# Awakening Giants, Feet of Clay:
# A China-India Comparative Economic Assessment

**By**

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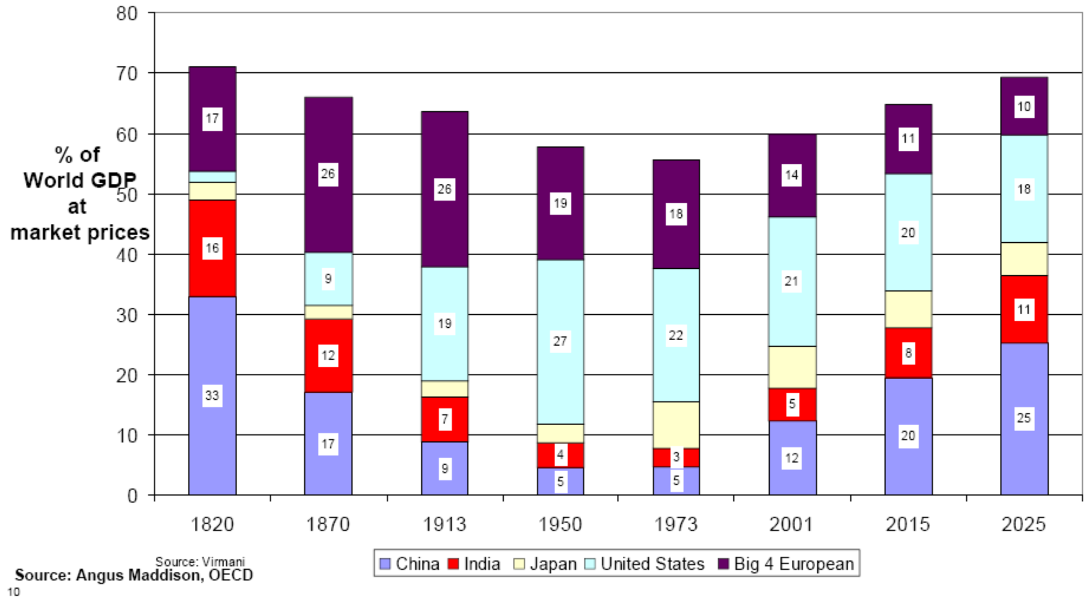
## I

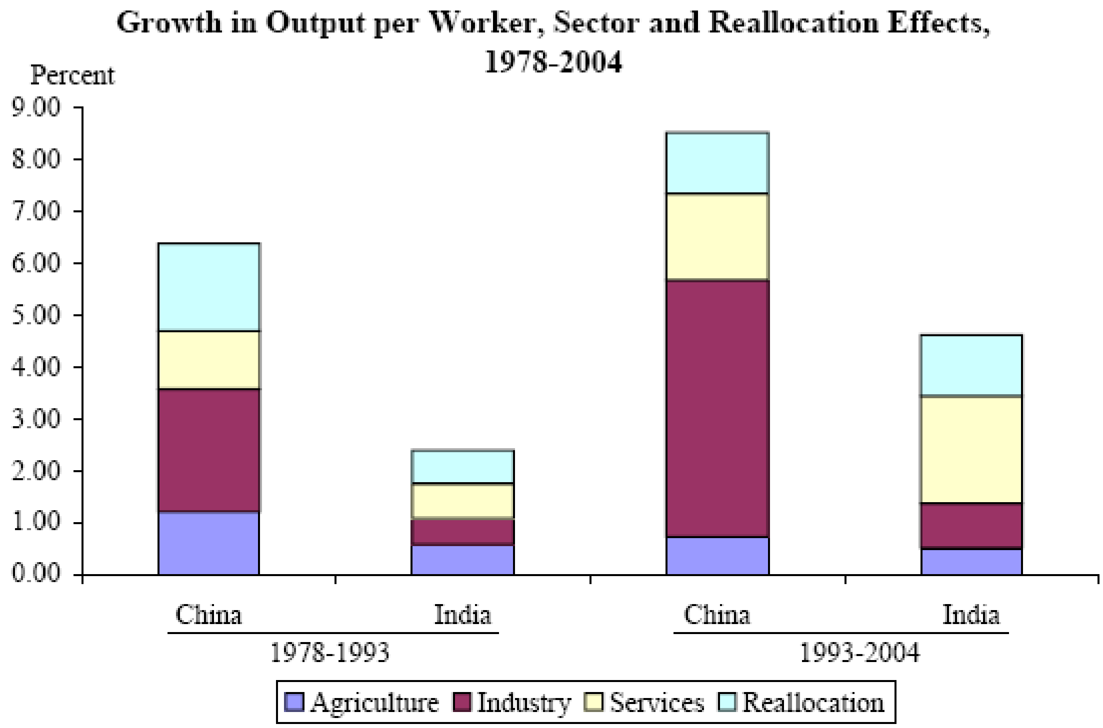
Over the last few years, at least until the current global downturn, the media, particularly the financial press, have been all agog over the rise of China and India in the international economy. After a long period of relative stagnation, these two countries, containing nearly two-fifths of the world population, have had their incomes growing at remarkably high rates over the last quarter century or so.




In per capita income (PPP) India was ahead of China in the 1870's and in the 1970's

But China surged way ahead since then.

India's per capita income growth rate in the last two decades has been nearly 4 per cent, China's has been at least double that rate, and even discounting for some overstatement in the Chinese official rates of growth, China has clearly grown significantly faster.




**Source: Bosworth and Collins (2007)**

**Table 2. Sources of Growth by Major Sector, 1978-2004**

Annual percentage rate of change

| Period | | Output | Employment | Output per Worker | Contribution of: Physical Capital | Land | Education | Factor Productivity |
|---|---|---|---|---|---|---|---|---|
| **Agriculture** | | | | | | | | |
| 1978-04 | China | 4.6 | 0.3 | 4.3 | 2.3 | 0.0 | 0.2 | 1.8 |
| | India | 2.5 | 1.1 | 1.4 | 0.4 | -0.1 | 0.3 | 0.8 |
| 1978-93 | China | 5.2 | 0.9 | 4.3 | 2.5 | -0.2 | 0.2 | 1.8 |
| | India | 2.7 | 1.4 | 1.3 | 0.2 | -0.1 | 0.2 | 1.0 |
| 1993-04 | China | 3.7 | -0.6 | 4.3 | 2.1 | 0.2 | 0.1 | 1.8 |
| | India | 2.2 | 0.7 | 1.5 | 0.7 | -0.1 | 0.3 | 0.5 |
| **Industry** | | | | | | | | |
| 1978-04 | China | 10.0 | 3.1 | 7.0 | 2.2 | | 0.2 | 4.4 |
| | India | 5.9 | 3.4 | 2.5 | 1.5 | | 0.3 | 0.6 |
| 1978-93 | China | 9.3 | 4.4 | 4.9 | 1.5 | | 0.2 | 3.1 |
| | India | 5.4 | 3.3 | 2.1 | 1.4 | | 0.4 | 0.3 |
| 1993-04 | China | 11.0 | 1.2 | 9.8 | 3.2 | | 0.2 | 6.2 |
| | India | 6.7 | 3.6 | 3.1 | 1.7 | | 0.3 | 1.1 |
| **Services** | | | | | | | | |
| 1978-04 | China | 10.7 | 5.8 | 4.9 | 2.7 | | 0.2 | 1.9 |
| | India | 7.2 | 3.8 | 3.5 | 0.6 | | 0.4 | 2.4 |
| 1978-93 | China | 11.3 | 6.5 | 4.7 | 1.8 | | 0.2 | 2.7 |
| | India | 5.9 | 3.8 | 2.1 | 0.3 | | 0.4 | 1.4 |
| 1993-04 | China | 9.8 | 4.7 | 5.1 | 3.9 | | 0.2 | 0.9 |
| | India | 9.1 | 3.7 | 5.4 | 1.1 | | 0.4 | 3.9 |

