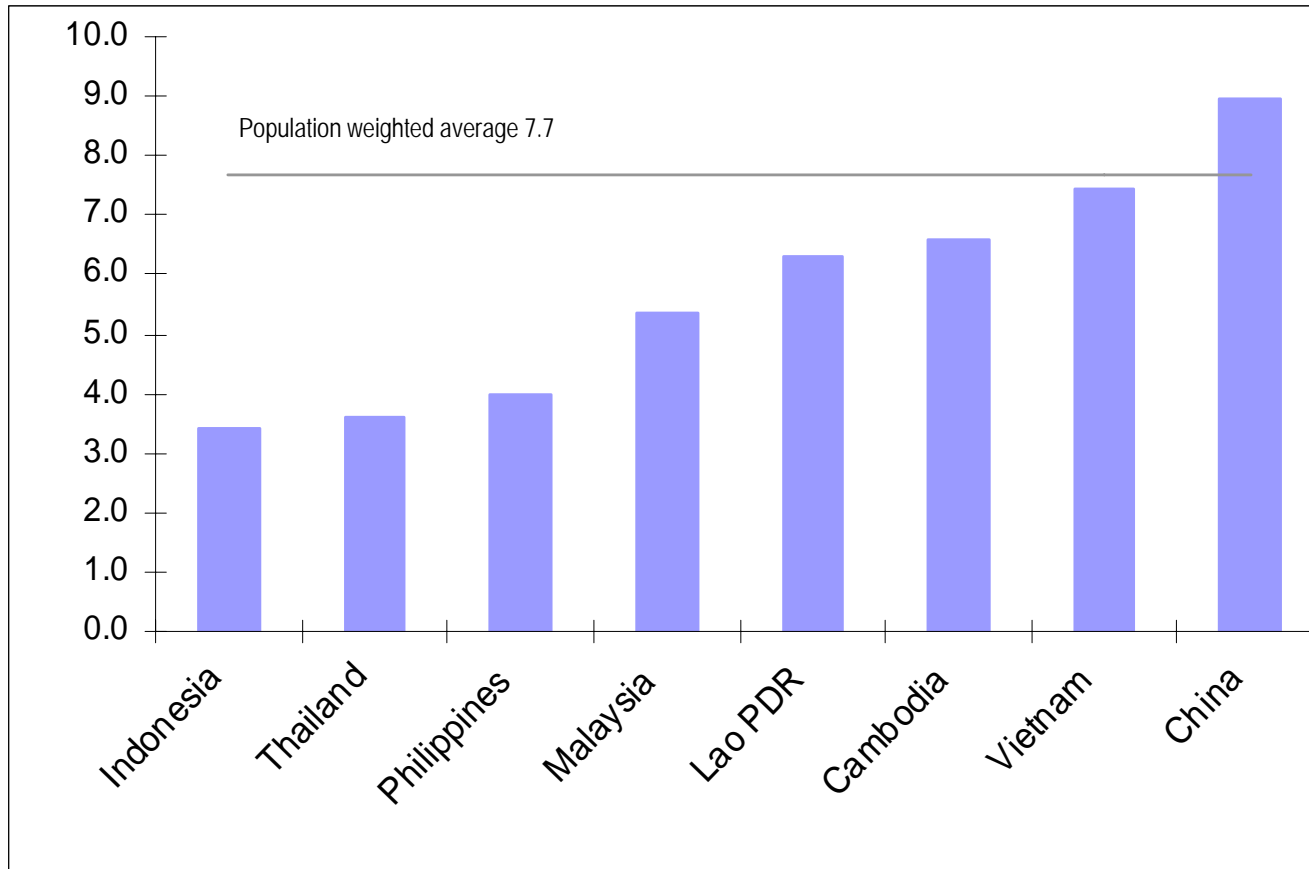
- Are there two Asias with two distinct infra agendas?
- Who finances infra and who pays for it?
- The challenge for governments: re-defining planning function; managing trade-offs between growth and access; eradicating corruption...
- The challenge for development partners: leveraging limited resources; focusing on impact...

