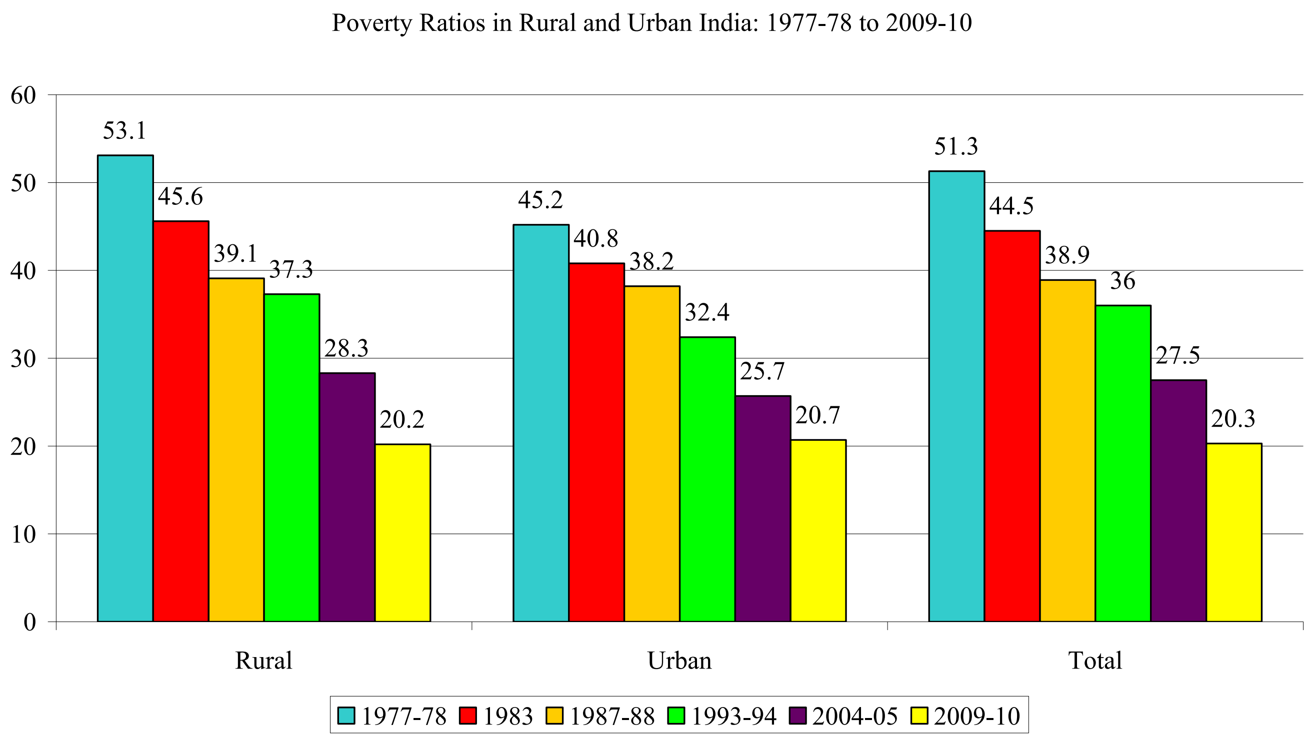
Agenda for the day

1. **Key Policy Goals & Challenges**
2. Growth & Inclusion
3. State & Market

Meaningful Progress in Reducing Poverty Rates over time



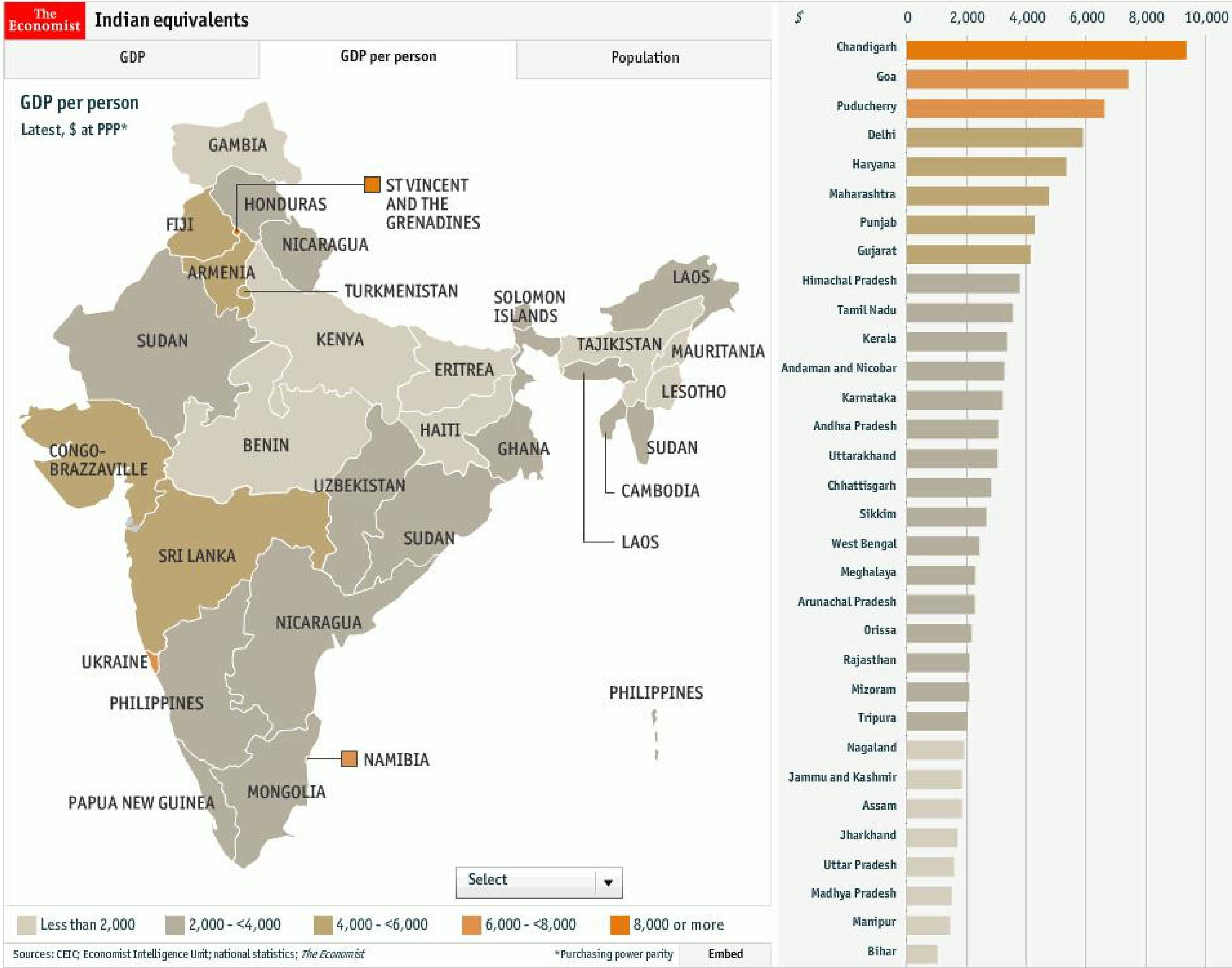
But India still has (by far) the largest absolute number of people living in poverty