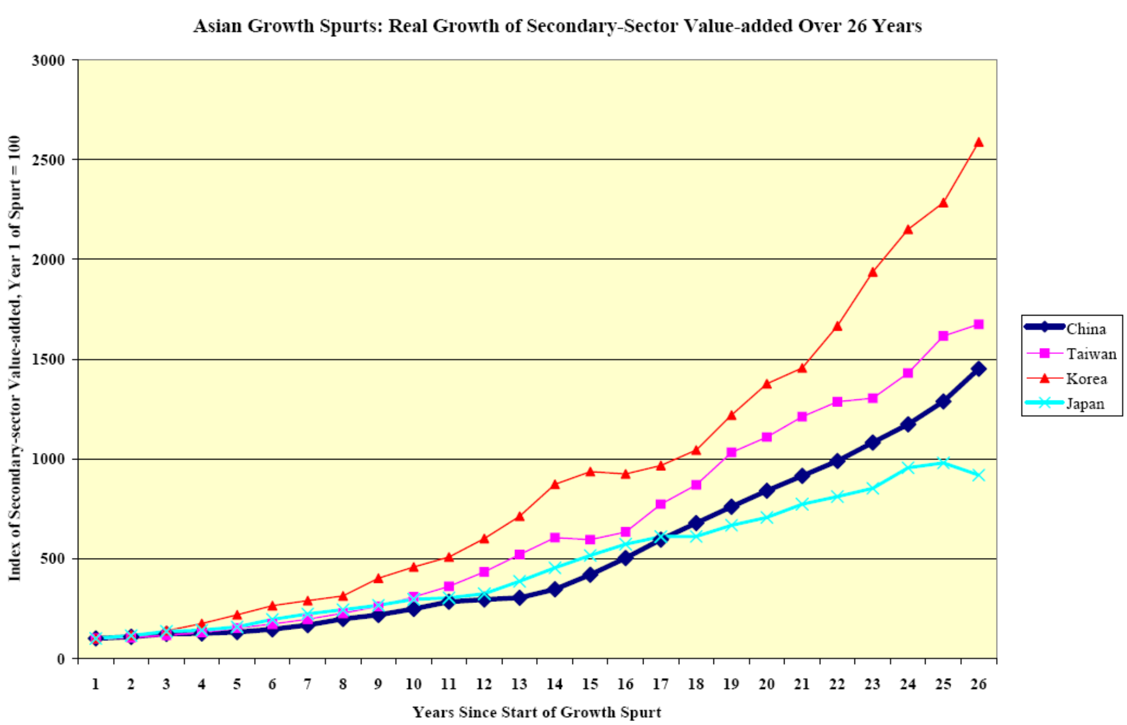
Source: Bosworth and Collins (2007)

As Table 2 shows, industrial output in China grew at an annual rate of 9.3 per cent between 1978 and 1993, and at 11 per cent between 1993 and 2004. Total factor productivity in industry grew at the annual rate of 3.1 per cent in the first period and at twice that rate in the second period.

Industrial output in India grew at the annual rate of 5.4 per cent between 1978 and 1993, and at 6.7 per cent between 1993 and 2004. Total factor productivity grew at 0.3 per cent and 1.1 per cent in those two periods respectively. Even though these rates are much lower than those in China, compared to the past these represent a significant advance for India.

China is now widely regarded as the manufacturing workshop of the world, but growth in output can be somewhat misleading for countries like China (or India) where a large amount of manufacturing is still assembling and processing materials and components: in 2004, China's share in the worldwide manufacturing *value added* was less than 9 per cent, compared to Japan's 21 per cent and that of US at 24 per cent.

In fact there is evidence that the growth in *value added* in the secondary sector was significantly higher in Taiwan and South Korea than in China in the first 25 years since growth spurt started.




Source: Brandt, Rawski, and Sutton (2008)

While growth of exports and FDI in China contributed to employment expansion, technological and managerial upgrading and disciplining of hitherto-coddled inefficient enterprises, they have not been the main driver of economic growth; their direct net impact has been quantitatively modest in terms of GDP growth, compared to that of domestic investment or consumption, as shown in Branstetter and Lardy (2008).
Even at the height of recent global expansion of trade in the period 2002-07, the increase in net exports contributed only about 15 per cent of total real GDP growth in the period.

In Table 2 the more significant growth in India is in the service sector; total factor productivity in that sector grew from an annual average of 1.4% in 1978-93 to 3.9% in 1993-04. The Indian growth process has been described as a service-sector-led growth, whereas in China it has been more manufacturing-centered.

One immediately thinks of the widely acclaimed performance of Indian software and other IT-enabled services. But it seems that in the economy's service sector growth in the period 1993-04 not all of the growth can be explained by finance, business services or telecommunication where economic reform may have made a difference. Table 4 shows that a large part of the growth in the service sector, at a rate higher than that in manufacturing, was in the traditional or "unorganized sector" services, which even in the last decade formed about 60 per cent of the service sector output. These are provided by tiny enterprises, often below the policy radar, unlikely to have been directly affected substantially by the regulatory or foreign trade policy reforms. Thus the link between economic reform and growth in the leading service sector is yet to be firmly established, though it is possible that some informal service enterprises now act as sub-contractors to large firms, and there may have been some spillovers of the communication revolution into the informal sector.

Table 4: Growth in Components of Service Sector (percentages)

| | Modern Services | | | | | Traditonal Services | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Period | Total | Communi cations | Finance | Business Services | Education & Medical | Total | Trade | Transportation | Other Services | Services less Dwellings |
| | | | | | Share of Total Output in Services | | | | | |
| 1960-61 | 19 | 2 | 6 | 1 | 10 | 81 | 40 | 14 | 27 | 100 |
| 1980-81 | 22 | 3 | 7 | 1 | 11 | 78 | 37 | 16 | 24 | 100 |
| 1993-94 | 31 | 3 | 14 | 2 | 12 | 69 | 34 | 14 | 21 | 100 |
| 1999-00 | 35 | 6 | 14 | 4 | 12 | 65 | 33 | 12 | 19 | 100 |
| 2004-05 | 40 | 11 | 12 | 5 | 11 | 60 | 33 | 11 | 16 | 100 |
| | | | | | Annual Percentage Rate of Change | | | | | |
| 1960-80 | 5.7 | 6.9 | 5.9 | 3.4 | 5.5 | 4.6 | 4.5 | 5.6 | 4.3 | 4.9 |
| 1980-93 | 9.0 | 7.1 | 12.3 | 9.8 | 6.6 | 5.4 | 5.6 | 5.4 | 4.9 | 6.3 |
| 1993-99 | 12.6 | 20.3 | 9.3 | 28.0 | 10.6 | 8.9 | 9.8 | 7.5 | 8.6 | 10.1 |
| 1999-04 | 10.5 | 23.8 | 5.7 | 11.4 | 7.1 | 6.5 | 7.9 | 5.7 | 4.3 | 8.0 |
| | | | | | Percentage Contribution to Total Services Growth | | | | | |
| 1960-80 | 1.1 | 0.1 | 0.3 | 0.0 | 0.5 | 3.8 | 1.8 | 0.8 | 1.2 | 4.9 |
| 1980-93 | 2.0 | 0.2 | 0.9 | 0.1 | 0.7 | 4.2 | 2.1 | 0.9 | 1.2 | 6.3 |
| 1993-99 | 3.9 | 0.7 | 1.3 | 0.5 | 1.2 | 6.2 | 3.3 | 1.1 | 1.8 | 10.1 |
| 1999-04 | 3.7 | 1.3 | 0.8 | 0.5 | 0.8 | 4.2 | 2.6 | 0.7 | 0.8 | 8.0 |

source: authors' calculations from CSO (2006) and prior years.

