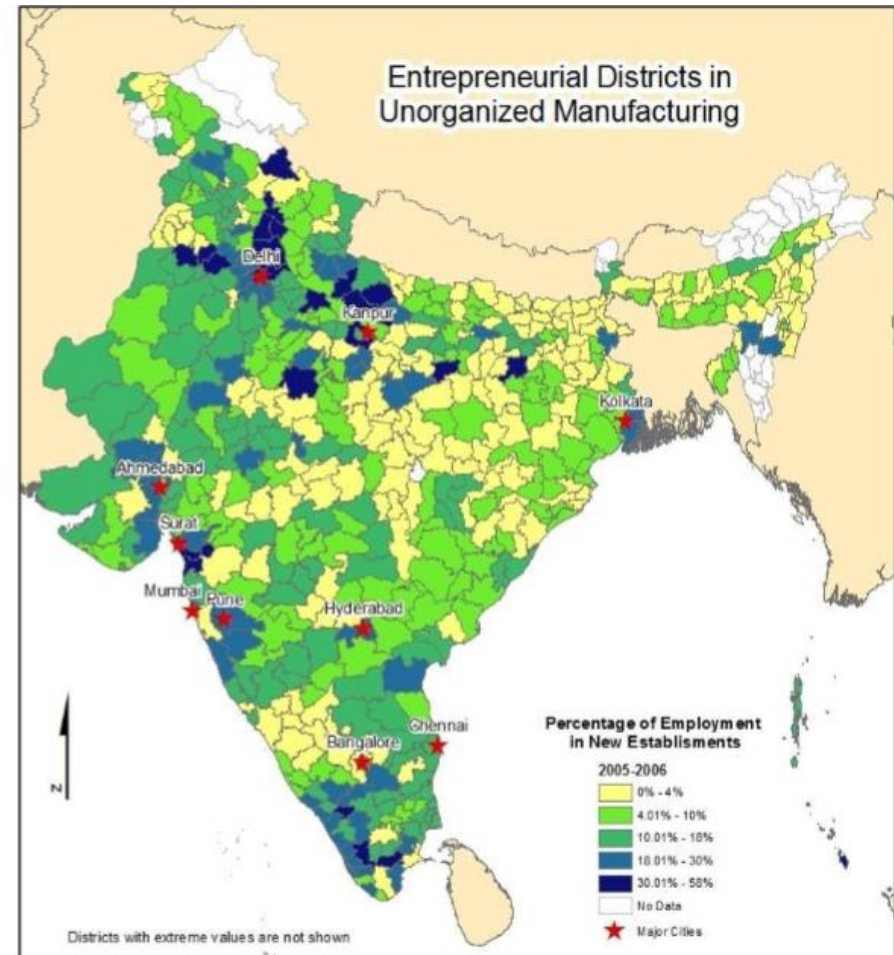
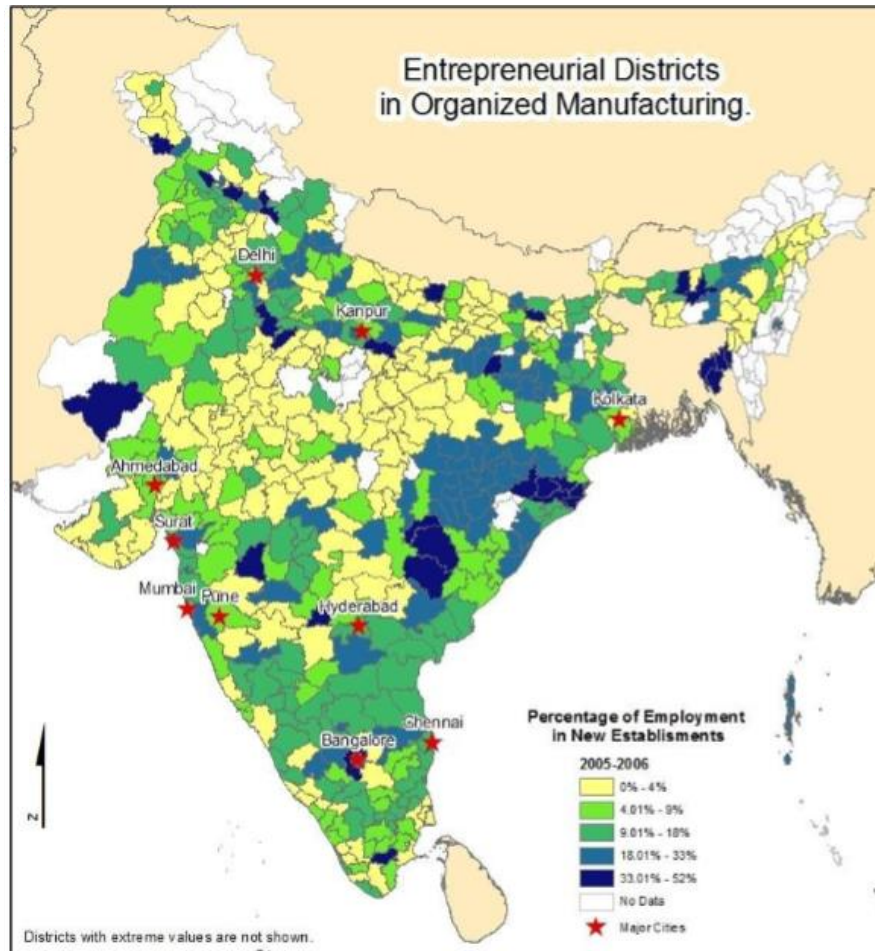




Lecture 4a

The Indian Economy

The Economic Geography of India



A Brief Economic History of India I

- Like China, India is one of the oldest civilizations in the world
 - Established in the Indus River valley and comprising sophisticated urban settlements
 - Collapse followed by replacement with a more tribal/pastoral Vedic culture, organized around a caste system (*varnas*)
 - Iron-age kingdoms followed before unification into single state under the Mauryan Empire (322 BCE)
 - Followed by several dynasties culminating in India's Golden Age (Gupta), before a succession of smaller dynasties eventually fell to Muslim rule (Delhi Sultanate, then Mughal Empire)
- Also like China, India's steady economic growth did not result in industrialized takeoff, although it overtook Qing China around 1700

A Brief Economic History of India II

- Mauryan-Delhi Sultanate Period (321 BCE–1525)
 - Unification under the Mauryan Empire fostered subcontinent-wide trade, finance, and infrastructure development
 - Economic activity organized around *varnas* and religion-inflected collectives
 - Cosmopolitan economy was also integrated into international trading networks over large parts of Afro-Eurasia
- Economic growth was stable but slow, and only began to accelerate under Mughal rule

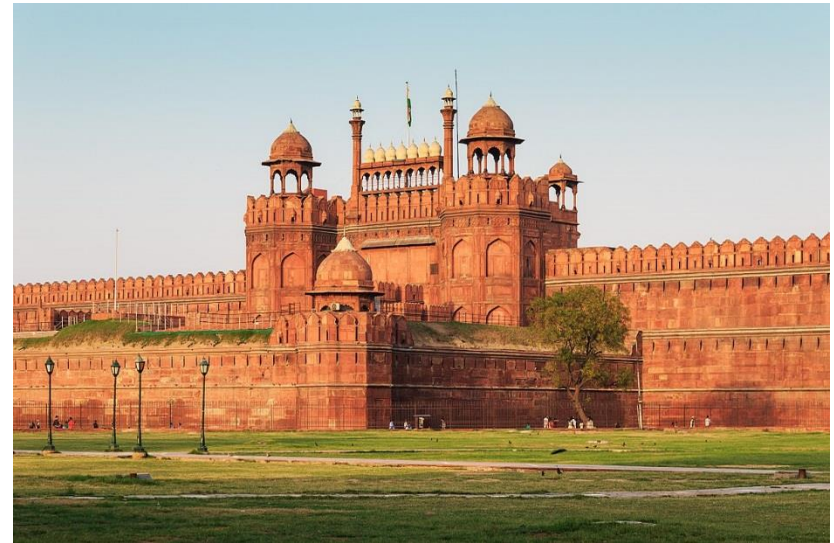
A Brief Economic History of India III

- **Mughal Period (1526–1857)**
 - Led by Babur and his descendants, the Mughals conquered much of the subcontinent and eventually constituted a cosmopolitan empire in India
 - Economic reforms led to an acceleration in economic activity under Mughal rule
 - Agriculture expanded to include nonfood cash crops and processed agricultural products
 - Industry took hold, and by 1750 accounted for as much as a quarter of global manufacturing output
 - By 1700, India had overtaken China to become the world's largest economy
 - While the economy was prosperous, a large share of income was captured by a small administrative and military elite

A Brief Economic History of India IV

- India during the Mughal period exhibited elements of proto-industrialization
 - Complex three-tier framework of landed property rights, comprising incremental rights to: cultivate, levy taxes, and grant taxation rights
 - Sharecropping arrangements were widespread at the time, but occasional tax relief offered incentives for productivity improvements
 - High agricultural productivity enabled development of processed agricultural products, such as textiles, metalware, and foodstuffs
- But productivity began to fall behind in relative terms after the British East India Company gradually acquired sovereignty over many parts of India

Mughal-era achievements were predominantly cultural and military, although economic development also advanced