# Background Slides

- Competitiveness of infrastructure in East Asia
- Variation in infrastructure investments across EAP
- Variation in infrastructure service access across EAP
- Comparing savings and investments
- The private sector bubble and fiscal contraction

# Strong Aggregate Growth in East Asia

Average annual growth (%), 1994-2003

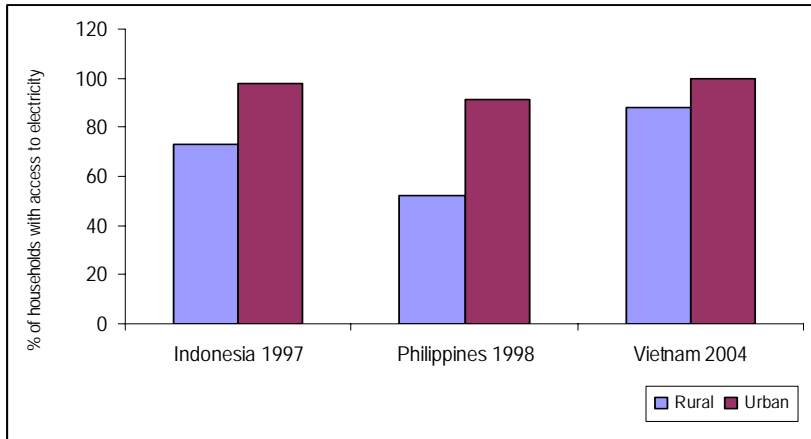


Source: World Development Indicators, 2004

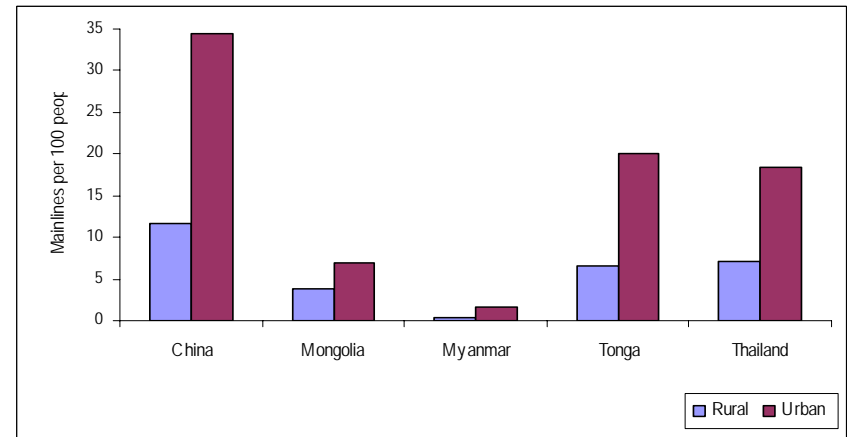
# Inequality – The Rural-Urban Challenge