Source: Bosworth, Collins, and Virmani (2007)

India has not yet succeeded in a massive expansion of the kind of labor-intensive manufacturing jobs which have transformed the economies of China (and now, Vietnam).

Most of Indian success has been in relatively skill- and capital-intensive industries.

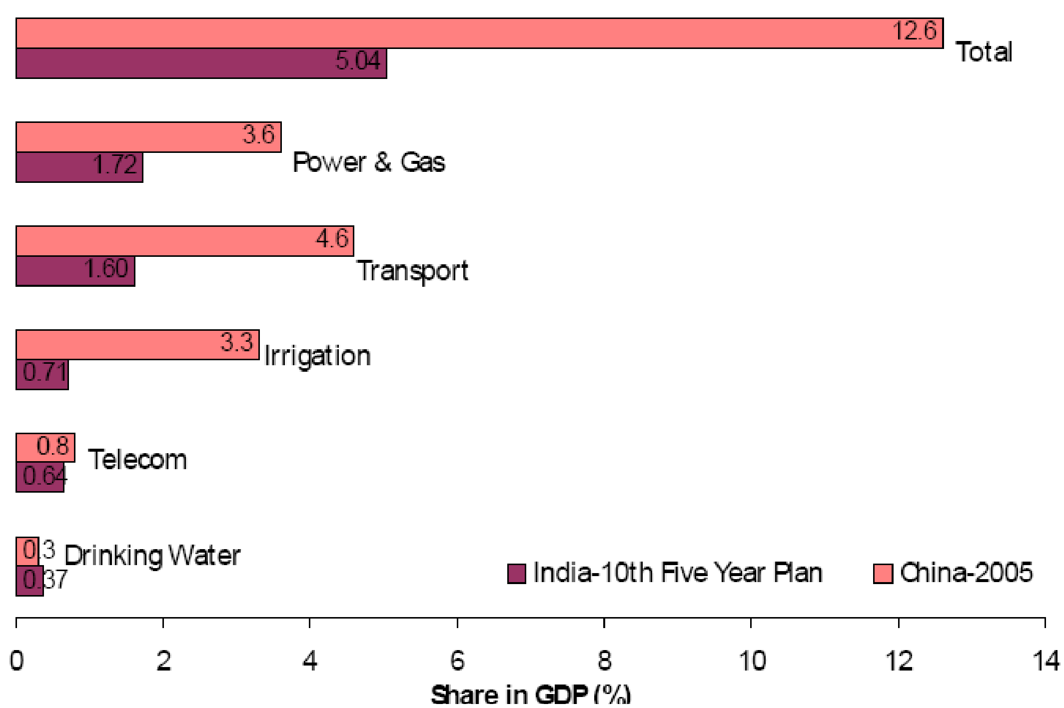
Many reasons for the relative lack of progress in labor-intensive manufacturing have been cited.

Which of these reasons are more important than others is not yet resolved at the level of rigorous empirical analysis.

Many factors that are involved :

- India's creaking infrastructure (power, roads, etc.), particularly compared to China's phenomenal progress in that matter

**Chart 1: Infrastructure Investment (% of GDP), China and India**




China's much larger investment in infrastructure driven by:

- China's high enterprise/corporate savings, and low fiscal deficit relative to India

(although some of the Chinese fiscal deficit is disguised in the form of non-performing loans of SOE's from banks)

- weaker popular resistance to charging user prices for infrastructural services (for example, China does not subsidize production or consumption of electricity, whereas in India cost recovery is an enormous political and financial problem)
- peremptory land acquisition for infrastructural projects (already more than 66 million farmers have lost their land to commercial development often without adequate compensation)
- better modes of management of infrastructure financing and construction (In China urban infrastructure is constructed, operated, and maintained by separate companies set up by the city government, whereas in India the municipal government itself does it through its own departments.

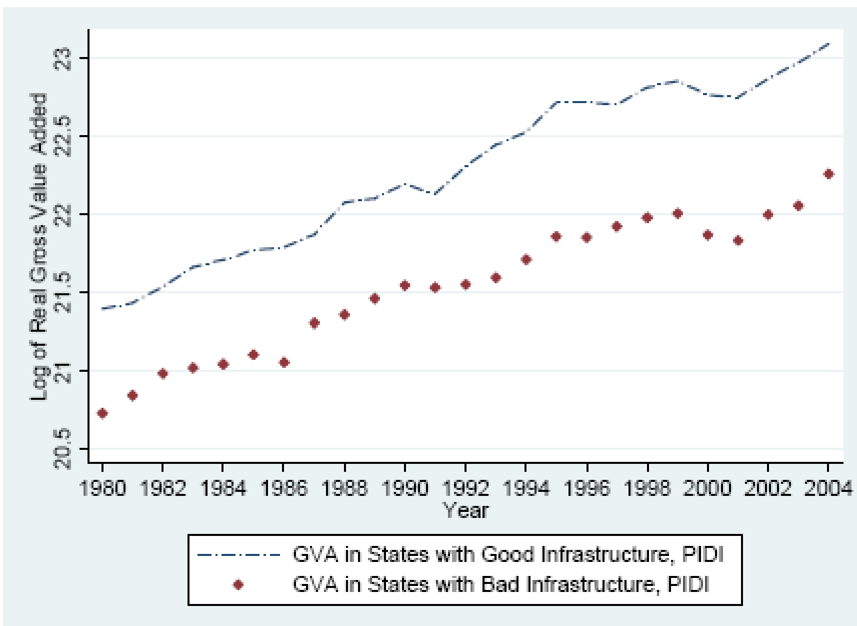
The latter are financially strapped, as they do not have much taxation power and are perpetually dependent on the state government for funds. In general the fiscal system is much more decentralized in China, where sub-provincial levels of government tend to spend more than half of total government expenditure, compared to about 5% in India.)

- Restrictive Labor Laws in India (particularly those relating to job security) are often considered a major disincentive to hiring in large-scale labor-intensive industries and a cause of more capital-intensive techniques in production. In China strikes are not permitted, and the monopoly Party union has no say in lay-offs by employers. China laid off about 30 million workers from state and collective-owned urban manufacturing enterprises in just five years—1995-2000; if India tried even a fraction of this there would have been a huge political upheaval.

But I think the constraint of restrictive labor laws is somewhat exaggerated. Labor laws are implemented at the state level and it is well-known that many state Governments look the other way when they are openly violated -—Jenkins (2000) has referred to this as an example of ‘reform by stealth’.