Table 2.4 ALL-INDIA POVERTY AND INEQUALITY

Year	Headcount Poverty Ratio (%)			Inequality: Gini Coefficient (%)
	Old Definitions	Tendulkar Definition	Rangarajan Definition	
1950–1960	52.7 (210 million)	n.a.	n.a.	35.0 (RG: 33.7; UG: 38.2)
1960–1970	53.3 (262 million)	n.a.	n.a.	31.5 (RG: 30.3; UG: 35.3)
1973/74	54.9 (321 million)	n.a.	n.a.	29.2 (RG: 28.5; UG: 30.8)
1977/78	51.3 (329 million)	n.a.	n.a.	32.1 (RG: 30.9; UG: 34.7)
1983	44.5 (323 million)	n.a.	n.a.	31.3 (RG: 30.1; UG: 34.1)
1993/94	36.0 (320 million)	45.3 (404 million)	n.a.	30.7 (RG: 28.5; UG: 34.4)
2004/05	27.5 (302 million)	37.2 (407 million)	n.a.	34.7 (RG: 28.1; UG: 36.4)
2011/12	n.a.	21.9 (269 million)	29.5 (363 million)	35.9 (RG:28.7; UG:37.7)

Notes: In the "Headcount Poverty Ratio" part of the table, the figures in brackets show the absolute number of poor people in millions. In the "Inequality: Gini Coefficient" part of the Table, RG means Rural Gini and UG means Urban Gini.

Sources: Poverty, 1950s and 1960s: Datt (1997); poverty, 1973/74 to 2011/12 (except Rangarajan poverty in 2011/12): Planning Commission (2014a) and Planning Commission (2014c); poverty, 2011/12 (Rangarajan definition): Planning Commission (2014a); inequality, 1950s to 1993/94: Datt (1997); inequality, 2004/5 and 2011/12: Himanshu (2015).