Disparities between rural and urban access are large and growing

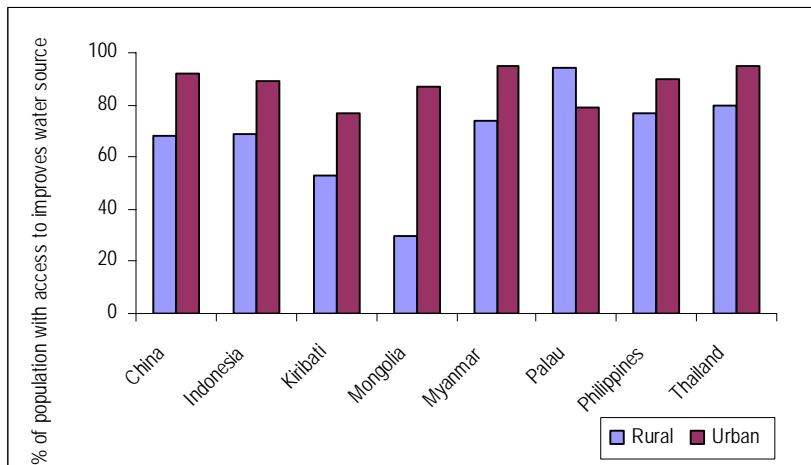
Access to electricity



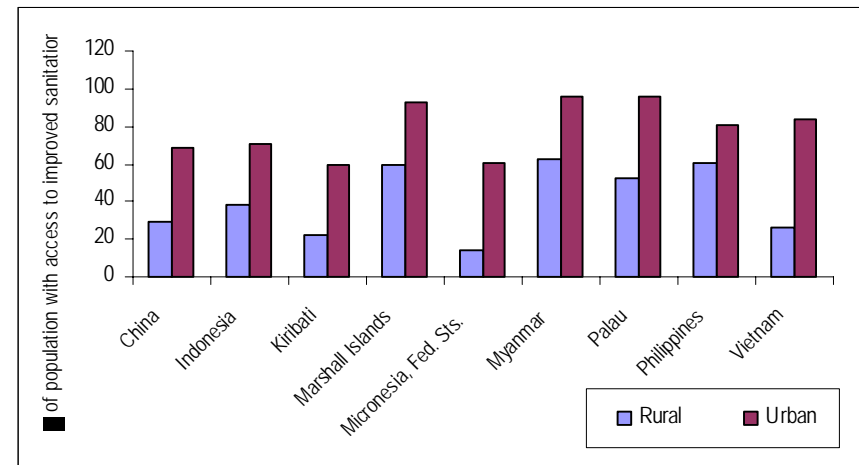
Access to telecommunications (2003)



Access to improved water source (2002)

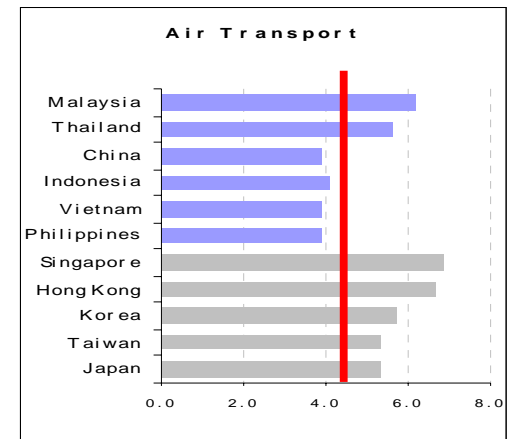
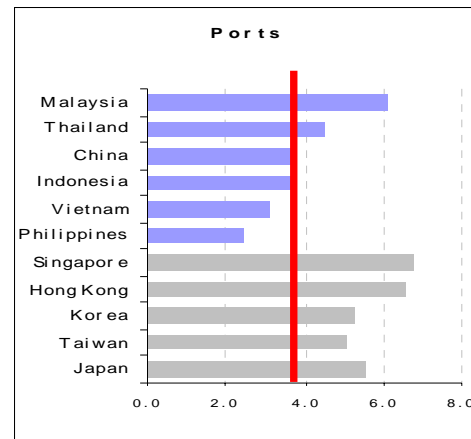
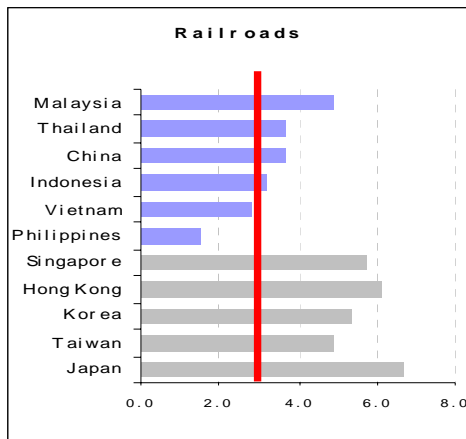
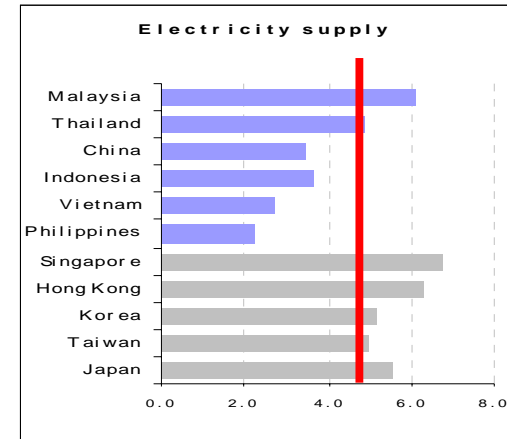
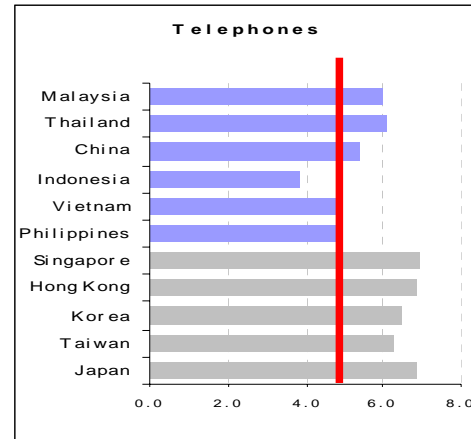
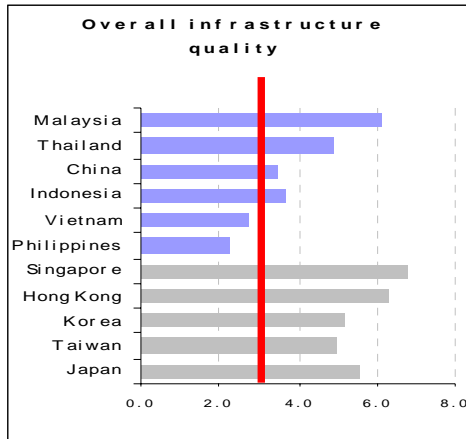