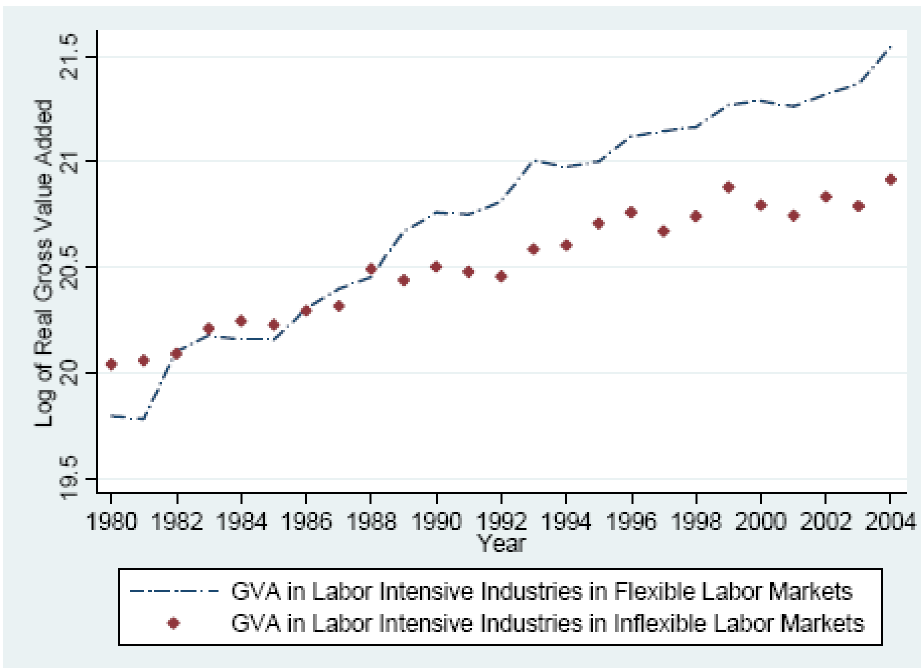
So far the most detailed econometric study of industrial growth based on state-level Annual Survey of Industries data in India for 42 three-digit manufacturing industries for the period 1980-2004 is by Gupta, Hasan, and Kumar (2008). They find that the impact of delicensing reforms (since 1985) has been highly uneven across industries: industries which are labor-intensive, use unskilled labor, and depend on infrastructure (or are energy dependent) have experienced smaller gains in growth of value added from those reforms. States with less competitive product market regulations have experienced slower growth and states with more inflexible labor market regulations have experienced slower growth particularly in labor-intensive industries. Figures below are cited from Gupta, Hasan, and Kumar (2008).

Effects of Infrastructure on Growth in Registered Manufacturing in India




GVA refers to Gross Value Added; PIDI is the Physical Infrastructure Development Index.

Figure 2.3: State-level Variations in Labor Market Regulation and Growth in Labor-Intensive Industries in India




The labor market may be more ‘flexible’ in China than in India, but one should not exaggerate the difference in job security and benefits. As Cai, Park and Zhao (2008) point out, until the late 1990’s the

Government tightly restricted the dismissal of workers in China. Enterprises could dismiss no more than 1 per cent of their employees each year, were barred from dismissing certain types of workers, and were expected to place dismissed workers in new jobs. Then at the end of 90's came the large-scale layoffs from SOE's. But Giles, Park, and Cai (2006) find that during the period 1996-2001 a significant fraction of unemployed workers (near half in the case of older workers) had access to public subsidies (including post-layoff *xiagang* subsidies for three years, unemployment benefits at the end of those three years and social assistance through the minimum living standard program). Since January 2008 a new labor law in China partially secures the tenure of longtime workers, but not so rigidly as in India.

- Reservation of many products (now dwindling in numbers) in India for the small-scale producers, denying the sector economies of large scale. Chinese factories for the same products are much larger. In general, average size of firms much lower in India in most industries, even outside this reserved domain

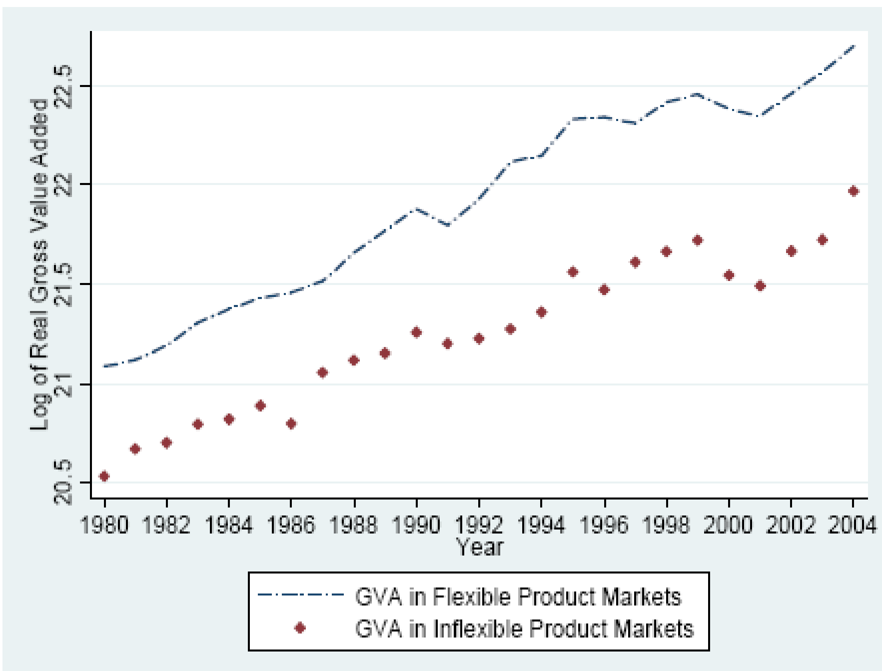
- Much less progress in India in labour-intensive agro-processing (various restrictions on agricultural marketing and distribution, apart from poor preservation, cold storage and warehousing facilities) and other rural non-farm products. Unlike in India, rural non-farm sector was the leading sector in Chinese industrialization, with local business development encouraged by fiscal decentralization
- Even in agriculture, market liberalization induced a major structural shift in China from land-intensive staple grains to high-value labor-intensive products (like fruits and vegetables, livestock and fisheries). For example, China now adds the equivalent of the production capacity of California (the world's most productive vegetable grower) every two years, and its share of cultivated area devoted to fruit orchards is a few times that in any other agricultural country. China has encouraged large retail companies—both

domestic and foreign—to invest in cold chains and retail distribution networks. Indian agricultural marketing is hampered by regulations that mainly help monopoly purchase by state-appointed commission agents

- Much more substantial foreign investment in China has enabled Chinese joint-venture companies to acquire new technology and break into export markets in labor-intensive products. In particular Chinese rural industries were helped considerably by the international retail marketing links of Hong Kong and Taiwan entrepreneurs with foreign markets, just as the latter were being priced out of those markets.
- Domestic Product Market Regulations

(According to the OECD (2007) report, the Herfindahl Index scores of industrial concentration suggest that India's share of highly concentrated industries is more than three times that in China (or the US). Such an anti-competitive environment, reinforced by persistent restrictive regulations in many states, is unlikely to have been favorable to industrial growth.)

## Effects of State-level Variations of Product Market Regulations on Industrial Growth in India



High saving, but low financial intermediation in both countries (Indian household savings rate higher than in China—this gap is likely to increase over time as the worker-dependent ratio peaks in China in the early years of next decade, but 2030's in India). Precautionary motive of saving dominant in both countries when social protection is minimal, particularly in rural areas and urban informal sector.