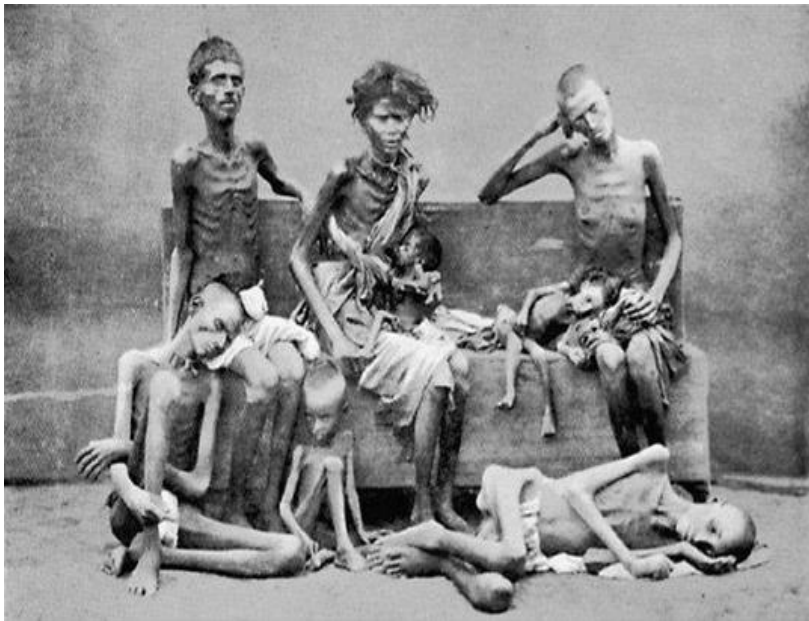
A Brief Economic History of India V

- British India Period (1858–1947)
 - The British first gained a major foothold in India via its East India Company in 1757, after which it began to expand control over the country via Presidencies
 - Economic activity during the period was structurally defined by the importance of labor and natural resources in production
 - The economy became far more open during this period, and India was part of the first wave of globalization in the 19th century
 - Integration into the world economy also enabled Indian participation in the emerging transport and communications revolution
 - Incomes became more evenly spread between colonial officers and private commercial/industrial interests, at the expense of increased poverty

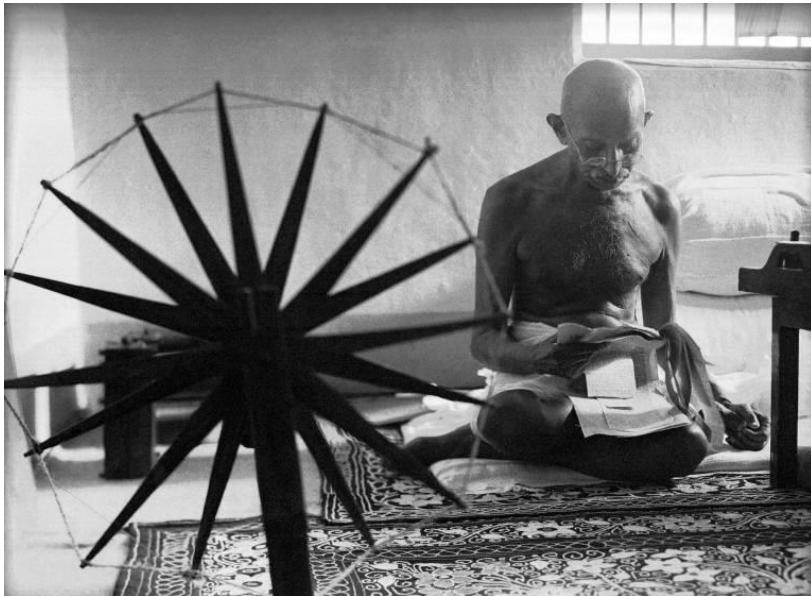
A Brief Economic History of India V

- The British Raj fundamentally altered the trajectory of Indian economic development
 - Although conditions were favorable for takeoff, the economy stagnated and only began industrializing in the late 19th century
 - Economy was realigned from exports of higher value-added processed goods toward lower value-added raw materials, fostering deindustrialization
 - While the British developed Indian infrastructure (esp. railroads and telegraphs) and institutions, these were for resource exploitation
 - Poverty steadily increased, culminating in famine
- The colonial experience left a legacy of Indian leaders emphasizing economic independence to revitalize the country

Inequality in India eventually culminated in routine famines



The lasting impact of colonial deindustrialization was a legacy that stressed economic independence



A Brief Economic History of India VI

- Post-Independence Period (1951–1981)
 - Comprises a nationbuilding phase and import-substituting industrialization phase
 - Both subperiods exhibited slow “Hindu” rate of growth
 - Nationbuilding stressed economic independence, with restrictive industrial policy alongside relative trade/investment openness
 - Dominance of public sector in heavy industry
 - Regulation of investment via licensing
 - Distribution and price controls to manage inputs
 - Domestic political factors led to the rise of socialist program
 - Nationalization of banking/insurance alongside financial repression
 - Tightening regulation and licensing of domestic/foreign business activity
 - Import controls and export subsidies impeded trade

A Brief Economic History of India VII

- The embrace of socialist policies in India were responsible for a significant setback in India's economic development
 - Although the initial stages of central planning raised investment, coordination difficulties in a complex economy made interventionist policies ineffectual
 - Extensive regulation and licensing ("License Raj") left private sector ill-prepared to adapt to external shocks that buffeted the economy
 - Policies seeking equity that resulted in low growth meant that these pro-poor policies were actually anti-poor

India chose state-led, centrally-planned, import-substituting industrialization at independence



Source: <https://youtu.be/T66taDwqqf8>

The Modern Indian Economy I

- Post-Hindu Growth Period (1982–present)
 - Comprises a transition phase followed by a sustained growth takeoff under accelerated liberalization
 - Twin deficits began accumulating in the late 1980s and culminated in a balance of payments crisis in 1991
 - New Industrial Policy consolidated internal liberalization, while trade liberalization shifted to outward orientation in the July 1991 budget
- Return to liberal policies due to perceived failure of license Raj (internal) and global demise of socialism (external)

India was able to escape a more severe collapse of the economy by choosing a path of liberalization after 1992



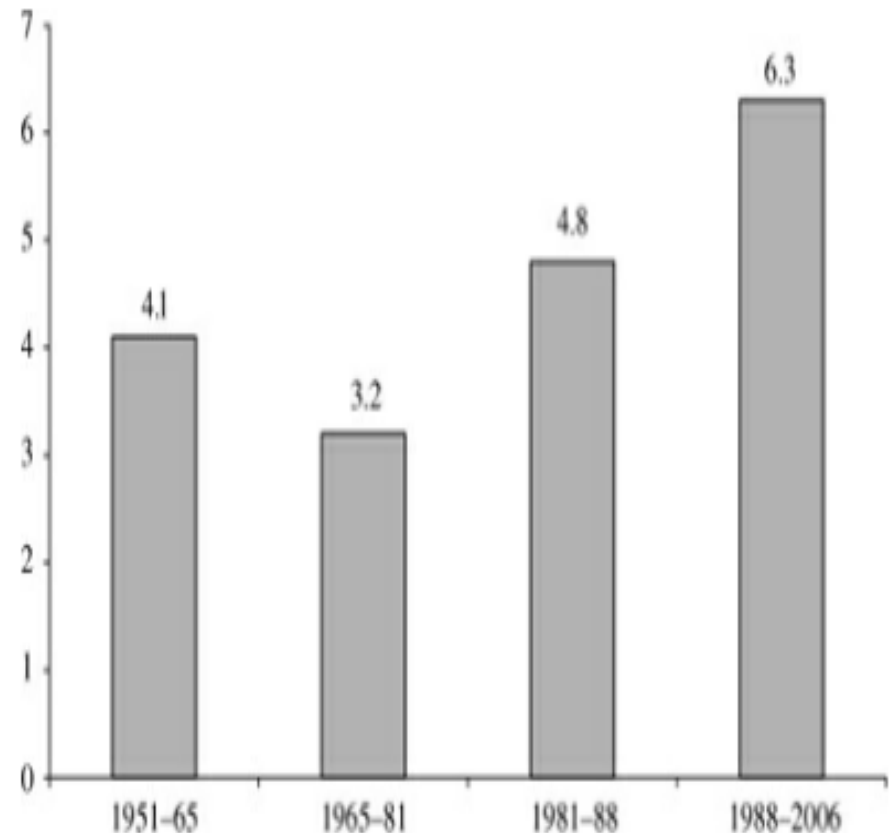
Source: <https://youtu.be/uuPKtTEPQB8>

The Modern Indian Economy III

- India is often regarded as the next emerging economic giant
 - Central challenge remains a transition from India's backward, agriculturally-dependent economy into a modern one
 - Services-led growth with premature deindustrialization
 - Poverty and inequality enduring concerns, but there is a rising middle class
 - Human development is challenged by poor public sector service delivery
 - Monopolistic/oligopolistic industrial structure with “missing middle” of midsize firms
 - Continued struggle with twin deficits challenges
 - Persistent fiscal shortfall with significant leakages
 - Financial sector fragility due to reliance on capital inflows

Average growth rate in India by period, 1951–2006

- Four phases of growth, with earlier two phases exhibiting a slow rate and the later two a fast one
- The break in 1980/81 onward is identifiable statistically as well as from policy changes that began to be undertaken

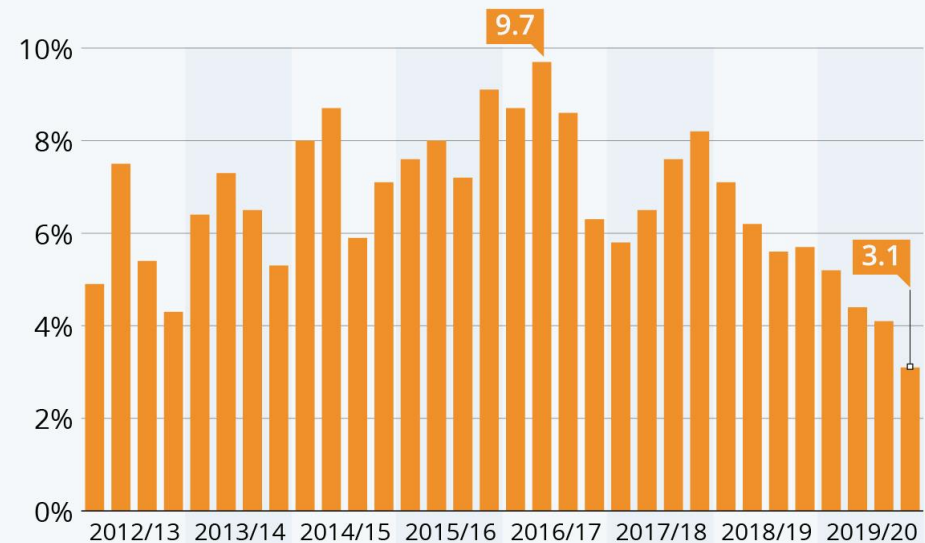


Quarterly growth rate in India, 2012Q1–2020Q4

- Growth surged in the post-global crisis period
- But the high point accompanied the Dec 2016 demonetization and 2017 GST rollout
- Growth collapsed for two quarters due to the pandemic but has returned to positive territory