Access to improved sanitation (2002)



# East Asia Infrastructure Compares Well with the Rest of the World

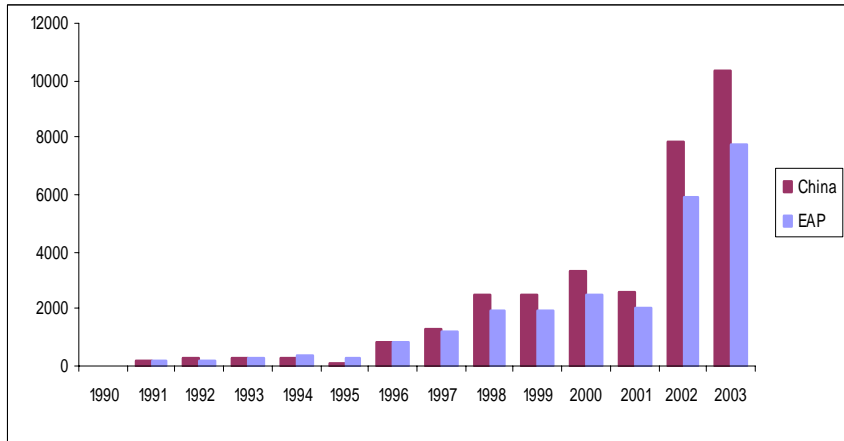
## Infrastructure quality ranking, World Competitiveness Report, East Asia



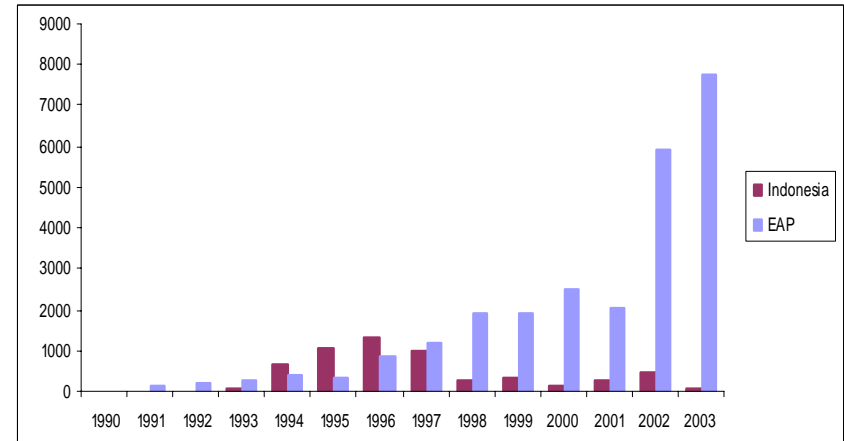
Note: Rankings are shown for developing East Asian economies (darker bars), and advanced East Asian economies (lighter bars). Vertical line is the average for all 102 surveyed countries, both within and outside of East Asia.