**Table 1: Savings and Investment in China (% of GDP)**

| | 1990 | 1995 | 2000 | 2005 |
|---|---|---|---|---|
| **Domestic Savings** | **38.7** | **41.2** | **38.2** | **42.0** |
| Households | 20.0 | 20.0 | 16.4 | 16.0 |
| Government | 7.3 | 4.8 | 6.3 | 6.0 |
| Enterprise | 11.4 | 16.4 | 15.5 | 20.0 |
| **Investment** | **34.7** | **40.8** | **36.3** | **41.0** |
| Household | 6.4 | 2.7 | 5.5 | 6.0 |
| Government | 3.6 | 5.2 | 3.5 | 4.0 |
| Enterprise | 24.7 | 32.9 | 27.3 | 31.0 |
| **Current Account (S-I)** | **4.0** | **0.4** | **1.9** | **1.0** |

Source: Kuijs, Louis (2005, 2006)

**Table 2: Savings and Investment in India (% of GDP)**

| | 1990 | 1995 | 2000 | 2005 |
|---|---|---|---|---|
| Domestic Savings | 21.8 | 24.4 | 24.8 | 31.1 |
| Households | 17 | 18.6 | 21.1 | 21.6 |
| Government | 2.4 | 2.3 | -0.8 | 2.4 |
| Enterprise | 2.4 | 3.5 | 4.5 | 7.1 |
| Investment* | 23.7 | 23.5 | 25.3 | 28.4 |
| Households | 9.2 | 6.7 | 10.5 | 11.4 |
| Government | 10.2 | 9.3 | 7.4 | 7.1 |
| Enterprise | 4.4 | 7.5 | 7.4 | 9.9 |
| **Current Account (S-I)** | **-1.9** | **0.9** | **-0.5** | **2.7** |

Source: Handbook of Statistics on Indian Economy, Reserve Bank of India

Notes:*: Investment is Gross Capital Formation

In China the state-controlled large banks dominate the whole financial system, paying their depositors a below-market rate, ‘non-performing loans’ still remain a significant burden, and allocation of capital remains severely distorted, particularly working against private enterprise which accounts now for more than half the GDP. The Indian financial system is somewhat more balanced in terms of banking, equity, and bond markets as sources of formal finance and better-regulated and less saddled with bad loans, but the banking sector still leaves a large part of the economy with small enterprises seriously underserved, and with high Government borrowing, the cost of capital in the economy remains high. The impending pension needs of an aging population and the need to cover the large informal sector will seriously afflict the financial sector in both countries without substantial reform.

**Table 7.1: Poverty measures for $1 a day per capita (in 2005 PPP)**

(a) Percentage of population

| Country | 1981 | 1984 | 1987 | 1990 | 1993 | 1996 | 1999 | 2002 | 2005 |
|---|---|---|---|---|---|---|---|---|---|
| China | 73.5 | 52.0 | 38.0 | 44.0 | 37.7 | 23.7 | 24.1 | 19.1 | 8.1 |
| India | 42.1 | 37.6 | 35.7 | 33.3 | 31.1 | 28.6 | 27.0 | 26.3 | 24.3 |

(b) Number of people (in millions)

| Country | 1981 | 1984 | 1987 | 1990 | 1993 | 1996 | 1999 | 2002 | 2005 |
|---|---|---|---|---|---|---|---|---|---|
| China | 730.4 | 548.5 | 412.4 | 499.1 | 444.4 | 288.7 | 302.4 | 244.7 | 106.1 |
| India | 296.1 | 282.2 | 285.3 | 282.5 | 280.1 | 271.3 | 270.1 | 276.1 | 266.5 |

Source: Chen and Ravallion (2008)

Non-income indicators of poverty:

Life expectation at birth now in India is what it used to be in China in the early 70's.

Indicators of child malnutrition and mortality much worse in India:

- In the 0-3 age group 46% underweight (8% in China, about 30% in sub-Saharan Africa)
- 38% stunted
- More than 70% anemic
- Below-5 child mortality per thousand 94 in India (41 in China)

Decline of Rural Health Services in China, since de-collectivization of 1978 and since the recentralization of public finance in 1994, which left unfunded mandates for social services with local governments particularly in the interior provinces

China essentially moved from one of the most impressive basic public health coverage systems to an effectively privatized (or user charge financed) system, particularly in rural areas.

Gini coefficient of income inequality (accounting for cost of living differences between rural and urban areas and across provinces) went up from 0.29 in 1990 to 0.39 in 2004—see Lin, Zhuang, Yarcia, and Lin (2008).

India does not have comparable time series data for *income* inequality: NCAER data suggest that after correction for rural-urban price differences the Gini coefficient for income inequality in India was 0.535 in 2004-5 (this represents a large rise from mid-80's).

In both countries, inequality across provinces is a small proportion of total inequality

Urban-rural disparity higher in China than in India, but social surveys (for example, that carried out by the Harvard sociologist, Martin Whyte) suggest that inequality per se does not generate much discontent in rural China.
This is not unexpected in this fast growing economy when even in rural areas the average per capita household income increased at an annual rate of nearly 5 per cent in 1991-2004. Even across expenditure groups, the bottom quintile in China experienced a significant 3.4 per cent growth rate in mean per capita expenditure between 1993 and 2004 (the corresponding figure for the Indian bottom quintile group is only 0.85 per cent). Also, the Chinese rural people may perceive more opportunities opening up with the relaxation of restrictions on mobility from villages and improvement in roads and transportation.  What inflame the passions of people in rural areas are arbitrary land seizures and toxic pollution. (India also has had some flashpoints of peasant unrest and violence over land acquisition, even though the latter has been on a much smaller scale).

Inequality of opportunity (land, education, gender, social identity, etc.)

The Gini coefficient of distribution of land (in terms of operational holdings) in rural India was 0.62 in 2002; the corresponding figure in China was 0.49 in 2002

**Gini Coefficients of Inequality in Wealth Distribution**

| | Rural | Urban |
|---|---|---|
| China | | |
| 1995 | 0.33 | 0.52 |
| 2002 | 0.39 | 0.47 |
| India | | |
| 1991 | 0.62 | 0.68 |
| 2002 | 0.63 | 0.66 |

India’s educational inequality is one of the worst in the world: according to data in the WDR 2006, the Gini coefficient of the distribution of adult schooling years in the population was 0.56 in India in 1998/2000, which is not just higher than 0.37 in China in 2000, but even higher than almost all Latin American countries (Brazil: 0.39). Even in the 15-24 age group 24% are illiterate in India, almost none in China.

Male to female ratio in children (below 6 years) is very high at about 1.19 in China (1.08 in India). Already by 2005 there were 32 million more boys than girls under age 20 in China.

But one should add that female literacy and labor participation rates (above 70 per cent in urban China, 24 per cent in urban India) being substantially higher in China, women in China have had the opportunity to contribute to economic growth much more than in India.

Environmental damages, particularly in the form of water and air pollution. China and India have now 18 of the world’s 20 most polluted cities (most of them in China). China adds a coal-fired power plant every week. India is also dependent on coal as the most important energy source, though to a somewhat smaller extent. Recent reports suggest that China has already overtaken the US as the largest emitter of energy-related greenhouse gases. Energy-efficiency is somewhat lower in China than in India (although the gap in energy-efficiency is smaller now than before between the two countries)

Emissions-GDP ratio very high in both China and India, but somewhat higher in China. According to an estimate by WHO, air pollution (both indoor and outdoor) has been the cause of more than half a million premature deaths every year in India (the number is even higher for China).