India's GDP Growth Hits New Low

Quarterly GDP growth in India (year-over-year, in percent)*



* at constant prices, 2011/12 base year

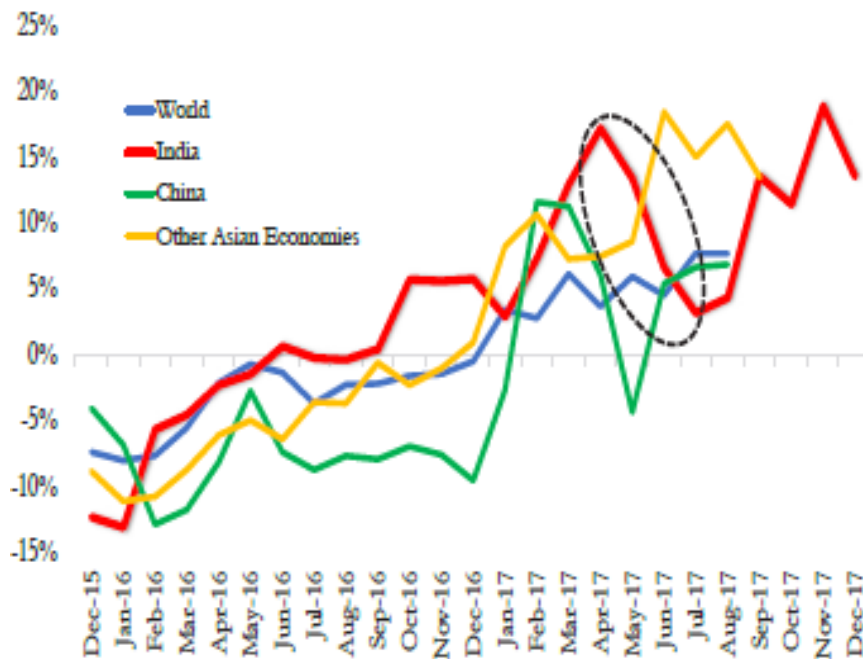
Source: Government of India Ministry of Statistics and Programme Implementation (MOSPRI)



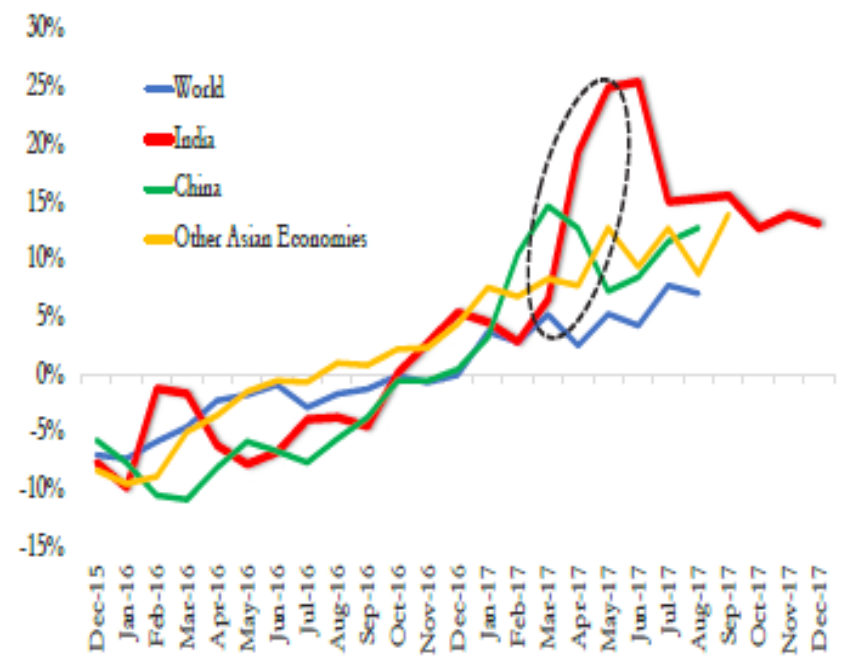
The Modern Indian Economy V

- The Indian economy has struggled with premature deindustrialization, skipping over manufacturing-led phase

Growth of manufacturing export value

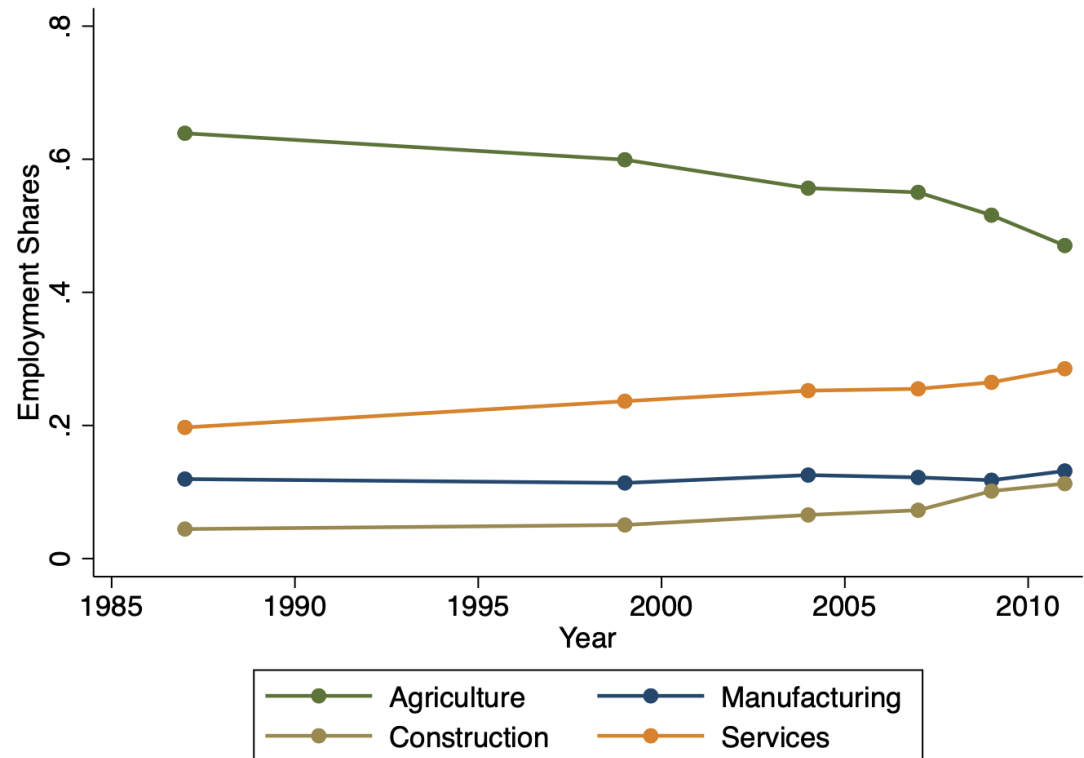


Growth of manufacturing import value



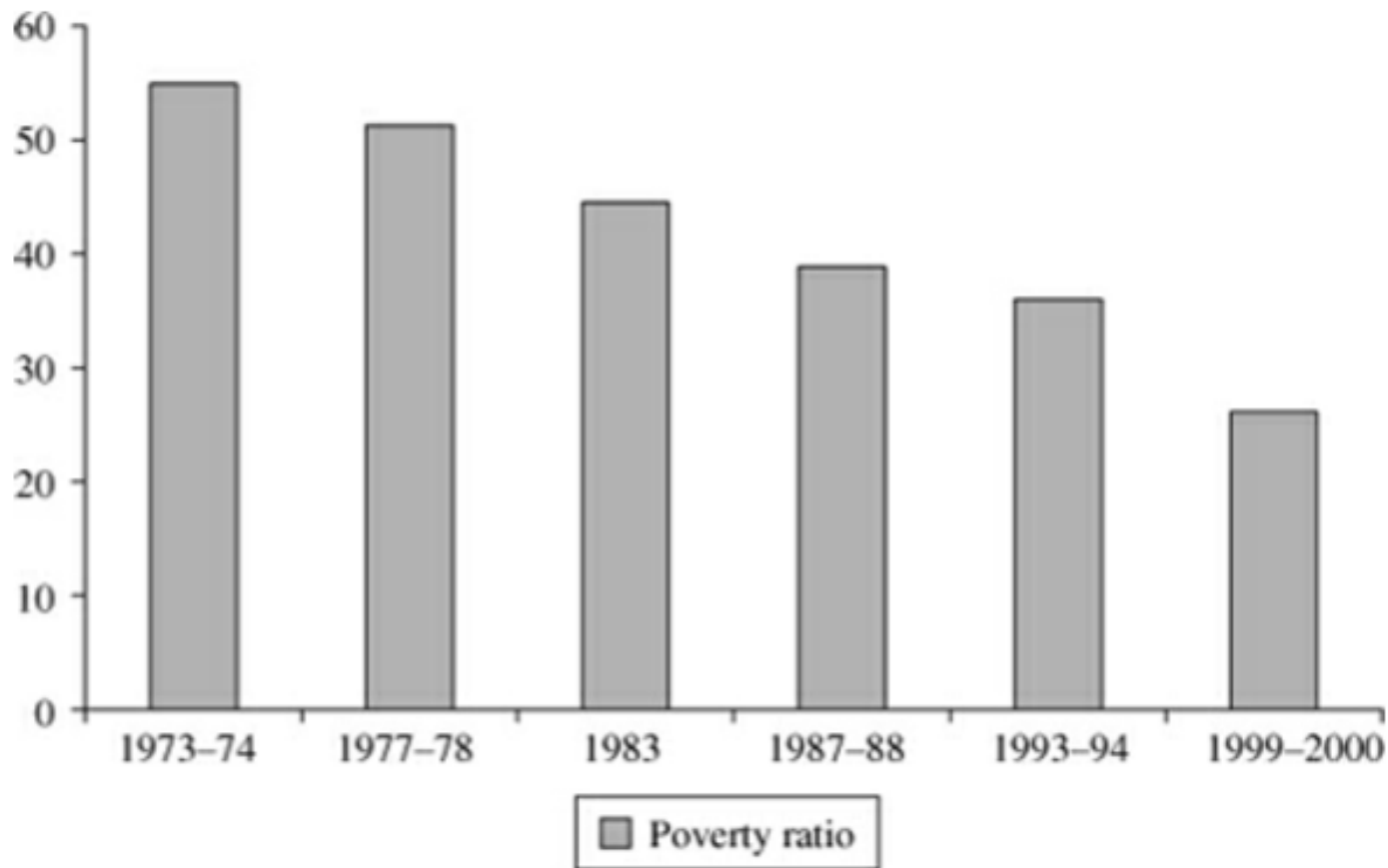
Sectoral distribution of GDP and employment, India, 1980s to 2000s