# But Infrastructure Investments Vary Across Countries...

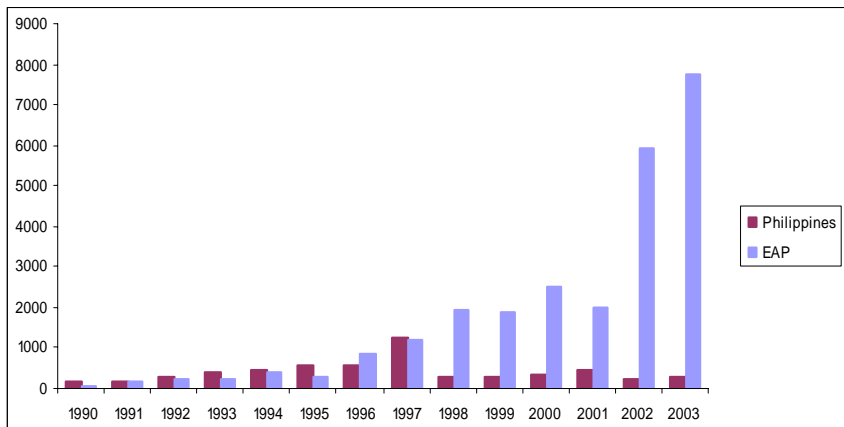
## China



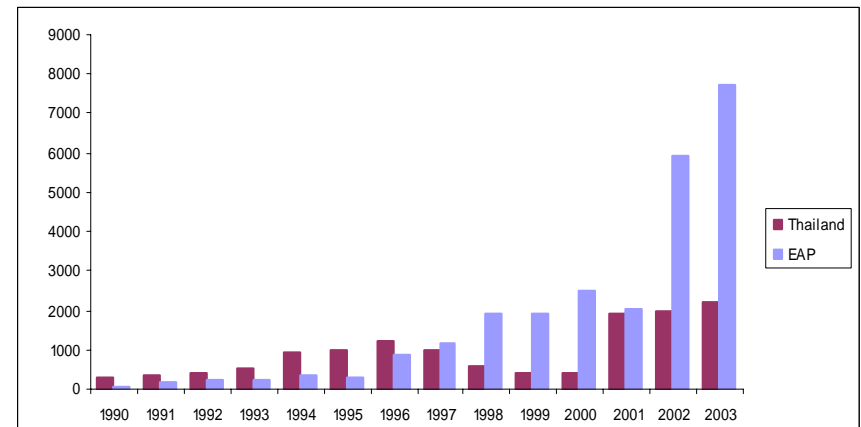
## Indonesia



## Philippines



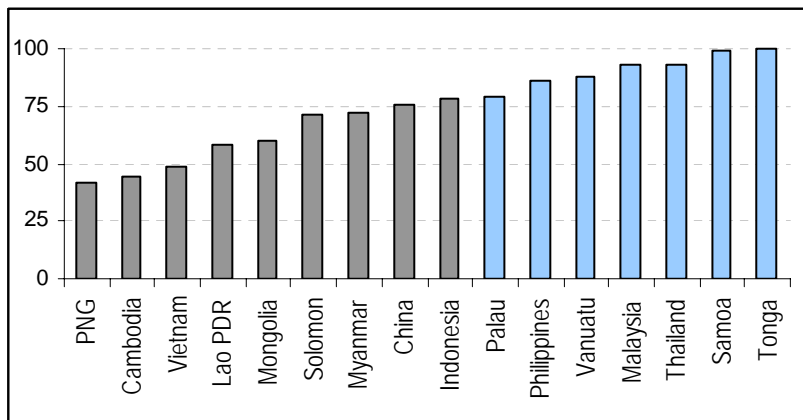
## Thailand



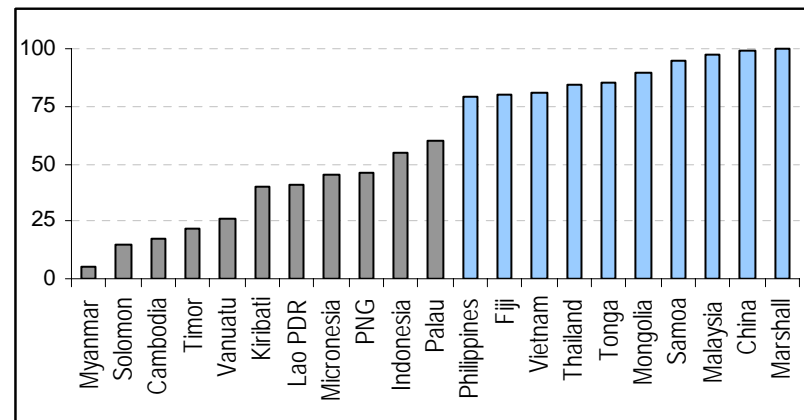
# ... and There Is Significant Variation in Service Access

Service Access (Bars in blue = outcomes above low and middle income country average)