Satellite Image of Tropospheric Nitrogen Dioxide Emission Levels from Fossil Fuel Combustion and Biomass Burning in Asia (from ***Nature***, September 2005)

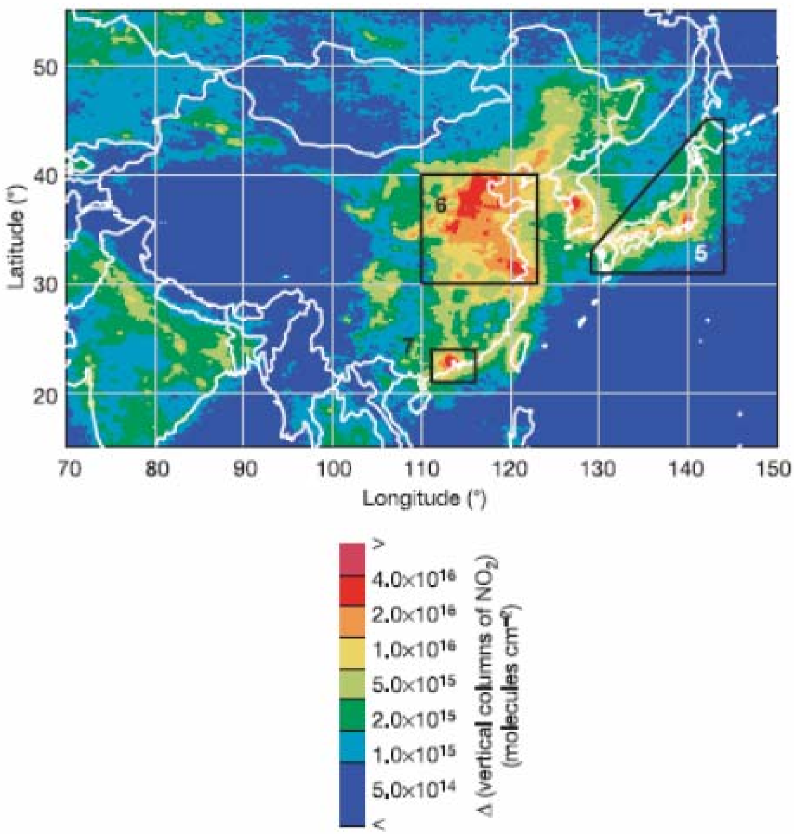



**Figure 2 | SCIAMACHY tropospheric $NO_2$ vertical columns averaged between December 2003 and November 2004 for selected industrial regions.** SCIAMACHY measurements are taken close to 10.00 a.m. LT. A nonlinear colour scale has been used because of the large range of $NO_2$ vertical columns. The numbered rectangles indicate the regions used in Fig. 3.

Many of the river systems in China are now so toxic that the water cannot be used for irrigation (not to speak of drinking or supporting marine life). In both countries over-extraction of groundwater has led to serious depletion of water tables. Two-thirds of the population in both countries lack clean drinking water.

**Table 9.1 Environmental Indicators, 2008**

| | China | | India | |
|---|---|---|---|---|
| | Country Score | (Average Score for Country Income Group) | Country Score | (Average Score for Country Income Group) |
| A. | | | | |
| 1. Adequate Sanitation | 34.5 | (62.0) | 21.6 | (48.2) |
| 2. Drinking Water | 61.0 | (79.7) | 76.2 | (59.6) |
| 3. Urban Particulates | 56.1 | (83.1) | 56.6 | (67.9) |
| 4. Indoor Air Pollution | 15.8 | (67.3) | 13.9 | (38.5) |
| 5. Industrial $CO_2$ Emissions | 49.7 | (75.5) | 73.8 | (85.2) |
| 6. Pesticide Regulations | 59.1 | (51.5) | 13.6 | (41.5) |
| 7. Biodiversity and Habitat | 56.7 | (53.5) | 21.2 | (48.6) |
| 8. Fisheries | 44.0 | (74.1) | 77.2 | (73.6) |
| 9. Environmental Burden of Disease | 94.6 | (91.5) | 76.6 | (78.5) |
| 10. Air Pollution | 44.9 | (93.0) | 88.0 | (89.7) |
| 11. Water (effects on ecosystems) | 69.6 | (64.2) | 65.4 | (67.4) |
| B. | | | | |
| 12. Agriculture | 81.5 | (78.2) | 55.8 | (77.7) |
| 13. Air Pollution ((effects on humans) | 48.6 | (78.4) | 48.2 | (59.7) |
| 14. Water (effects on humans) | 47.7 | (70.9) | 48.9 | (53.9) |
| 15. Climate Change | 52.7 | (71.3) | 57.9 | (71.8) |
| C. | | | | |
| 16. Aggregate Environmental Performance Index | 65.1 | (76.8) | 60.3 | (68.5) |

Source: EPI estimates prepared by Yale University Center for Environmental Law and Policy and Columbia University Center for International Eartl Science Information Network.
For China the reference income group is the 5th decile in PPP per capita incomes of the 149 countries, for India it is the 7th decile.
Items under B include some items under A. (For example item 13 includes item 3 and 4).
Item 16 is aggregate over all items. Not out of which are in the table here with some weight assigned to each item.

The over-all environment performance score for China in 2008 is 65.1 (with rank 105 out of 149 countries), somewhat better than that of India’s 60.3 (with rank 120).Just for comparison, the highest score among these countries is for Switzerland, 95.5, and the lowest is for Niger, 39.1. The scores for China and India are also significantly worse than the average scores in their respective income group of countries; for China the reference group is the fifth decile of countries ranked in ascending order of per capita income (PPP), for India it is the seventh decile.

The scores are abysmally low for both countries in the conditions of sanitation and indoor air pollution (largely caused by smoke from cooking fire from traditional fuel contributing to the high incidence of respiratory illness, particularly among women); they are also extremely low for pesticide regulation and biodiversity in India. The scores are relatively low for both countries in particulate matters in outdoor air in urban areas, in general for air and water pollution (in terms of their effects on human health), and contribution to climate change. Conditions are much worse in China than in India in industrial CO2 emissions, air pollution (in terms of effects on ecosystem), and fisheries. The opposite is the case of environmental degradation in agriculture, where China's score is much better than India's.

Whether the Chinese central Government's energetic countermeasures launched in recent years will succeed in making a big dent on the problems needs to be seen. The Indian countermeasures have yet not reached the Chinese scale, but the environmental movement is more active as a watchdog in India.

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II

## Nature of Capitalism

'Billions of Capitalists'? (Prestowitz, 2005)
Those who envisage 'billions of new capitalists' in China and India do not realize that hundreds of millions of poor people in either country are currently scrounging a living from tiny family enterprises of extremely low productivity. They don't have the kind of access to credit, marketing, and infrastructure or the basic skills and education and risk-bearing capacity that can make a capitalist enterprise possible. They are there because the capitalist parts of the economy (under state or private auspices) cannot absorb them.

Most people will agree that in China while the Party retains the monopoly of power, much of the economy is no longer a 'command economy', with market mechanism being the major allocator of resources. About 95 per cent of consumer prices are now market-determined, though the state still controls prices in some key sectors (like financial services, telecoms, utilities and energy).

But is the economy primarily capitalist now, with private owners of capital providing the dominant mode of organizing social and economic life through their drive for profit-making and accumulation?

The answer is still somewhat ambiguous, but with some telling straws in the wind.

First, how quantitatively important is private ownership now?

It is not easy to classify Chinese firms by their ownership or to distinguish between private control rights and other forms of public or semi-public control rights or to trace their varying shares in a firm. Huang (2008) shows how convoluted the ownership structure is even in China's most successful private-sector firm, Huawei Technology Corporation

Some evidence to suggest that the private sector now contributes over half of industrial value added (though not of fixed capital investments).

But the relationship between private business and the state is often rather clientelistic. They provide support to the state leadership and accept its pervasive control and guidance; they are more interested in a predictable business environment than in full democratization of the polity, and in exchange get political legitimacy and protection, better access to state resources, and at the local level, even partnership with officials.

Of course, it is well-known that some of the entrepreneurs are in fact friends or relatives of Party officials. (A study by the State Council of the Academy of Social Sciences and the Party's Central University has found that of the 3320 Chinese citizens with a personal wealth of 100 million yuan in 2007, about 2932 were children of high-ranking Party officials).

In any case there is a new political-managerial class which over the last two decades has converted their positions of authority into wealth and power. The vibrancy of entrepreneurial ambitions combined with the arbitrariness of power in an authoritarian state has sometimes given rise to particularly corrupt or predatory forms of capitalism, unencumbered by the restraints of civil society institutions.