- At the beginning of the period of gradual liberalization, Indian output was only 1/3 services
- This has now shifted to more than 50 percent services, which is unusual for a still-developing economy



The Modern Indian Economy V

- India's poverty rates remain high, but growth has made a major difference to poverty alleviation



Indian cities, while growing very rapidly, retain significant pockets of poverty, and the Indian countryside is even poorer

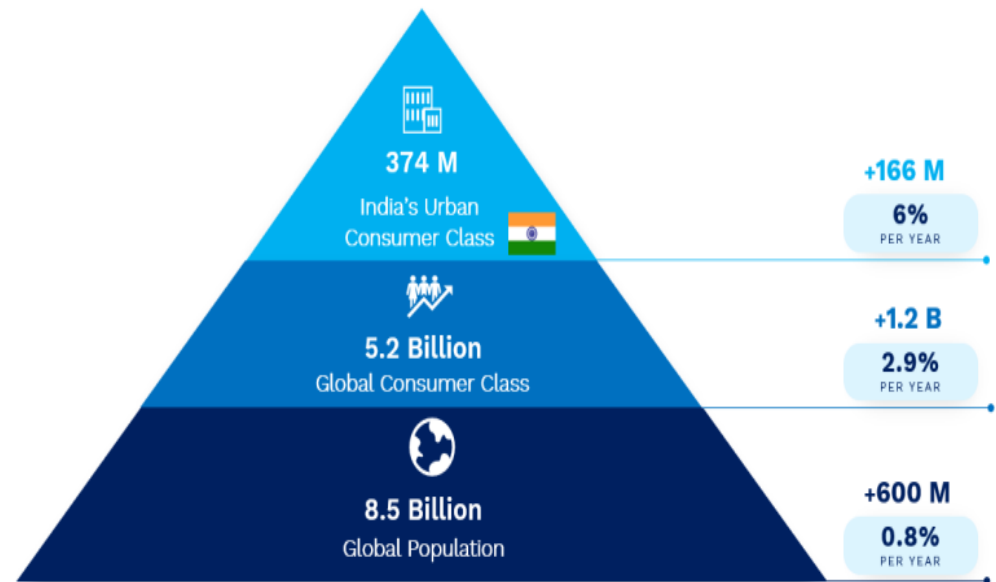


The inequality inherent in pockets of poverty is even more stark when contrasted against adjacent modern housing



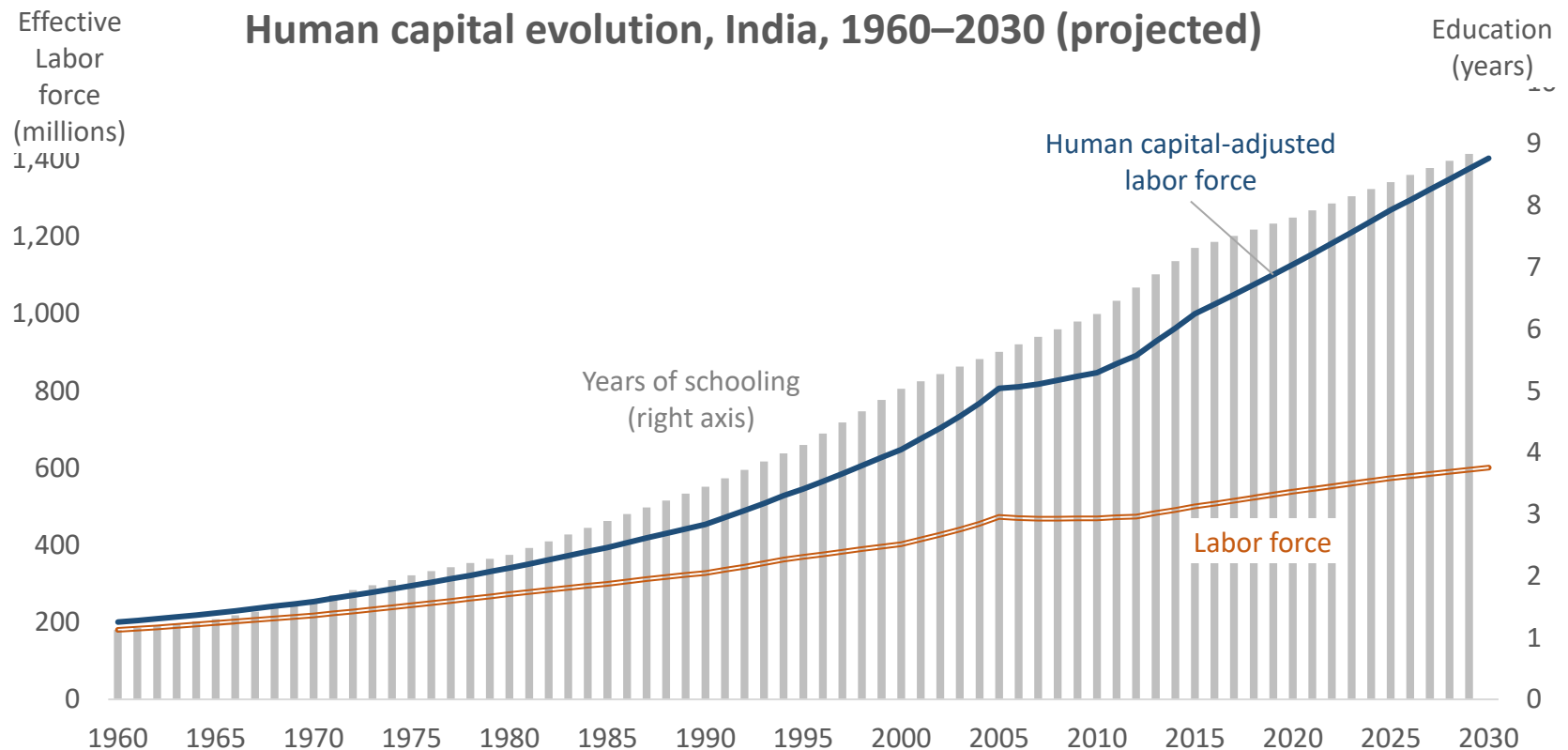
The global consumer class growth pyramid has India on top

- Projections suggest 4 billion people in the global consumer class at end-2021, and 5.2 billion by 2030
- The majority will be urban, and India's 208 million is expected to rise to 374 million
- India's consumer class growth rate will exceed the average for both the world and Asia



The Modern Indian Economy VI

- Human development challenges remain, and is hampered by inadequate service delivery



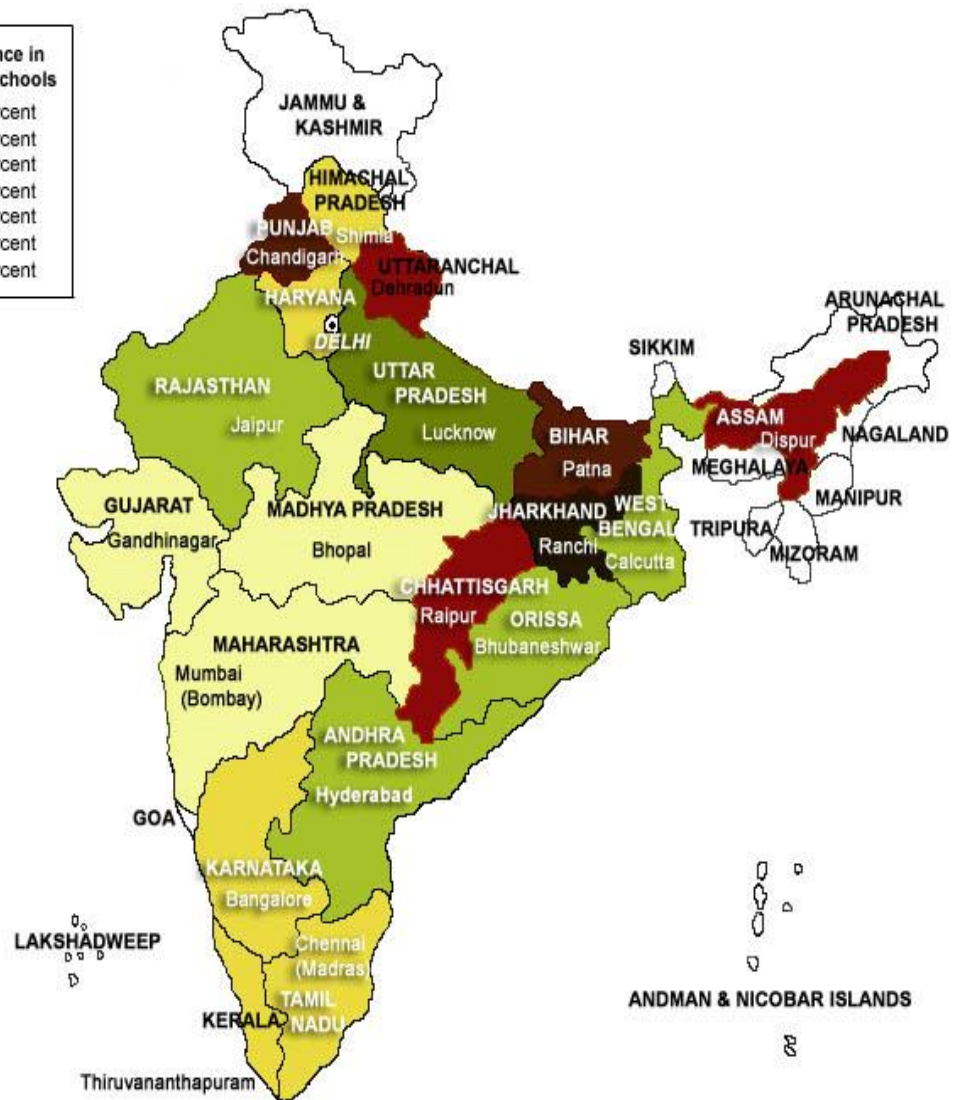
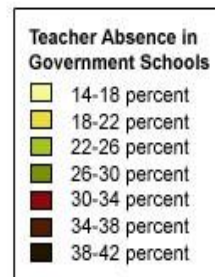
Source: Authors' calculations, from Barro & Lee (2015, 2016), IIASA (2010), ILO (2014), UN (2013, 2015), World Bank (2017)