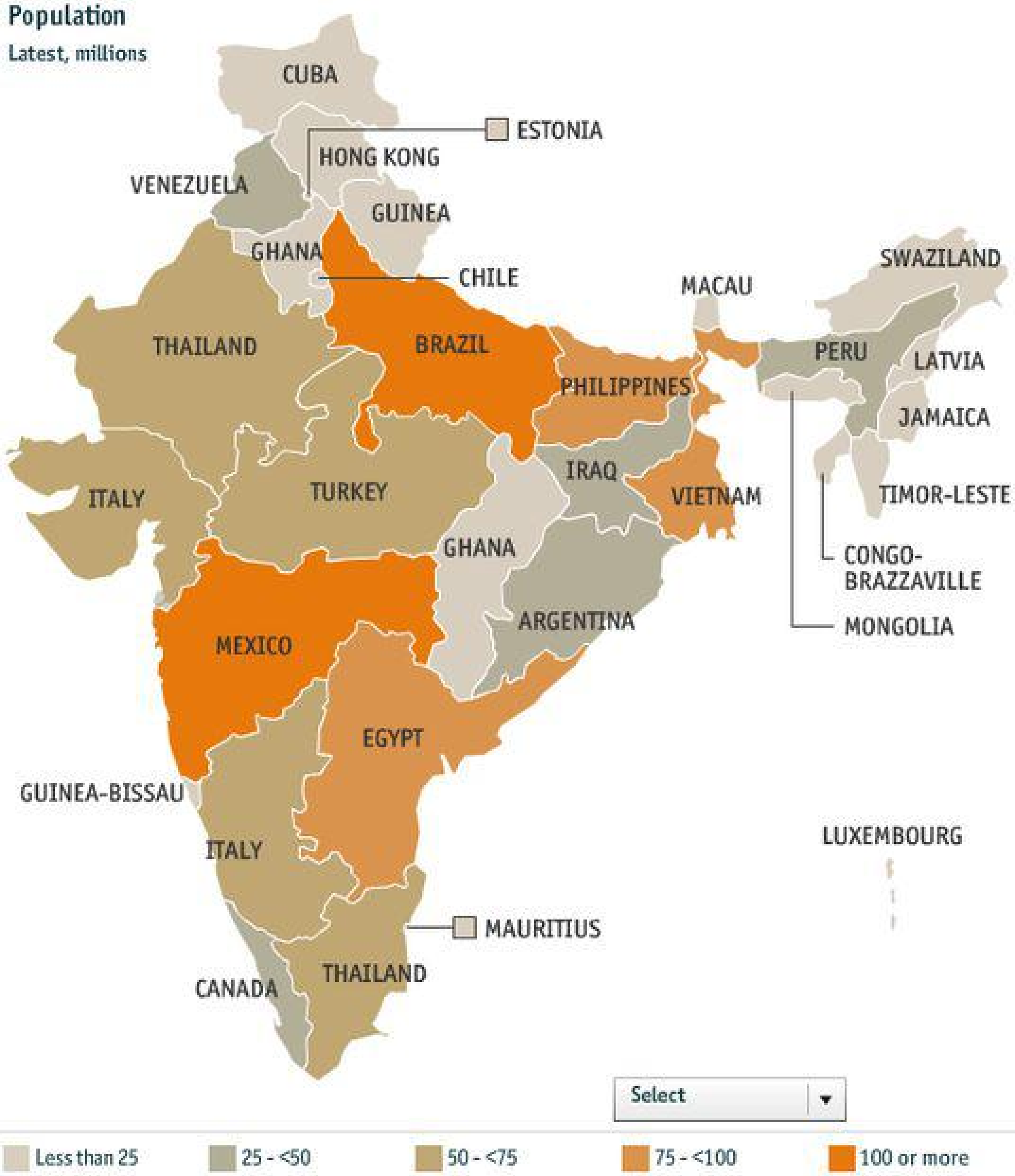

The Economist
Indian equivalents
GDP
GDP per person
Population
GDP per person
Latest, $ at PPP*
GAMBIA
ST VINCENT AND THE GRENADINES
HONDURAS
FIJI
NICARAGUA
ARMENIA
TURKMENISTAN
SOLOMON ISLANDS
LAOS
SUDAN
KENYA
TAJIKISTAN
MAURITANIA
ERITREA
LESOTHO
HAITI
CONGO-BRAZZAVILLE
BENIN
GHANA
SUDAN
UZBEKISTAN
CAMBODIA
SUDAN
LAOS
SRI LANKA
NICARAGUA
UKRAINE
PHILIPPINES
PHILIPPINES
NAMIBIA
MONGOLIA
PAPUA NEW GUINEA
Select
Less than 2,000
2,000 - <4,000
4,000 - <6,000
6,000 - <8,000
8,000 or more
Sources: CEIC; Economist Intelligence Unit; national statistics; The Economist
*Purchasing power parity
Embed
$
0
2,000
4,000
6,000
8,000
10,000
Chandigarh
Goa
Puducherry
Delhi
Haryana
Maharashtra
Punjab
Gujarat
Himachal Pradesh
Tamil Nadu
Kerala
Andaman and Nicobar
Karnataka
Andhra Pradesh
Uttarakhand
Chhattisgarh
Sikkim
West Bengal
Meghalaya
Arunachal Pradesh
Orissa
Rajasthan
Mizoram
Tripura
Nagaland
Jammu and Kashmir
Assam
Jharkhand
Uttar Pradesh
Madhya Pradesh
Manipur
Bihar

The Economist **Indian equivalents**

GDP | GDP per person | **Population**

Population

Latest, millions



Sources: CEIC; Economist Intelligence Unit; national statistics; *The Economist*

Embed

Key Policy Challenges

- The fundamental challenge is poverty reduction, and improving the quality of life of 1.4 billion people
  - Growth is essential
  - But so is the "quality" of the growth with regard to distribution, environment, and economic/political inclusion

- One way to summarize the objective of India's economic development (Joshi 2017) is:
  - "Rapid, inclusive, stable and sustainable growth of national income within a framework of liberal democracy"

- We now turn to objectives (growth & inclusion) and tools for getting there (state & market)

Agenda for the day

1. Key Policy Goals & Challenges

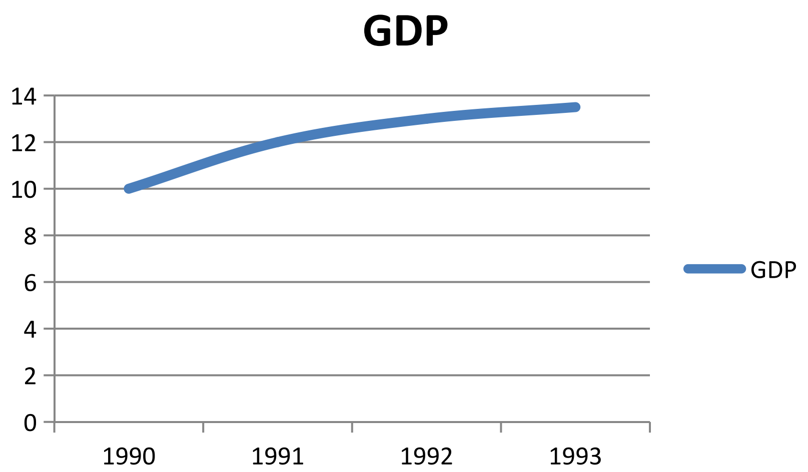
2. Growth & Inclusion

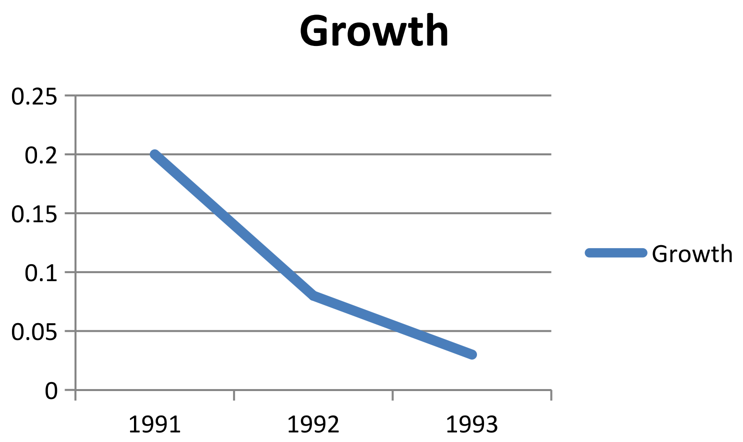
3. State & Market

What is growth?