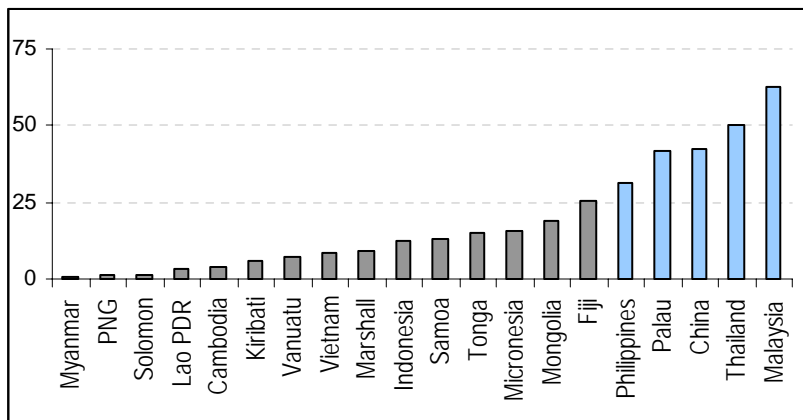
Water supply access (%)



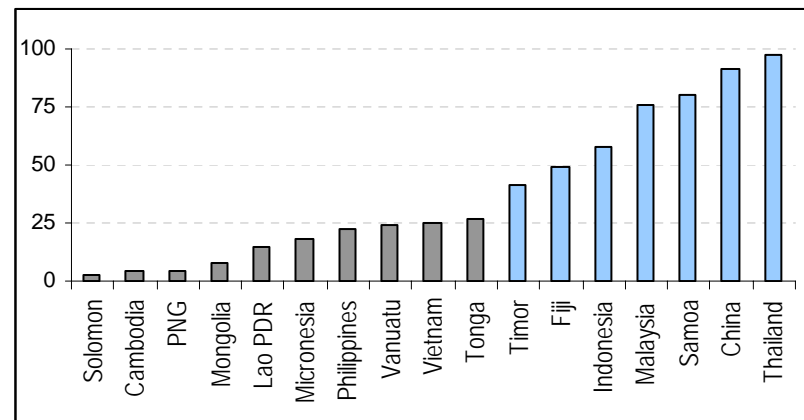
Electricity access (%)



Telephone access (subscribers / 100 inhabitants)



Percentage paved roads

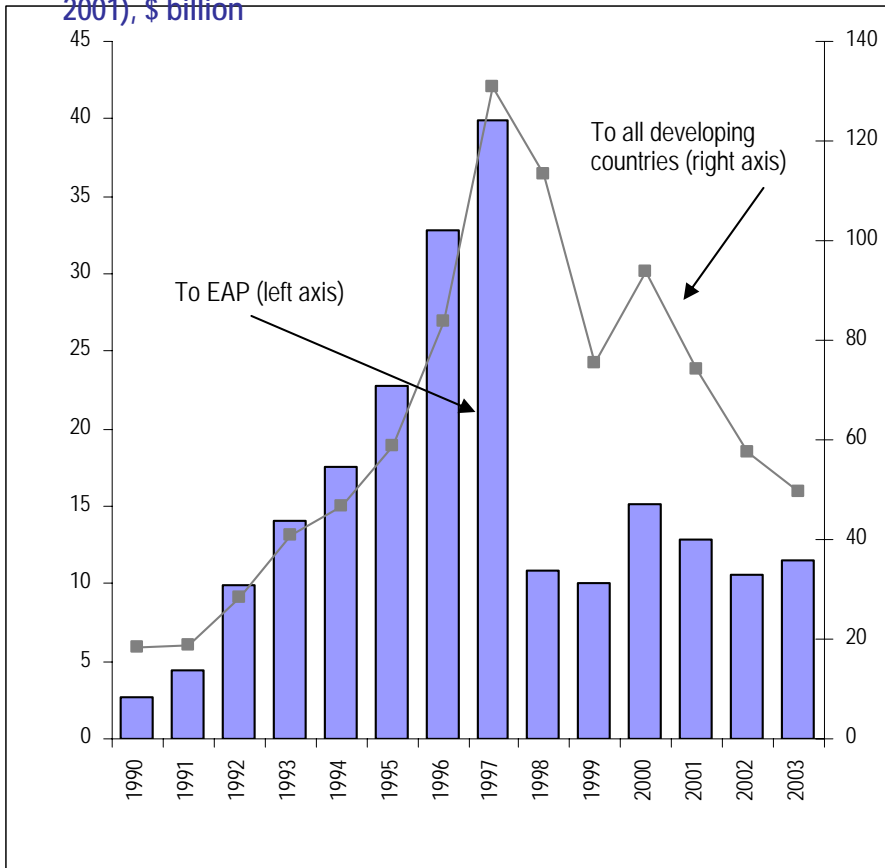


# Financing Constraints in Both Private and Public Sectors

The private sector bubble has burst

Private sector investment in infrastructure (\$ billion)