(Perhaps nowhere has it been as starkly evident as in the recent real estate boom in cities where the commercial developers in cahoots with local officials have bulldozed old neighborhoods, residents waking up in the morning to find that their house has been marked for demolition with the Chinese character *chai* (meaning 'raze') painted in white, with hardly any redress or adequate compensation available.)

The state is still predominant in the producer goods sectors and in transportation and finance. The state still controls the larger and often more profitable (high-margin, more monopolistic) companies in the industrial and service sectors. The SOE's are often highly commercialized: in recruiting professional managers, broadening their investor base, and shedding their traditional social and political obligations, many SOE's do not conform to the usual stereotypes about SOE's.

The state's role in regulating the private sector also goes far beyond the usual functions in other countries-—in bargaining the terms of foreign investment, negotiating the border prices of imported materials, channeling finance and investment to favored sectors, directing consolidation and merger of firms, and in promoting industrial capabilities across sectors and regions.

An important question arises in the cases where an enterprise is managed on essentially commercial principles, but the state, say at the local level, still owns or has control rights over a large share of the assets: is this a capitalist enterprise?

--Some may describe it as capitalist if the principle of shareholder value maximization is followed.

--Others may point out that as long as substantial control rights remain with the state, which is subject to potentially arbitrary political influence, the internal dynamic logic of capitalism is missing.

The actual situation is, of course, even more fluid, as there are different degrees of state control rights, and with recent changes in stock ownership laws markets have become more liquid, loosening the control of state authorities over companies.

Even if the Chinese economy is described as capitalist now, it will be a travesty to deny that the earlier socialist period provided a good launching pad in terms particularly of :

- a solid base of minimum social infrastructure ( broad-based education and health) for the workers;
- a fast pace of rural electrification that facilitated growth of agro-processing and rural industrialization;
- a highly egalitarian land redistribution, which provided a minimum rural safety net, that eased the process of market reform in the initial years, with all its wrenching disruptions and dislocations;
- a system of regional economic decentralization (and career paths of Party officials firmly linked to local area performance)-- for example, county governments were in charge of production enterprises long before economic reforms set in (creating a pool of manufacturing experience, skills and networks) and, drawing upon this pool the production brigades of the earlier commune system evolved into the highly

successful township and village enterprises that led the phenomenal rural industrialization

- the foundation of a national system of basic scientific research and innovation (even in 1980 spending on research and development as per cent of GDP was higher than in most poor countries)
- large female labor participation and education which enhanced women's contribution to economic growth.

Some analysts find in China elements of the 'developmental state', a familiar idea from the earlier East Asian growth literature.

- The financial system has been at the service of a state-directed industrial policy.
- Successful private companies in China like Huawei and Lenovo have benefited a great deal from their close ties with the Government.
- Like in the rest of East Asia export promotion combined with domestic technological capacity building and state encouragement of trial and experimentation in exploring dynamic comparative

advantage sometimes at the expense of static allocation efficiency have been at the core of the development strategy.

Yet the Chinese case is also qualitatively different from the standard ‘developmental state’ of East Asia in several respects.

- ❖ Because of a different history of evolution of the private sector, that grew in the interstices of market reform in a socialist economy, the nature of ‘embeddedness’ of the developmental bureaucracy was quite different in China. In contrast to the coordinated capitalism of Japan and South Korea (where the state presided over the coordination among private business conglomerates), the Chinese case can be, and has been, more aptly described as one of state-led capitalism from above and network (*guanxi*) capitalism from below to fit in the conditions of much weaker development of large private business in China; with a large number of small family-based businesses forming clusters with informal credit and trade links among themselves and with the diaspora

- ❖ Industrial policy has also been more diverse and diffuse in the context of regional variations and decentralized development in a continental-size economy
- ❖ Foreign investment has played a much more important role in technological and organizational upgrading and international marketing than in the other East Asian countries.

The Indian case has also been quite different from the East Asian developmental state. While private business houses have a long history in India, in the first three decades after Independence they were relatively subdued and largely played a subsidiary role to the state leadership and privileged state production in the strategic and heavy industries, and learned to work out niches and modes of operation in a heavily regulated industrial environment. The bureaucratic elite was not particularly pro-business, neither by inclination or ideology, nor in terms of social composition. In any case the tightly-knit links between business and officialdom of the East Asian type were difficult to forge in India where elite fragmentation in an extremely heterogeneous society and the exigencies of populist electoral politics make such tight links politically suspect.

Yet compared to the past, in the last couple of decades the link between the political or bureaucratic leadership and business associations (like CII) on the matter of economic reform has been important in pushing the market principle and in slowly establishing the general hegemony of capital in the political culture. Some of the new entrepreneurs, belonging as they sometimes do to the families of bureaucrats, army officers and other members of the professional classes or sharing ties through education in elite engineering and business schools, have forged new links between the bureaucracy and private capital. The incidence of such linkage has been stronger in some industries and regions than in others, and different state governments have been business-friendly to a different extent.

## Governance and Accountability

The discussion on accountability often begins and almost ends with the statement that China is a one-party authoritarian state, whereas India is a multi-party pluralist democracy. The actual situation is much more complex and this complexity has ramifications for economic development in the two countries. I'll point to severe accountability failures in both countries.

The dramatic success story of China has revived a hoary myth of how particularly in the initial stages of economic development authoritarianism delivers much more than democracy. But the relationship between authoritarianism or democracy and development is not so simple.

Authoritarianism is neither necessary nor sufficient for economic development.

- That it is not necessary is illustrated not only by today's industrial democracies, but by scattered cases of recent development success: Costa Rica, Botswana, and now India.
- That it is not sufficient is amply evident from disastrous authoritarian regimes in Africa and elsewhere.

Several advantages of democracy from the point of view of development:

  - Democracies are better able to avoid catastrophic mistakes, (such as China's Great Leap Forward and the ensuing great famine that killed nearly thirty million people, or a massive mayhem in the form of Cultural Revolution), and they have greater healing powers after difficult times. In general, democracy makes for a better capacity for managing conflicts, which in the long run enables a more stable political environment for development. India's democratic pluralism has provided the means of containing many (though not all) social conflicts, a capacity which I am not sure China's homogenizing, monolithic state has so far acquired. Faced with a public crisis or political shock, the Chinese leadership, which is otherwise so pragmatic, has a tendency to over-react, suppress information, and act heavy-handedly.

- Democracies in general experience more intense pressure to share the benefits of development among the people and to reduce the human costs of dislocation, thus making development more sustainable. They also provide more scope for popular movements against capitalist excesses and industrial fallout such as environmental degradation.
- Democratic open societies provide a better environment for nurturing the development of information and related technologies, a matter of some importance in the current knowledge-driven global economy. Intensive cyber-censorship in

China may seriously limit some forms of future innovations in this area.

India's experience suggests that democracy can also hinder development in a number of ways not usually considered by democracy enthusiasts:

- Competitive populism–- short-run pandering and handouts to win elections–- may hurt long-run investment, particularly in physical infrastructure, which is the key bottleneck for Indian development. Such political arrangements make it difficult, for example, to charge user fees for roads, electricity, and irrigation, discouraging investment in these areas, unlike in China where infrastructure companies charge more commercial rates.
- Competitive populism also makes it difficult to carry out policy experimentation of the kind the Chinese excelled in all through their reform process. For example, it is

harder to cut losses and retreat from a failed project in India, which, with its inevitable job losses and bail-out pressures, has electoral consequences that discourage leaders from carrying out policy experimentation in the first place.

- Electoral politics, particularly in a divided society with weak civic culture of pursuit of general welfare, can also give rise to clientelism, where there is an implicit quid pro quo between voter support and official disbursement of benefits specific to some individuals or a particular social group, at the expense of more broad-based benefits from public goods.