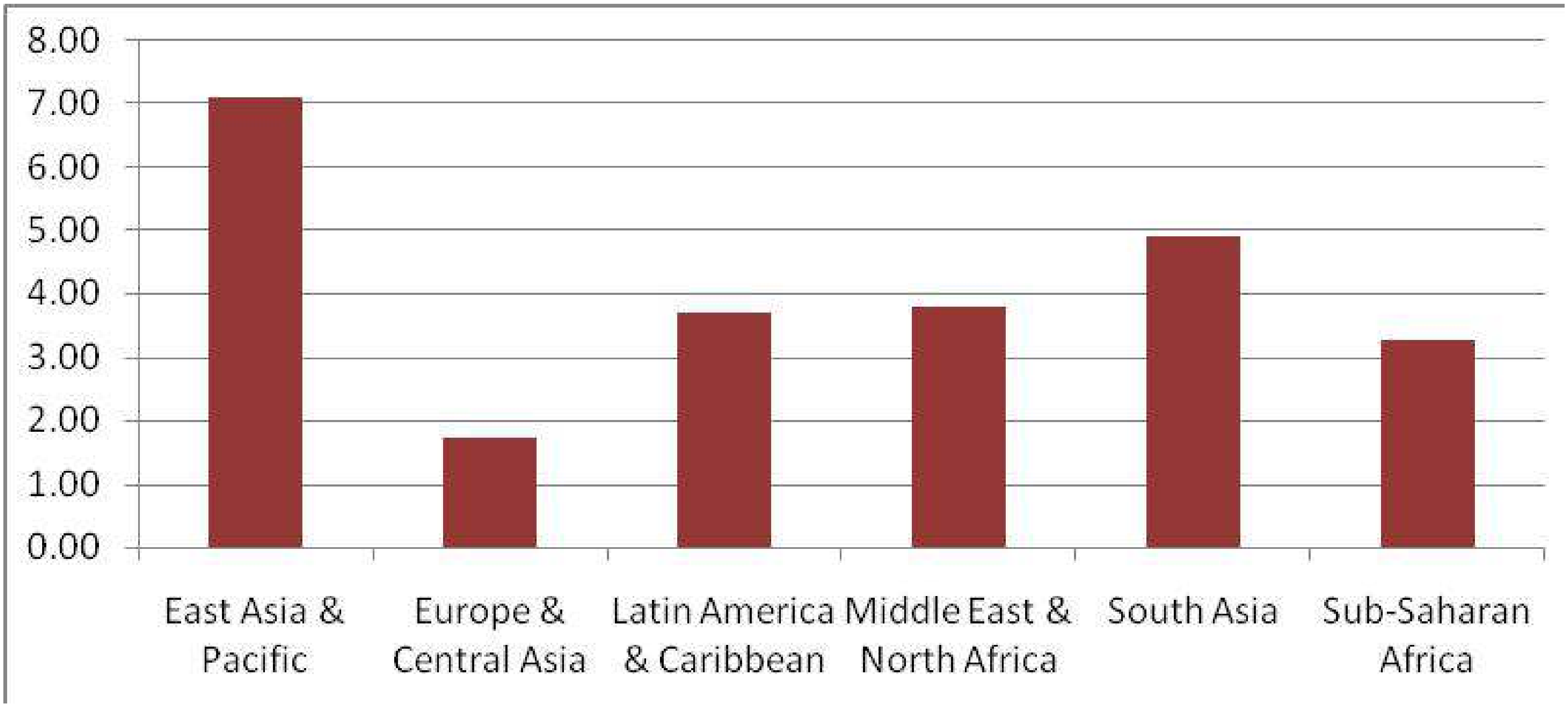
Rate of change in income

Year	GDP	Growth
1990	10	-
1991	12	0.2
1992	13	0.08
1993	13.5	0.04





Growth per Capita 1960-2007



The Power of Compounding!

- What is the difference between annual GDP/capita growth rates of 2%, 3%, 5%, and 7% for standards of living of future generations?

$$Growth\ Factor = (1+g)^N, g = Growth\ Rate, N = Number\ of\ Years$$

		Years				
		10	**20**	**30**	**40**	**50**
	2%	1.22	1.49	1.81	2.21	2.69
Growth Rate	**3%**	1.34	1.81	2.43	3.26	4.38
	5%	1.63	2.65	4.32	7.04	11.47
	7%	1.97	3.87	7.61	14.97	29.46

Why is Output/Worker So Different Across Countries?