Absenteeism, informal payments, and poor service quality are pervasive in Indian public education and healthcare



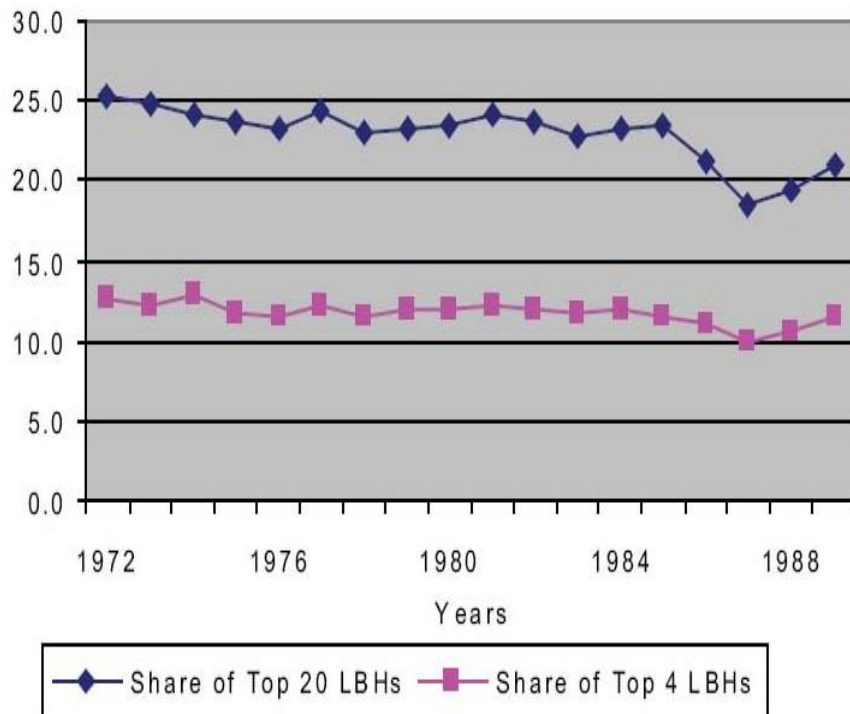
Public school absenteeism in India, 2003

- Public school absenteeism can be as high as 1/3, especially in poorer states such as Bihar and Jharkhand
- Although this has gradually improved over time, low public service quality remains a significant challenge

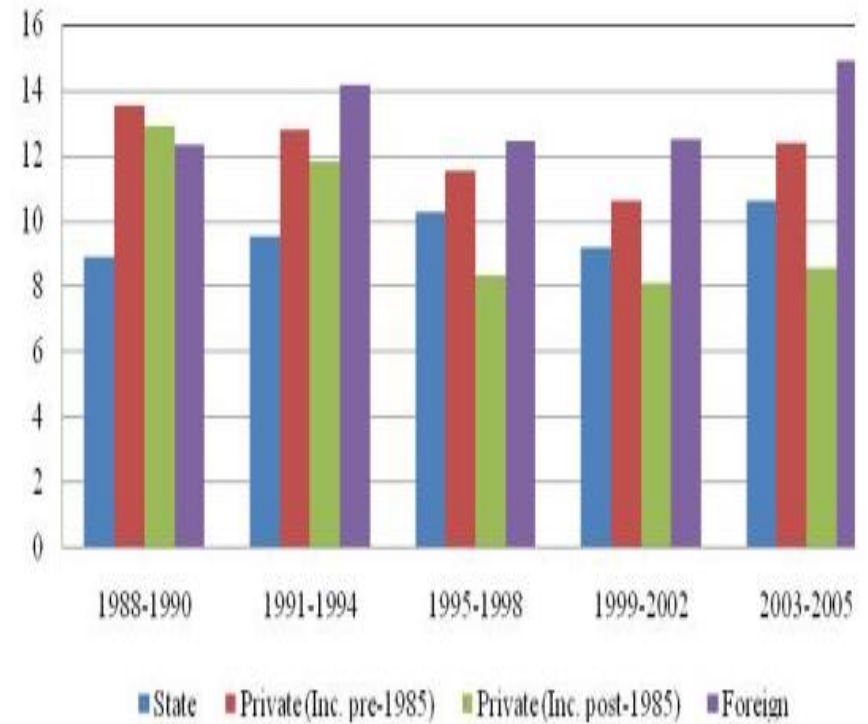


The Modern Indian Economy VII

While large business houses still dominate many sectors of the Indian economy, with the top 20 holding a quarter of all assets...



...their monopoly rents only lead to outperformance relative to new entrants, not more efficient foreign competition

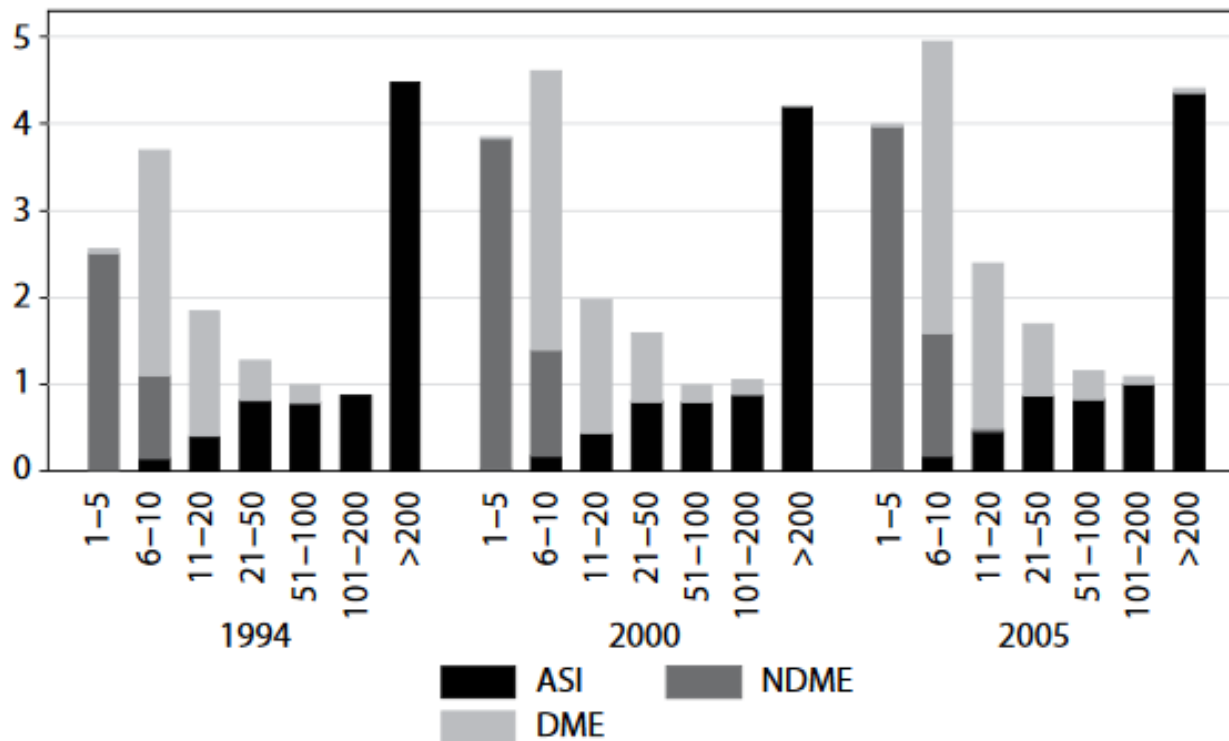


The license raj of the 1980s exerts its legacy today in inefficient, concentrated industries



Source: https://youtu.be/omtRNy_0000

The “missing middle” of midsize firms is exacerbated by relatively lower productivity of small vs medium firms