- When democracy takes mainly the form of popular mobilization, as it does in India (where the general education level is low, civic associations relatively weak, and public debates relatively uninformed), the

> opposition can get away with being irresponsible (short-sighted and often opposing the Government for policies they themselves supported when in power). This is over and above the general case that democracy's slow decision-making processes can be costly in a world of fast-changing markets and technology.

In India's extremely heterogeneous and conflict-ridden society, even the elite is highly divided, and there are severe collective action problems in common goal formulation, policy implementation and cooperative problem-solving efforts—this is particularly important in coordinating short-run sacrifices or curbing particularistic demands on the public fisc for the sake of long-run benefits (like those from investment in infrastructure). Increasing political fragmentation in India has made decisive collective action even more difficult in recent years.

In contrast Chinese leadership has shown a lot more decisiveness and coherence in policy initiative and execution. This is not all due to an authoritarian set-up, this may have something to do with the collective action problems being somewhat less severe in China's more homogeneous society.
But the same disorderly processes of fractious pluralistic democracy that make decisiveness on the part of the Indian leadership difficult, make it more legitimate in the eyes of the people. The Chinese leadership, on the other hand, has to derive popular legitimacy from ensuring rapid economic growth, and that is why the current faltering in the high economic growth is regarded by many as regime-threatening for China, not for India, even though India is much poorer.

Democracy has brought about a kind of social revolution in India. It has spread out to the remote reaches of this far-flung country in ever-widening circles of political awareness and self-assertion of socially hitherto subordinate groups.

But this social revolution has been associated with a loosening of the earlier administrative protocols and a steady erosion of the institutional insulation of the decision-making process in public administration and economic management. This has affected not just the ability to credibly commit to long-term decisions, but the whole fabric of governance itself. It is now common practice, for example, for a low-caste chief minister in a state to proceed, immediately upon assuming office, to transfer away top civil servants belonging to upper castes and get pliant bureaucrats from his/her own caste.

Some of the new social groups coming to power are even nonchalant in suggesting that all these years upper classes and castes have looted the state, *now it is their turn*. If in the process they trample upon some individual rights or some procedural aspects of democratic administration, the institutions that are supposed to kick in to restrain them are relatively weak. Highly corrupt politicians are regularly re-elected by their particular ethnic or local constituencies (which they nurse assiduously even while fleecing the rest of the system).

This is part of a fundamental tension between the *participatory* and *procedural* aspects of democracy in India.
Of course, ultimately the checks and balances of the ramshackle but still vibrant legal system kick in to curb undue excesses, in a way that is rather rare in China. The independent judiciary, the Election Commission, and a few of the regulatory bodies still function with some degree of insulation from the political interference and hold up due process against great odds.

This institutional insulation is, of course, much weaker in China, and the 'culture of impunity' of top Party officials is more prevalent. But there has been discernible progress in the legal system: as disputes become more complex, political interference, though still substantial, is declining, particularly in matters of commercial law. There is greater transparency than before in corporate governance in state companies, particularly those listed in overseas stock exchanges. The media and the NGO movement as watchdogs are, of course, much more active in India.

But the great puzzle of Indian democracy is why the poor people, who are so assertive when election time comes, often do not seem to punish politicians who are ineffective in resolving the endemic problems of poverty, disease and Illiteracy.

- Salience of politics of ethnicity and group dignity. Since the poor usually get mobilized on caste and ethnic lines, the modalities of such mobilization are often multi-dimensional, and poverty alleviation is only one of the many issues that get articulated in the public domain.
- Also, the process of such ethnic mobilization is often easy to be hijacked by the elite of these groups, who channel a lion's share of the benefits toward themselves. The intended poor beneficiaries are often unorganized and uninformed about their entitlements.
- Since in India's extremely fractious society it is usually the case that no disadvantaged group by itself is numerically predominant, exigencies of electoral

alliances with other groups (some of them not so disadvantaged) dilute the need for attending to the poorest.

- In general, capture of local democracy by the local elite which negates the effectiveness of many of the anti-poverty programs.

Decentralization of governance in the sense of devolution of power to elected local governments was constitutionally adopted in India around the same time as economic reforms. It was supposed to increase accountability of the service bureaucracy as well as generate resources to address felt needs at the local level. But this particular governance reform as yet remains largely ineffective, except in 3 or 4 states. . A large number of local governments do not simply have adequate funds, or the appropriate delegated functions or competent functionaries to carry out locally initiated autonomous projects that could make a significant difference to the lives of the poor, and there is considerable misappropriation of funds and delivery of services to non-target groups.

In China fiscal decentralization has been successful in providing incentives (and discipline) for rural industrialization. But decentralization has increased regional inequalities, with richer coastal regions having better ability to fund social services. Fiscal recentralization of the middle 90’s has left the local governments particularly in the interior provinces with large numbers of unfunded mandates and social obligations. But the local government even at the county level has still a great deal of power (much more than in India) in privatizing state companies, in regulatory approvals and patronage distribution, in appointing local oversight committees against financial and other irregularities, in appointment of (and fixing salaries of) judges and public prosecutors, and so on. It is difficult for the central Government to control the local officials and wean them away from the cozy rental havens they have built in collusion with local business and commercial interests. The central Government in its pursuit of the goals of reducing inequality, stopping arbitrary land acquisitions, containing environmental damages, and preventing the frequent regulatory scandals (relating to food and other consumer product safety) face at least covert opposition of local officials. Even when the local official is not venal, in an atmosphere of information control his usual inclination is to suppress bad news, as it may adversely affect his chances of promotion or his reputation.

Over more than a quarter century now the Chinese central leadership has, however, shown a remarkable adaptability to changing circumstances and capacity to mobilize new support coalitions to protect its political power. But it is still far from establishing a comprehensive rule-based system and institutionalizing a credible set of checks and balances. It has installed a far more decisive and purposive governance structure than India, but its weaker institutional checks and low capacity of conflict management make it more brittle in the face of a crisis than the messy-looking system in India for all its flaws. As the economy becomes more complex and social relations become more convoluted and intense, the absence of transparent and accountable processes and the attempts by a ‘control-freak’ leadership to force conformity and lockstep discipline will generate acute tension and informational inefficiency.

Several alternative political scenarios for the future in China have been depicted by political speculators, none more plausible than the others; some (wistfully) predict the eventual outbreak of Taiwan- or Korea-style democracy but only on a large scale, starting with the big cities; others predict that even if China manages a soft-landing into some form of quasi-democracy, it will be of the corrupt oligarchic kind under a predominant Party like the one that prevailed in Mexico under PRI for many decades.

While the Indian system has lot more institutionalized outlets for letting off steam it also has more of ethnic and religious tensions and centrifugal forces to grapple with. Its appalling governance structure for delivery of social services, its anomic inability to carry out collective action or to overcome populist hindrances to long-term investment or to address the infrastructural deficit that is reaching crisis proportions, its over-politicized administration and decision-making processes, its clogged courts and corrupt police and patronage politics frequently making a mockery of the rule of law for common people will continue to hobble the process of economic growth and alleviation of its still massive poverty. Yet the differential state capacity and governance performance among different states (better in some south or west Indian states) may generate over time a bit of healthy competition in investment climate and poverty alleviation performance to set examples for the democratic participants in all states to demand, overshadowing the salience of ethnicity or religion in politics.

While both China and India have done much better in the last quarter century than they have in the last two hundred years in the matter of economic growth, and while the polity of both has shown a remarkable degree of resilience in their own ways, one should not underestimate their structural weaknesses and the great deal of social and political uncertainties that cloud the horizons for these two countries.