- The extent of **physical capital** used in production
  - You can plough a field with manual tools, with an animal plough, or with tractors
  - Capital widening (more workers use capital)
    - More farmers use tractors instead of ploughs
  - Capital deepening
    - Use of more capital/worker (better tractors, harvesters, etc.)
- Differences in **human capital** (health & education)
  - Magnified greatly with complementarities (more on this later)
- Differences in **productivity**
  - Defined as the efficiency with which other inputs (typically capital and labor) get converted to output (driven by technology, management)
- So the main drivers of growth are increasing capital/worker (both physical and human) and increasing productivity

Robert Lucas (1988)

“The diversity across countries in measured per capita income levels is literally too great to be believed. Compared to the 1980 average for what the World Bank calls the 'industrial market economies' (Ireland up through Switzerland) of U.S. $10,000, India's per capita income is $240, Haiti's is $270, and so on for the rest of the very poorest countries.

I do not see how one can look at figures like these without seeing them as representing ***possibilities.*** Is there some action a government of India could take that would lead the Indian economy to grow like Indonesia's or Egypt's? If so, ***what,*** exactly?

The consequences for human welfare involved in questions like these are simply staggering: Once one starts to think about them, it is hard to think about anything else.”

Robert E. Lucas Jr. (1988) [Nobel Laureate – 1995]

Bill Gates (2007)

“Harvard was just a phenomenal experience for me. Academic life was fascinating. And dorm life was terrific.

But taking a serious look back … I do have one big regret.

I left Harvard with no real awareness of the awful inequities in the world – the appalling disparities of health, and wealth, and opportunity that condemn millions of people to lives of despair. I knew nothing about the millions of people living in unspeakable poverty and disease in developing countries.

It took me decades to find out.”

Bill Gates (2007) - Harvard Commencement Address

Solow Model Implications

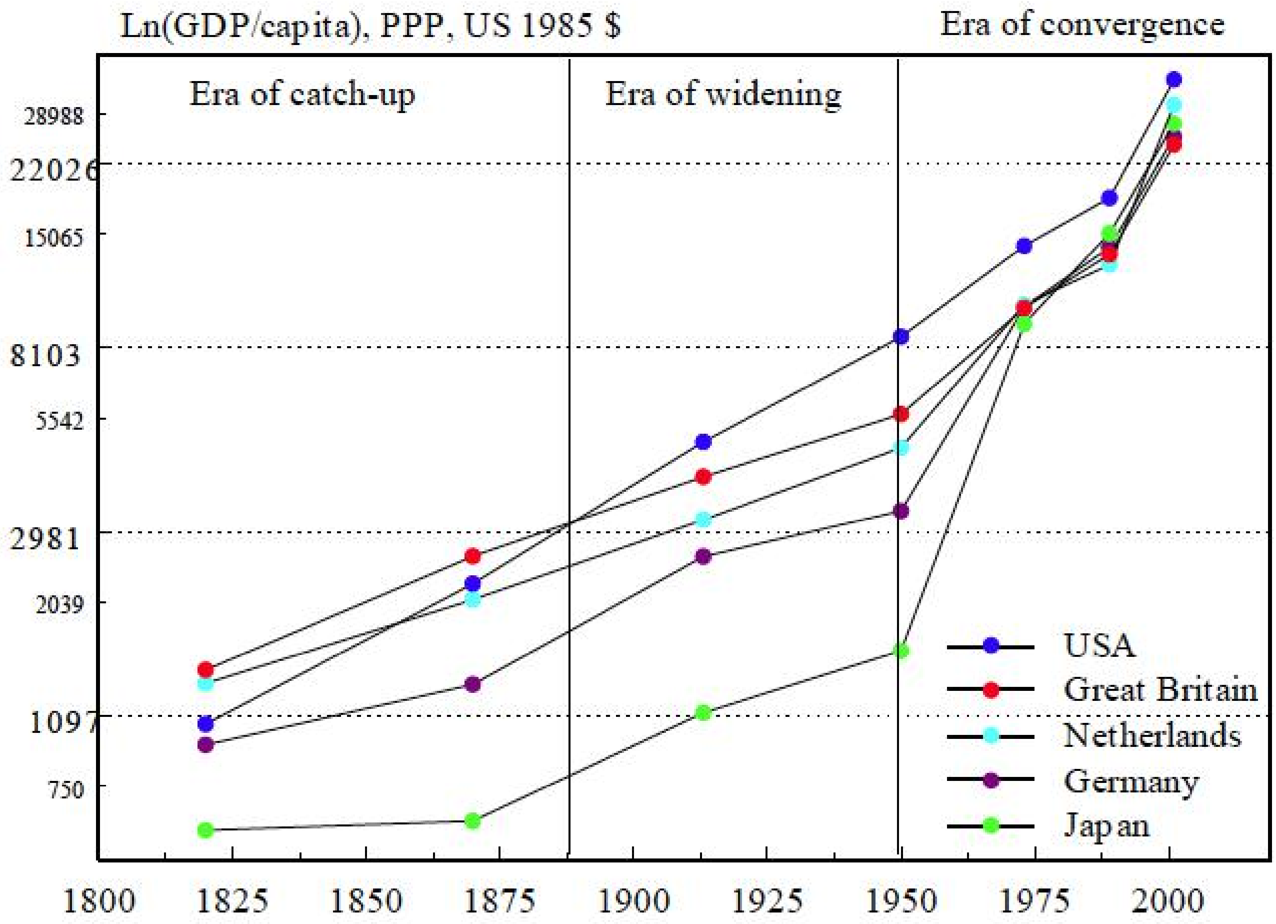
- One of the most widely used models to understand economic growth (by Robert Solow – 1986 Nobel Prize winner)

- Main prediction of the Solow Model is that poor countries should grow faster on average
  - Higher marginal returns to capital (both physical and human capital)
  - Easier to “adopt” existing technologies than to “invent” new ones