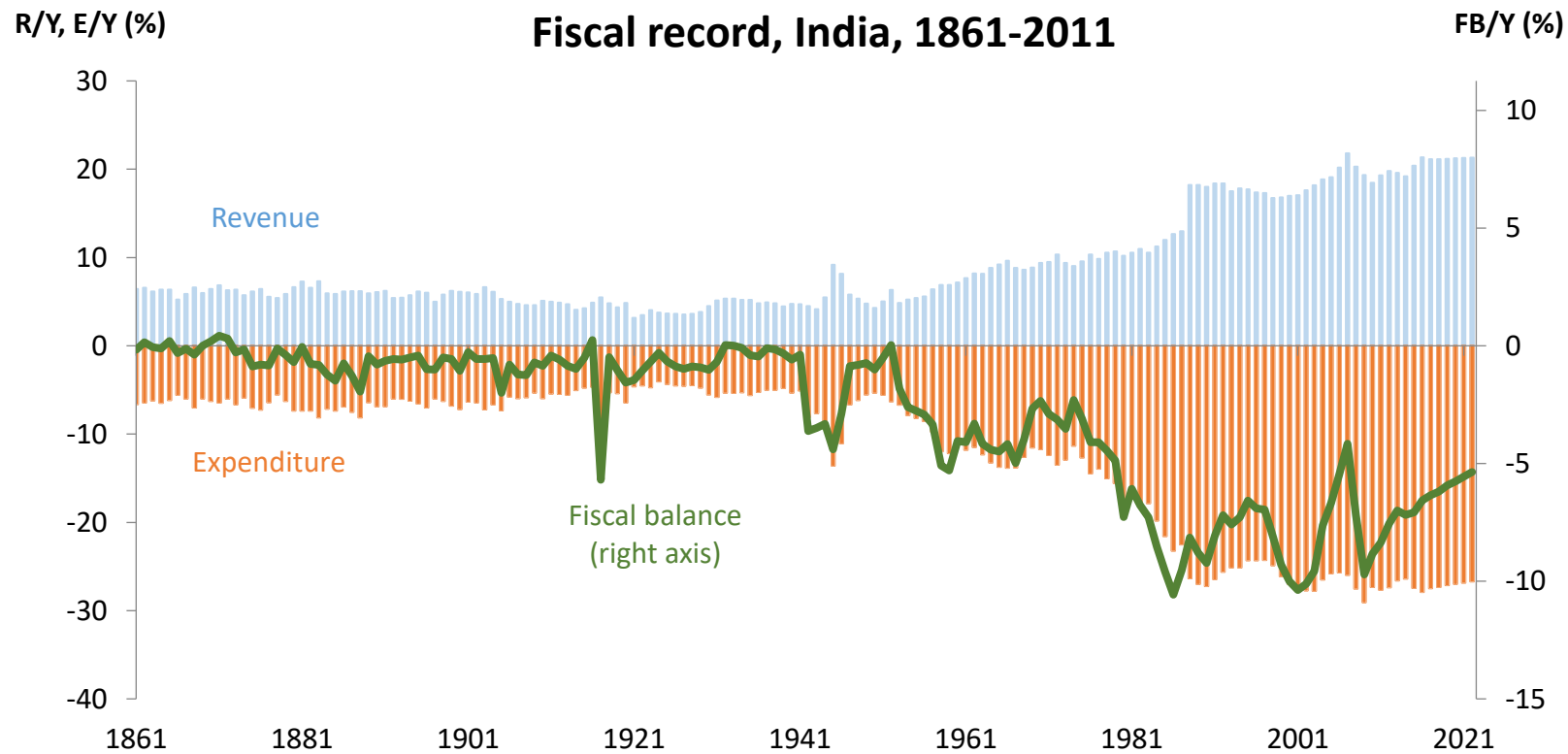


ASI = Annual Survey of Industries; OAME = own-account manufacturing enterprises; NDME = nondirectory manufacturing enterprises; DME = directory of manufacturing enterprises.

Source: Authors' computations.

The Modern Indian Economy VIII

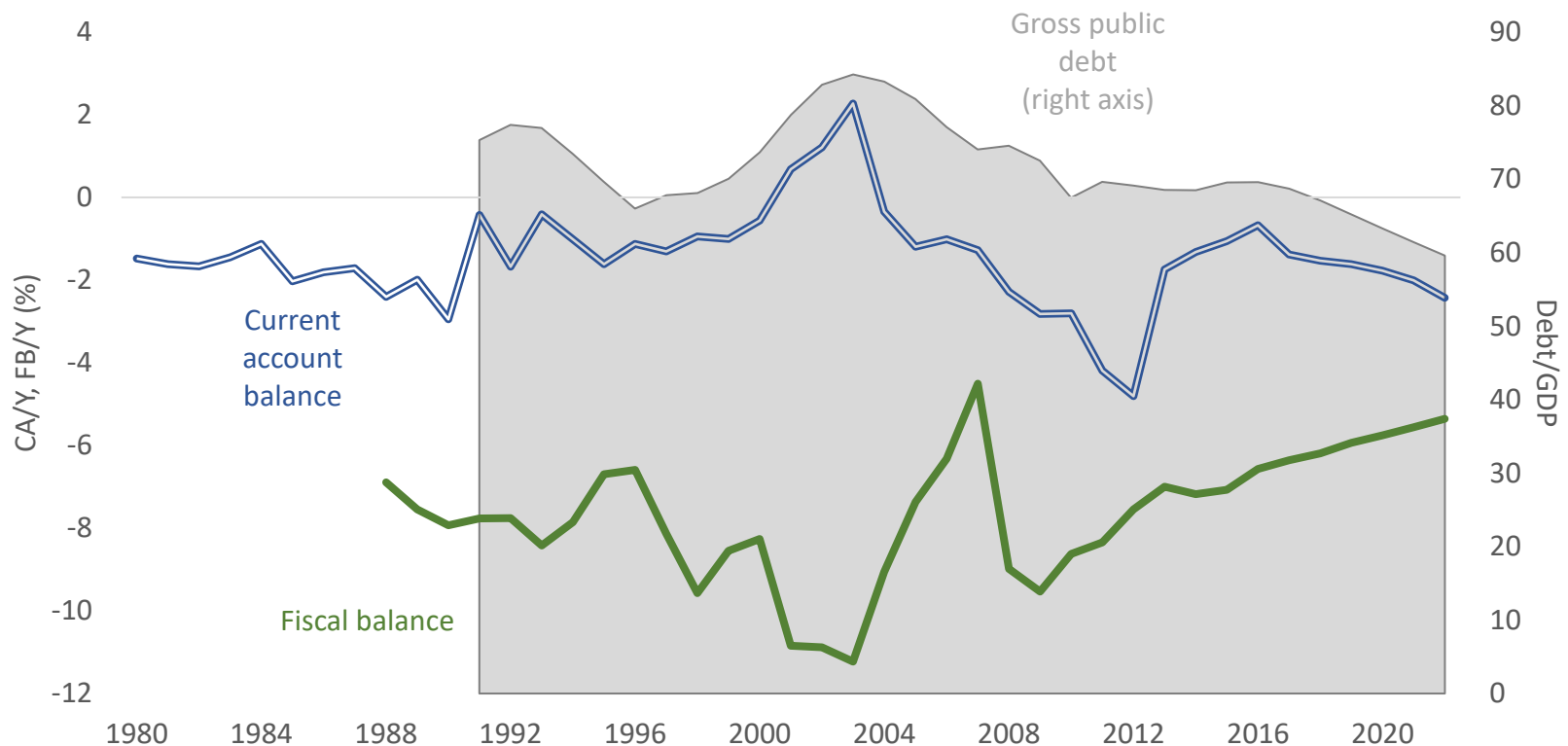
- Through most of the postwar period, India's fiscal record has been very poor, and deficits are projected to continue



Source: World Bank staff calculations, from Mauro et al (2013) and IMF WEO (2017).

India remains reliant on capital inflows to finance its investment, especially with government deficits

Fiscal borrowing & external balance, India, 1980–2020 (projected)



India's Economy in Comparative Perspective I

- Compared to other developing countries, India's postwar growth trajectory was fairly unique
 - Until recently, no superhigh growth rates (unlike East Asia)...
 - ...but growth did not also undergo periods of prolonged stagnation or decline (unlike Africa or Latin America)
- Substantial private sector, yet pursued an autarkic trading regime and highly interventionist economic policy for 3 decades
- One of only four effective democracies (and the largest one) among developing countries

India's Economy in Comparative Perspective II

- Why did India not experience an industrial revolution after Mughal rule?
 - Wages in commercialized parts of India may have actually been *higher* than in Britain in the mid-18th century

	Britain	South India	Bengal
Weaving (lbs/week)	40–140	65–160	55–135
Spinning (/lb)	4d.–2s.	7d.–2s.	5d.–2s.
Agricultural labor (lbs/week)	30–35	26–30	–

- But overall GDP/per capita estimates suggest greater disparities

Year	India (\$)	UK (\$)	Ratio (%)
1600	792	1,104	72
1650	746	904	83
1700	728	1,477	49.3
1751	669	1,678	39.9
1801	646	1,985	32.6
1811	617	2,083	29.6
1821	587	2,080	28.2
1831	592	2,228	26.6
1841	592	2,404	24.6
1851	594	2,718	21.9
1861	562	3,124	18.0
1871	533	3,676	14.5

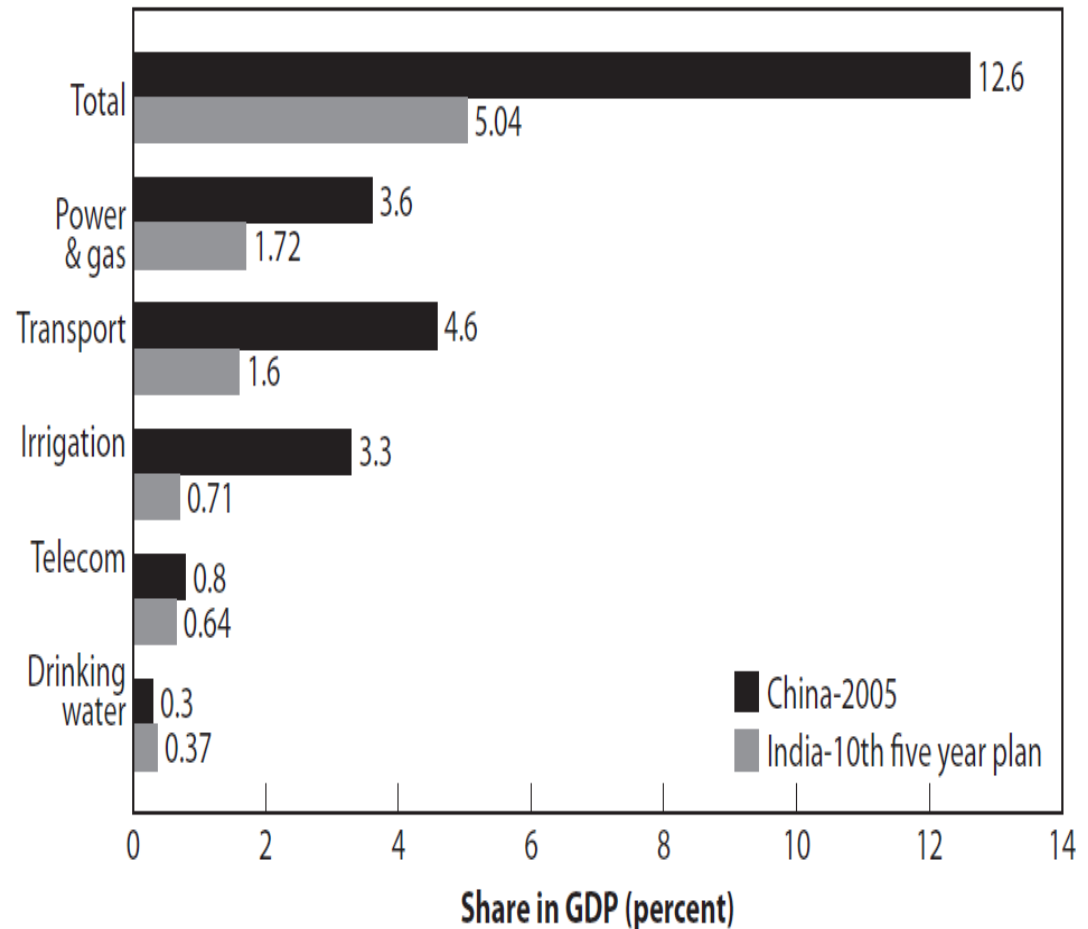
India's Economy in Comparative Perspective III