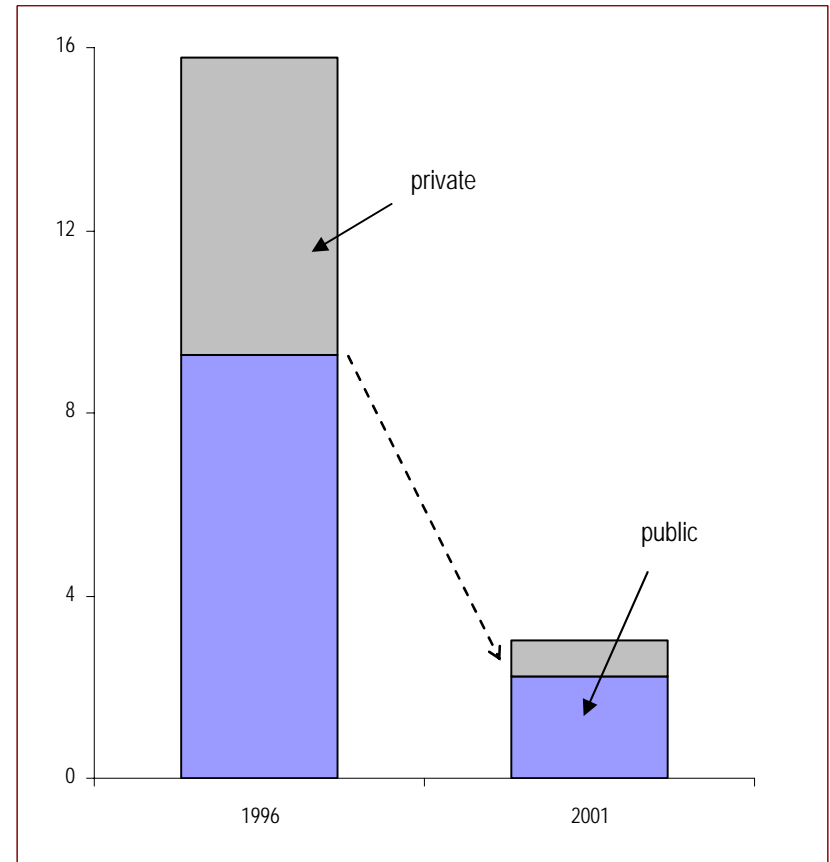
2001), \$ billion



Source: World Bank PPI Database, 2005

Vanished fiscal space in Indonesia

Infrastructure expenditure (1996-

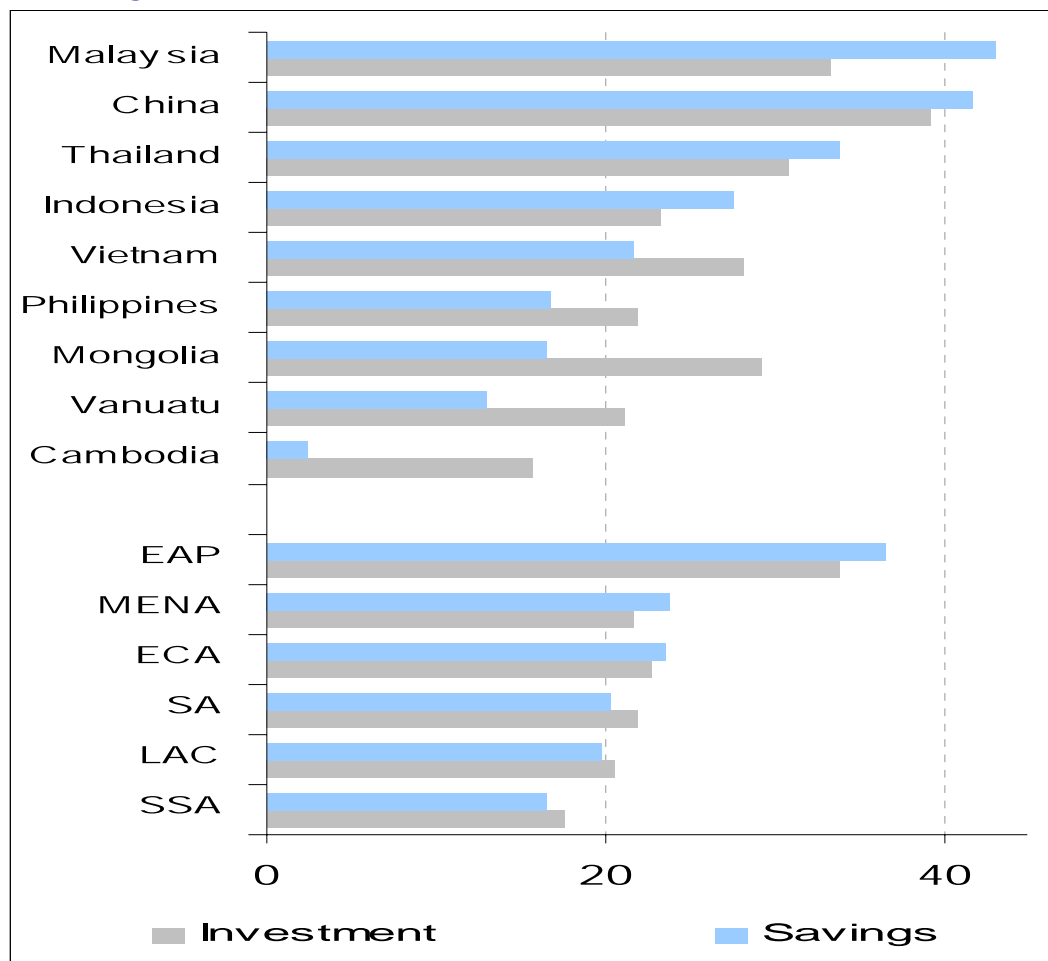


Source: Indonesia – Averting an Infrastructure Crisis: A Framework for Policy and Action, The World Bank



# Savings and Investment in East Asia Far Exceed those in Other Regions

Savings and investment (% GDP) 1993-2002