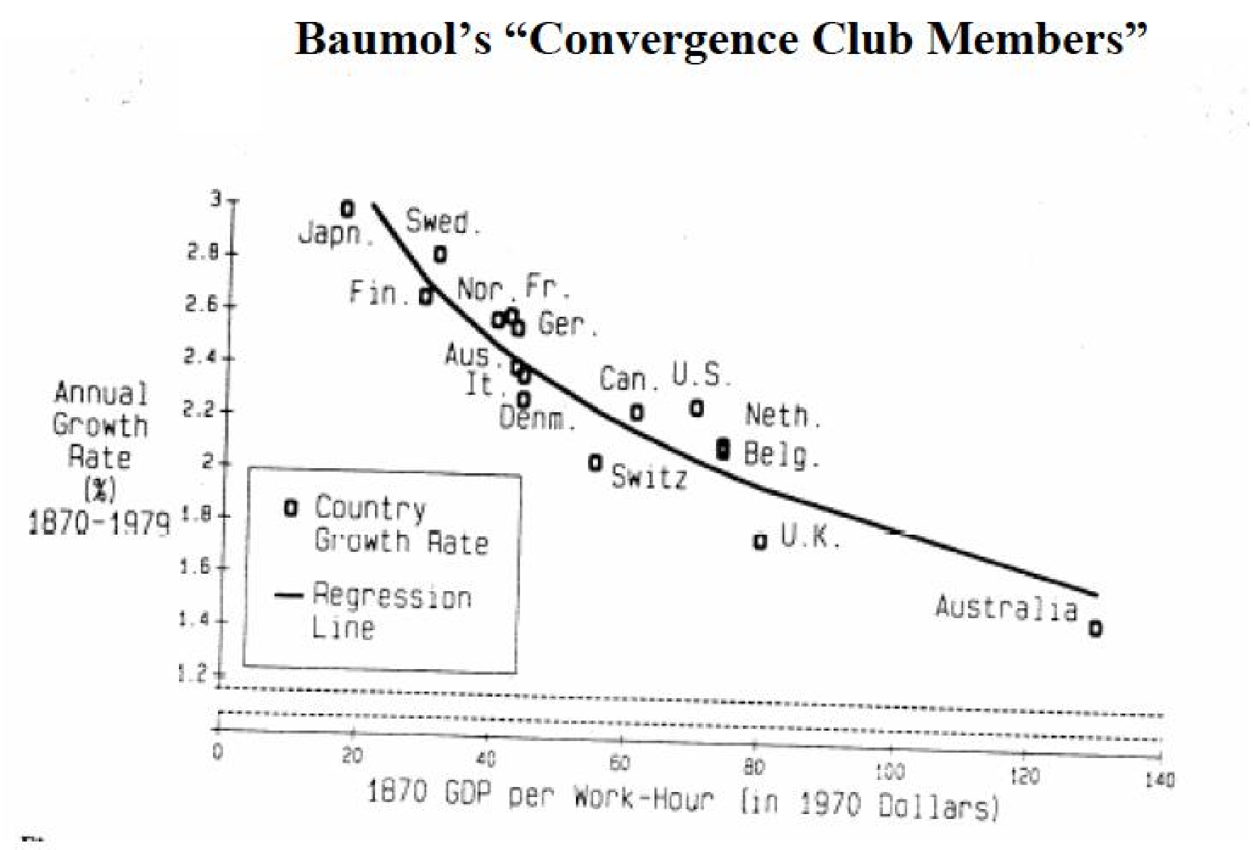
- A key implication of this is “convergence” over time between rich and poor countries
  - Poor countries should grow faster on average till they reach similar levels of per-capita income as rich countries

Convergence?

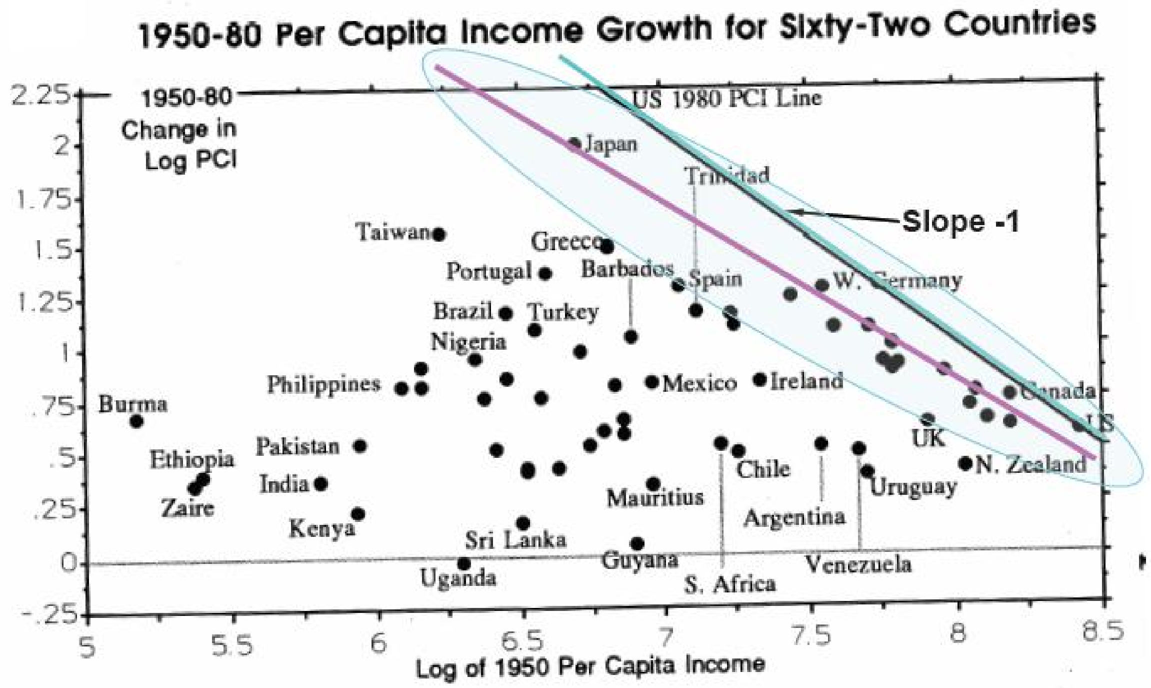
Angus Maddison's data; inconsistent for most recent data point.