- India's initial development timeline was similar to China's...
 - India was slightly ahead of China in per capita income in 1870
 - Liberal reform launch and accelerations around the same time
- ...but this began to diverge by the 1980s and 90s

	China	India
Saving/Investment	High household/corporate saving with major FDI inflows	High household offset by corporate/government deficits
Poverty	Dramatic poverty reduction	Solid poverty reduction
Public goods	World-class infrastructure with good access to education/health	Backdated infrastructure with low-quality public services
Exports	Low value-added manufacturing	Skill/capital-intensive services
Policy	Top-down planning with bottom-up execution	Top-down policy poorly aligned with local incentives
Political economy	Autocratic (authoritarianism & corruption)	Democratic (populism & special interests)

Infrastructure investment, China and India, 2005

- Infrastructure network and spending in India lags that of China, even in railways, a traditional Indian strength
- China channels state financing to catalyze infrastructure, then imposes charges
- India faces budgetary leakages in government budgets and applies low usage charges due to politics



India's Economy in Comparative Perspective IV

- Indian and Chinese households are high savers, which helps finance investment, but corporate and public saving differ

Saving and investment, China, 1990– 2005

	1990	1995	2000	2005
Domestic saving	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

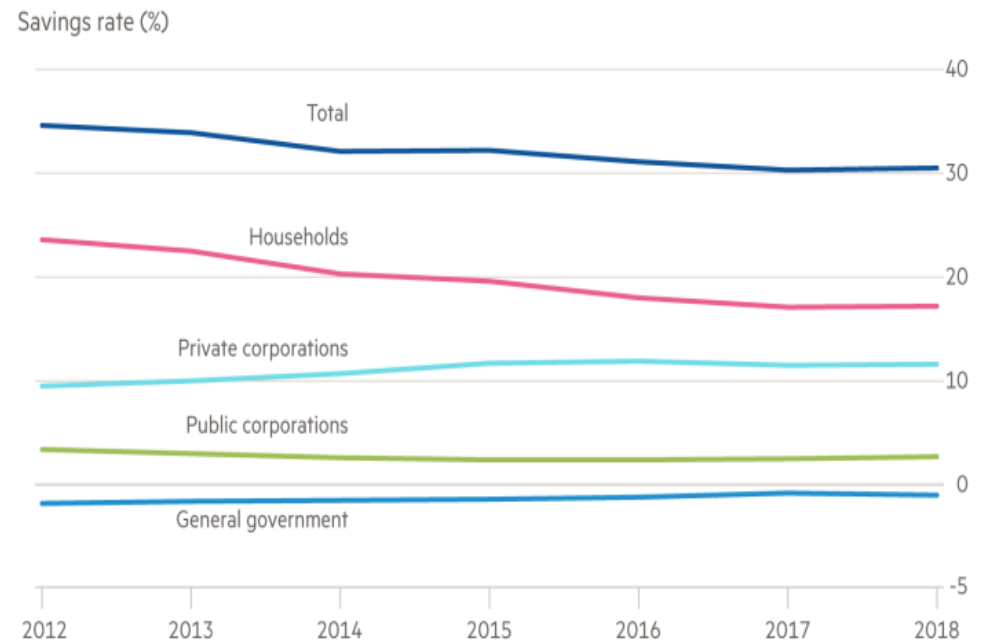
Saving and investment, India, 1990– 2005

	1990	1995	2000	2005
Domestic saving	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

Indian saving rates, by sector, 2012–2018

- Indian banking system weaknesses due to nonperforming loans has raised financial fragility
- This has reduced lending to firms and prompted some increase in corporate saving
- However slowing growth and falling incomes has also lowered household saving

Indian households are saving less in tougher times



Fiscal years

Source: India Ratings & Research (Fitch)

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India's Economy in Comparative Perspective V

- India chose a different development path from Korea over the mid-20th century
 - Import-substituting industrialization vs export-oriented industrialization strategies changed the structure of each economy

Sectoral shares of GDP and employment, Korea

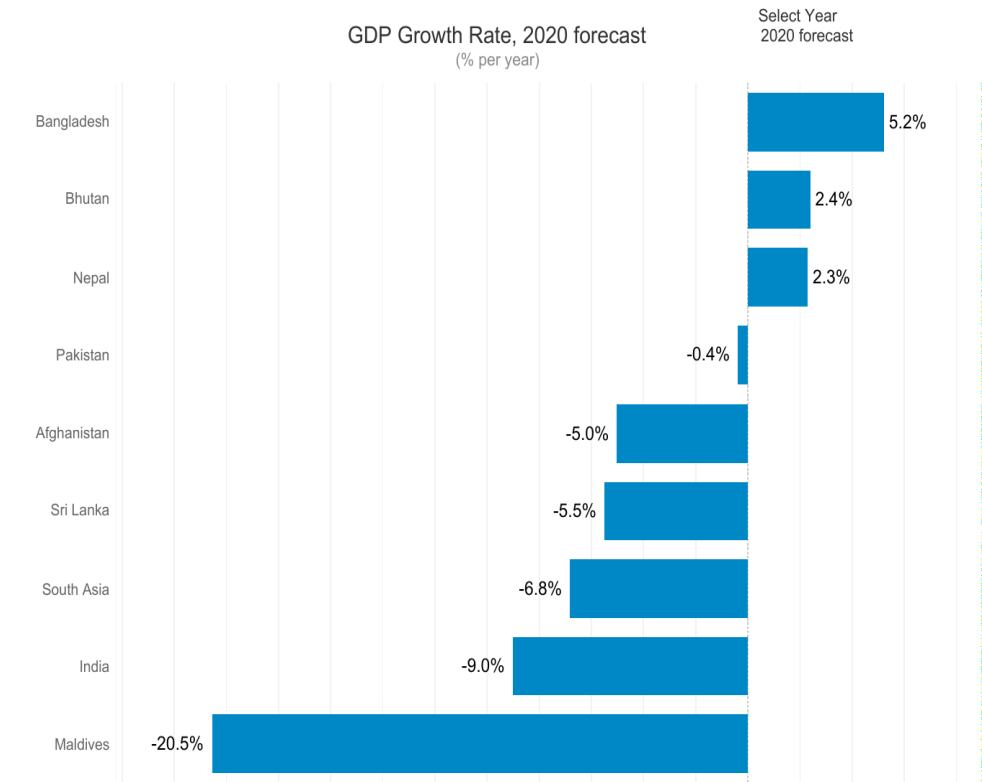
Year	Agriculture Forestry & Fisheries	Mining	Manufacturing	Other
<i>A. Gross Domestic Product by Sector (as percent of GDP)</i>				
1960	36.9	2.1	13.6	47.4
1965	38.7	1.8	17.7	41.8
1970	25.8	1.3	21	51.9
1975	24.9	1.4	26.6	47.1
1980	15.1	1.4	30.6	52.9
1985	13.9	1.5	29.2	55.3
1990	9.1	0.5	29.2	61.2
<i>B. Employment by Sector (as percent of total employment)</i>				
1960	68.3	0.3	1.5	29.9
1965	58.6	0.9	9.4	31.1
1970	50.4	1.1	13.1	35.4
1975	45.7	0.5	18.6	35.2
1980	34	0.9	21.6	43.5
1985	24.9	1	23.4	50.7
1990	18.3	0.4	26.9	54.4

India's Economy in Comparative Perspective VI

- India's social progress has also diverged from that of other South Asian economies
 - In spite of high rates of growth, real wages have remained relatively stagnant
 - Social indicators in Bangladesh (GDP per capita: \$1,359 in 2016) have overtaken India's (\$1,709)
 - Social indicators in Nepal (GDP per capita: \$730) has caught up with India

South Asia GDP growth, 2020 (est.)

- Most South Asian economies were not hit as hard by COVID-19 as India
- Bangladesh has gone from basket case to growth darling (one of the fastest growing economies globally, not just in South Asia)