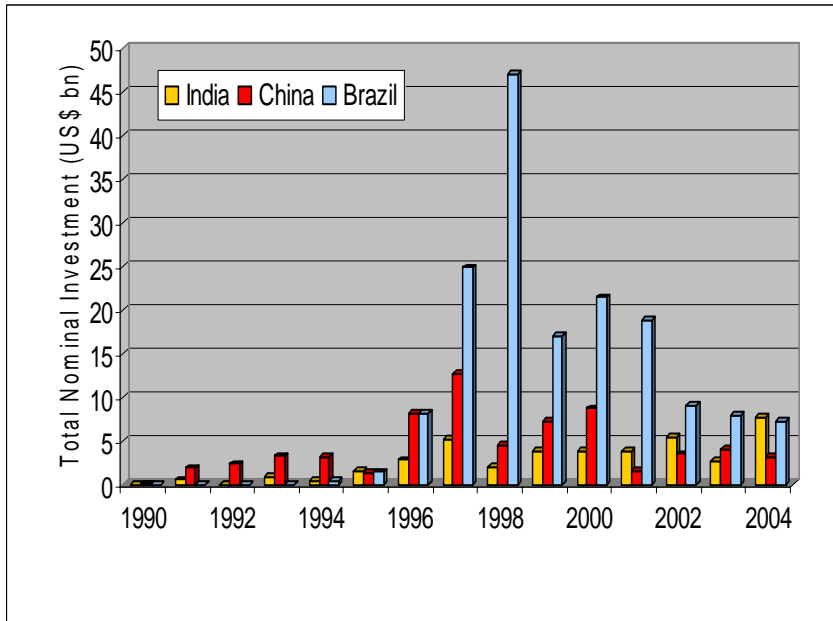
Source: World Development Indicators, 2004

# Comparing India and China

Since 2001, India has surpassed China in the volume of private partnerships...

...but China's growth continues to exceed India's in three sectors

PPI Trends in India, China and Brazil



Infrastructure Stocks in India and China, 1998 - 2003