Baumol's Convergence Club



Need to look at more data!



Where is the "convergence club" now? (DeLong)

Will Poor Countries Catch Up? (1)

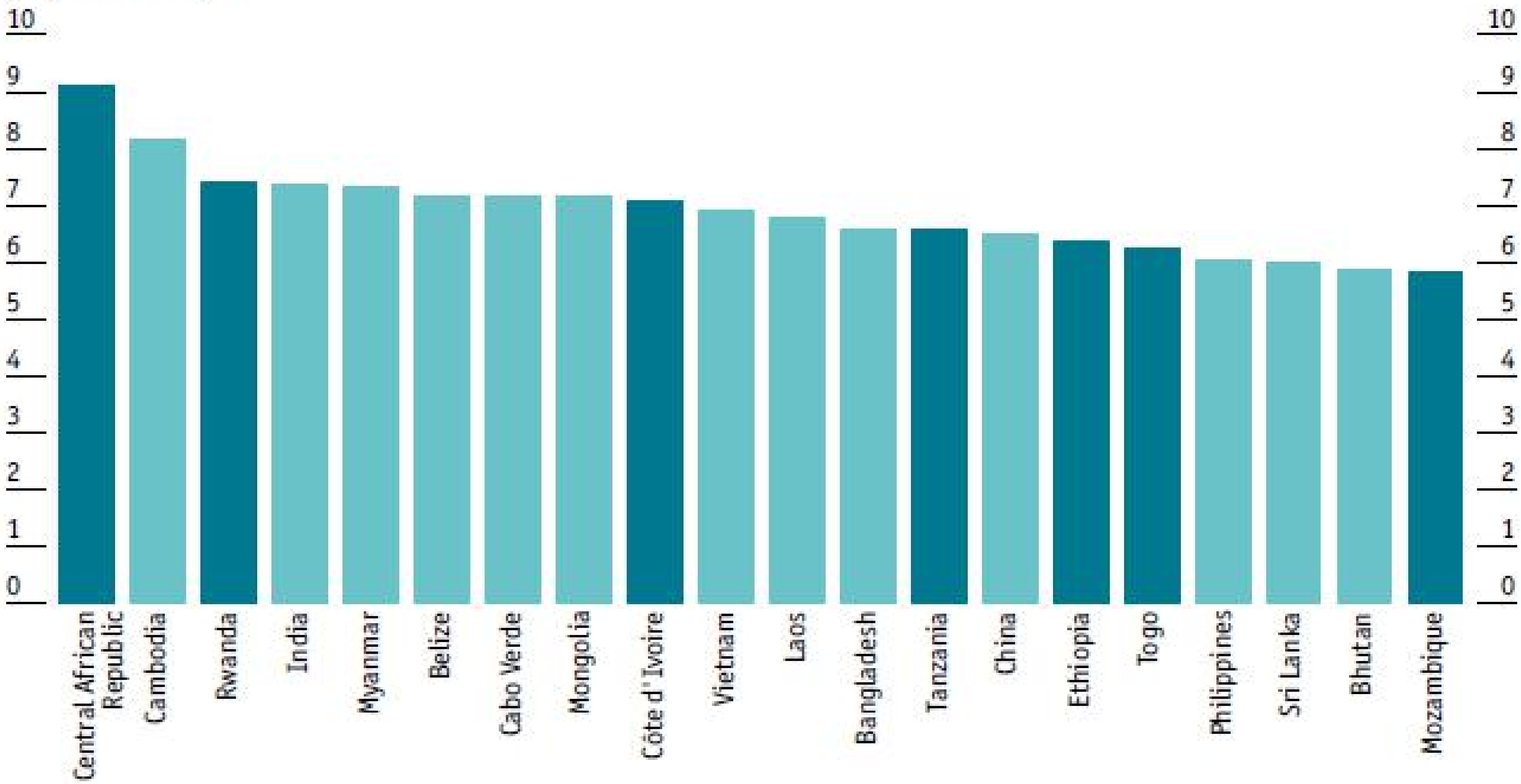
- Case for: "No – they won't"
  - Theoretical and practical cases of poverty traps
  - Assume minimum consumption needed for survival
  - Low incomes imply low saving (all income consumed to survive), and low investments; and so productivity does not go up
  - Also, even if savings exist for investments with high potential returns (as predicted by Solow model), these investments may not take place in the absence of key public goods
    - Especially law & order, property rights, contract enforcement
  - Further, even if property rights are in place, private returns to investments may be low in the absence of other investments
    - Coordination failure (example of multiple industries)

Will Poor Countries Catch Up? (2)

- Case for: “Yes – they will”
  - The long-run source of economic growth is technological progress (this is what determines the growth rate of developed countries)
  - It is much easier to copy/imitate technologies than to innovate from scratch
  - Also, marginal product of capital is higher in poor countries
  - Thus, poor countries should be able to grow faster
  - Several countries have shown dramatic progress in the past 50 years
    - Taiwan, South Korea, Hong Kong, Singapore – Asian Tigers
    - China – since 1980; India since late 1980s
      - Most important for global poverty alleviation
    - Success stories in Africa as well (Botswana)
- Summary seems to be that it is “possible” to catch up, but by no means inevitable
  - Globalization seems to be a key force in promoting convergence (increased movement of capital, ideas, and people)

The regional economic context

World's 20 fastest-growing economies, 2016
(% growth in GDP)



Source: The Economist Intelligence Unit.