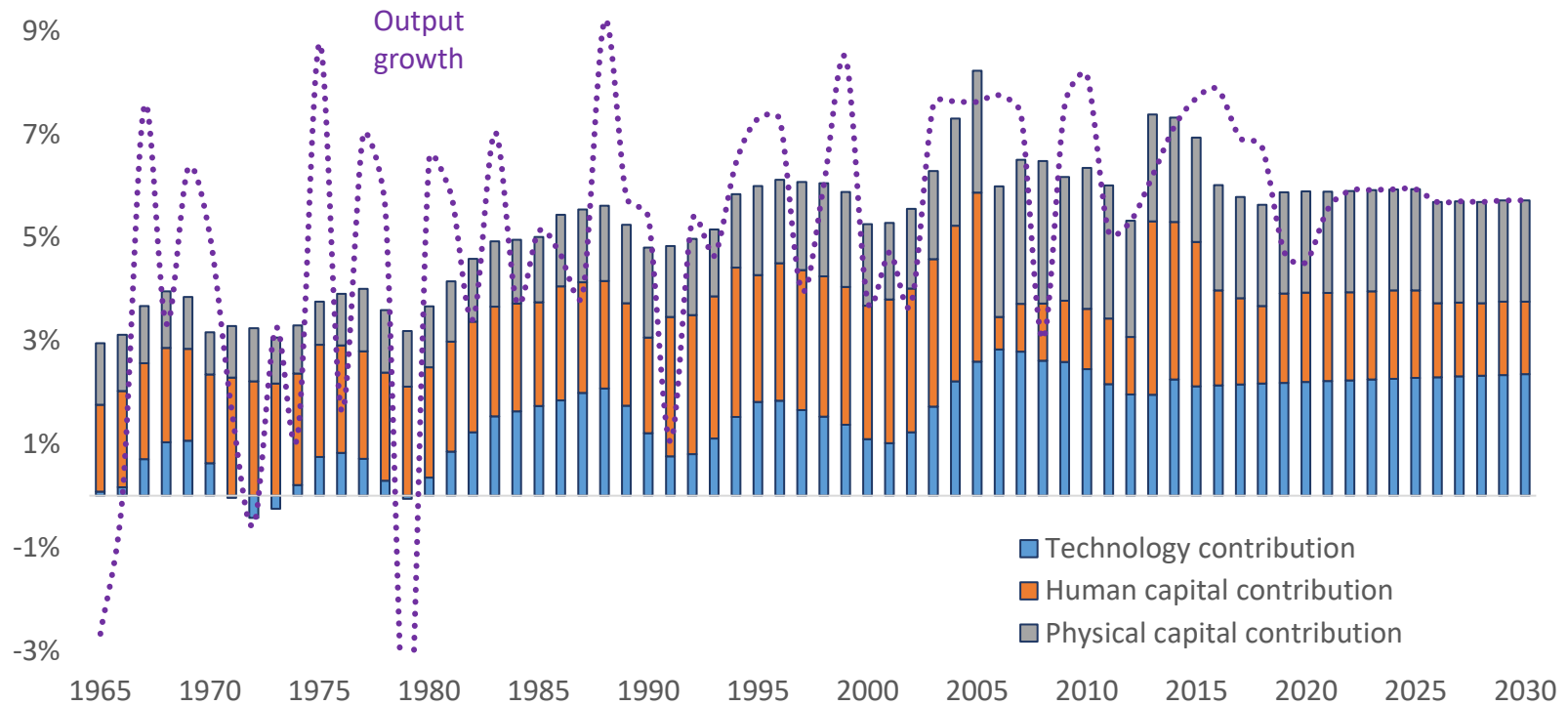


Source: Asian Development Bank. Asian Development Outlook (ADO) 2020 Update (September 2020)

The Future Indian Economy I

Decomposition of output growth, baseline projection

Growth (%)



Source: Authors' calculations, from Barro & Lee (2015, 2016), IIASA (2010), ILO (2014), UN (2013, 2015), World Bank (2018)

The Future Indian Economy II

- Challenges to India's Economic Future

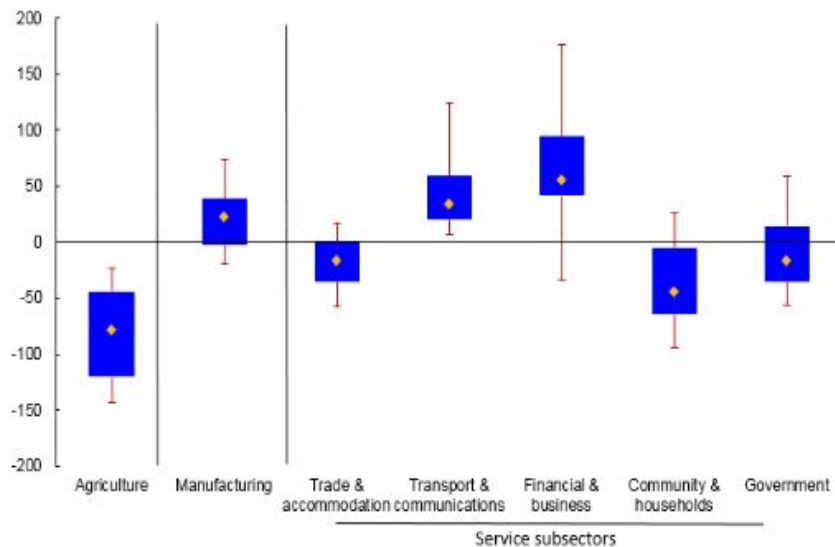
1. Poor infrastructure (power/roads) impedes investment and capital accumulation, and access of inland states to global markets
2. Public sector service delivery reduces quality of human capital
3. Premature deindustrialization may inhibit economic transformation and narrow path for entry into middle class
4. Poor intermediation of funds in financial system prevents efficient allocation of capital
5. Still-significant inter-state licensing barriers limits gains from trade and continued integration
6. Policy errors from demonetization and GST rollout

The Future Indian Economy III

- Producer services may be tradable and as productive as manufacturing, even if consumer services are less so

Productivity in some market services is comparable/higher than manufacturing...

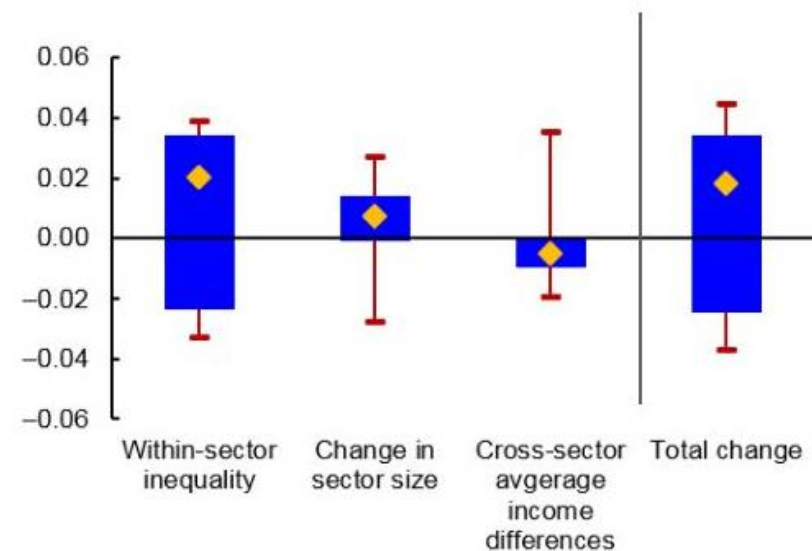
(output per worker, 2005, difference with respect to aggregate, percentage points)



Source: IMF staff calculations.

...and rises in inequality are due to within- rather than between-sector differences

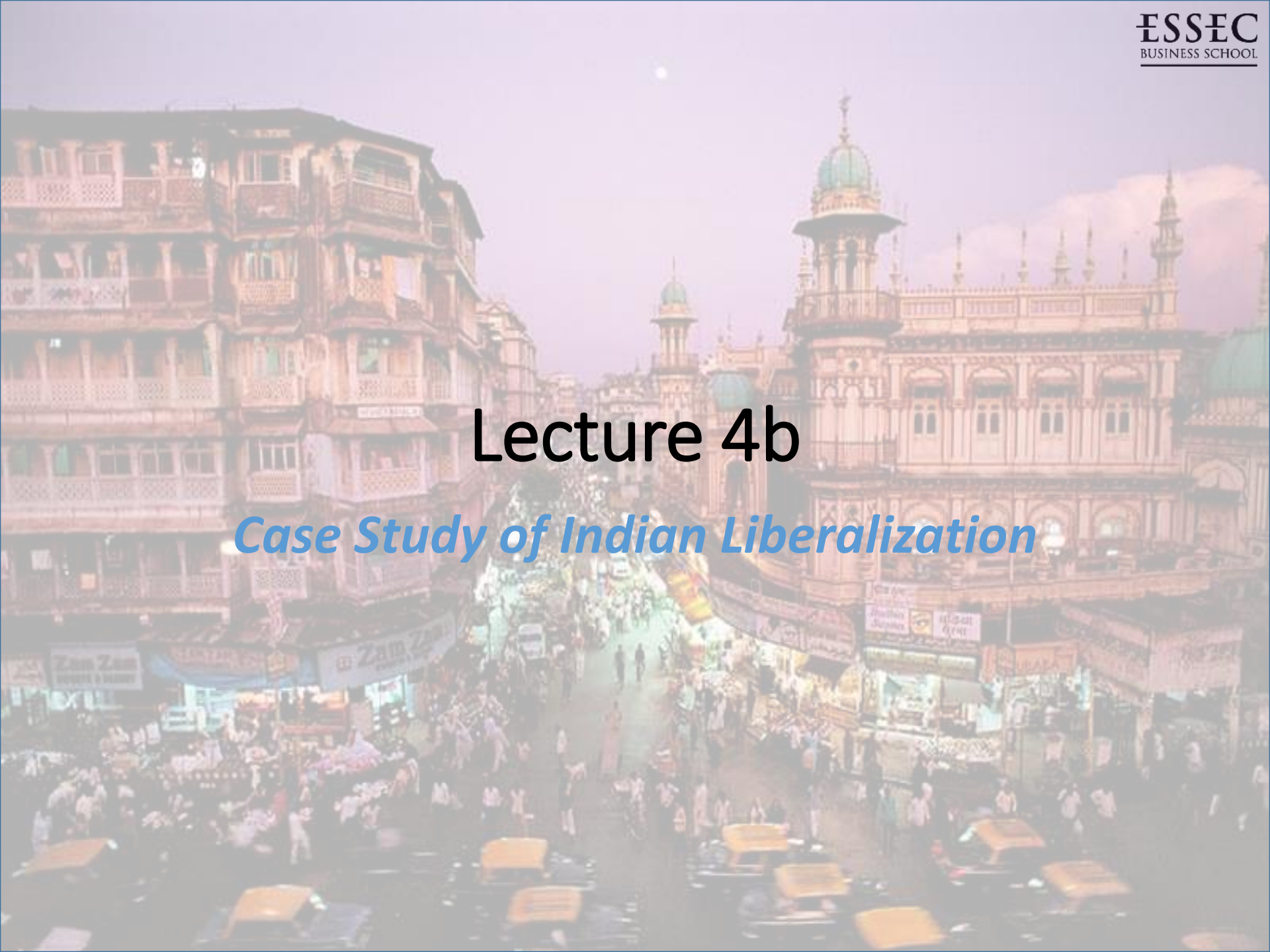
(contribution to change in overall labor income inequality between the 1980s and 2000s, points)



Source: IMF staff calculations.

Lecture 4b

Case Study of Indian Liberalization



Case: India's Liberalization

- What was the history of the Indian economy up till the liberalization decision in 1991?
 - What was its trading regime like?
 - What was the lead-up to the balance-of-payments crisis?
- What is the case against outright default or repudiation? What is the case for?
- How does the political environment play into the decision?
 - What is the broad historical evolution of India's political system?
 - What did the political system evolve to by 1991?
 - What sorts of special interests are there?
- What are India's comparative advantages? Why does that matter? What do the industrial examples suggest to you?