Does Income Measure Well Being?

- Amartya Sen (Nobel Laureate – 1998) – “capabilities”

- Development is expansion of human freedoms, income is only important ‘instrumentally’, poverty is ‘capability deprivation’.

- So, development should focus on:
  - Democracy, social choice.
  - Expanding access to markets
  - Equality *within* countries so that all citizens, not just the average citizen, faces a broad choice set.
  - Importance to society of expansion of women’s freedoms

- Problem: not easily quantified, outcomes are highly complex

Examples of these Limitations

Averages can be deceptive

	Ghana	Vietnam
GDP/Capita in 2001 PPP Dollars	$2,250	$2,070
Proportion of Population in Poverty	44.8%	17.7%

Income versus other measures of well being

	Guatemala	Sri Lanka
GDP/Capita in 2001 PPP Dollars	$4,400	$3,180
Proportion of literate adults	67%	92%
Life Expectancy at Birth	65 years	72 years

The Human Development Index (HDI)

- Why do we define and use it?
  - Because income alone does not define well being – at least as per the "capabilities" view of development
- What is it?
  - It considers a country's performance on three measures:
  1. Health: Measured by life expectancy
  2. Education: Measured by adult literacy (2/3 weight) and gross school enrollment ratio (1/3 weight)
  3. Standard of living: Measured by GDP/Capita in PPP $
- Each of these 3 components are measured by an index from 0 to 1
- The HDI averages all 3 indices with equal weights on each component

Impact of Using HDI vs. GDP/Capita

- The two are highly correlated, so rankings of countries don’t change too much one way or the other
- The main place where it makes a difference is that the Arab states do less well than would be indicated by their income alone, and more egalitarian/communist states do much better (Sri Lanka, Cuba, Kerala)
- Practical impact is that investments in health and education are seen as ends in themselves as opposed to merely being about human “capital”
- But, the ideas have been highly influential – and bear a strong footprint in international development policy

Millennium Development Goals

•These were the targets set by the United Nations at the turn of the Millennium (2000) with regard to goals for the international community to reach by 2015

• They constitute the most commonly used "vision statement" for international development policy

1. Eradicating extreme poverty and hunger,
2. Achieving universal primary education,
3. Promoting gender equality and empowering women,
4. Reducing child mortality rates,
5. Improving maternal health,
6. Combating HIV/AIDS, malaria, and other diseases,
7. Ensuring environmental sustainability, and
8. Developing a global partnership for development

Growth & Inclusion Summary

- Most important determinant of long-term economic welfare of a country (including India) is it’s average rate of growth (sustained over this period)

- But growth by itself is not enough to achieve the goals of “development”

- Also, important for the growth to be “inclusive” so that the benefits of growth accrue broadly:
  - Key for poverty reduction
  - Key for improving capabilities (health & education) for all
  - Key to maintain functioning democratic institutions (one person one vote vs. one dollar one vote)

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3. **State & Market**

Markets - Strengths

- Do an amazing job of aggregating information across different decentralized actors and using prices as signals for the optimal use of resources
  - Example 1: Pizza at 2am
  - Example 2: Factor allocation (land, labor, capital)
  - Combination of “prices” and “competitive markets” are a powerful positive force for efficient resource allocation
- Philosophical/Moral underpinning of markets comes from a libertarian tradition
  - No transaction takes place unless both sides want it
  - But varying extents of ‘coercion’ as a function of outside options
- Expanding the scope of market access/transactions a key enabler of economic growth (Adam Smith)
  - Economies of scale in production
  - Comparative advantage
  - Source at lowest cost; sell at highest value (maximize surplus)

Markets - Weaknesses

- Standard sets of market failures (within a neo-classical framework)
  - Externalities, coordination, public goods
  - Information asymmetries, monopolies/market power, regulation
- Distribution: Markets are wonderful but the market does not care for you if you don't have purchasing power
  - Example of Pharmaceutical Research
  - Undemocratic? 1 person 1 vote vs. 1 Dollar 1 vote
- Three major reasons why states get involved in economies
  - Provision of public goods
  - Correcting externalities
  - Redistribution, social insurance

Economics Vs. Other Social Sciences

- Example from lecture on “Global Chaos of Love”

State Vs. Market (1)

- Figuring out the relative role of the state and the market has been one of the central questions for theoretical and empirical social sciences for over 2 centuries!
  - Comparative economic systems is an entire field
- Core tension in public policy – continues to be relevant at every point in time and across societies
  - Think about current discussions on whether to use the "Defense Procurement Act" to ramp up COVID-19 related supplies?
  - Should the government do this? Pros and cons?
- Broad empirical fact of the 20th century appears to be that growth rates are higher when markets play a leading role in the allocation of factors of production (China, India)
  - Much more likely to allocate resources efficiently. Why?
  - Better incentives!

State Vs. Market (2)

- But not paying attention to distribution can create political conflict and threaten the basis for investment/growth
  - Recent US elections?
- Core policy challenge is to deliver "inclusive growth"
  - Figuring out the right balance between the state & the market is an ongoing struggle (at both aggregate and sector levels)
  - Phases of Indian economic history can be viewed through the different phases of this lens
- Some of the most promising pathways for reforms try to combine the advantages of markets (private provision) with interventions to provide purchasing power for the poor
  - Vouchers/charter schools
  - Advanced Market Commitments (AMC's) for vaccines
  - But there are non-trivial design challenges