

MACROECONOMICS: ECONOMIC GROWTH

SESSION 1B:

**Economic Growth
and
Some Stylized Facts**

Plan

- What is Growth Theory? Why do we care?
- ~~Stylized facts~~ Realities about Economic Growth

What Is Growth Theory?

- Growth theory is a branch of economic theory that explores the remarkable growth events of the last two centuries
- During this period, one section of the international community has, for the first time, experienced high and sustainable growth
- Economists have been looking at the puzzle of growth since the time of *Smith, Ricardo and Malthus* (\pm 250 years)
- According to *Simon Kuznets*, the phenomenon of sustained **modern economic growth** has become the defining feature of human history

Why do we care?

- It is of **great practical importance** to understand the forces that contribute to a country's rapid material advance, or stagnation.

The 'Great Divergence'

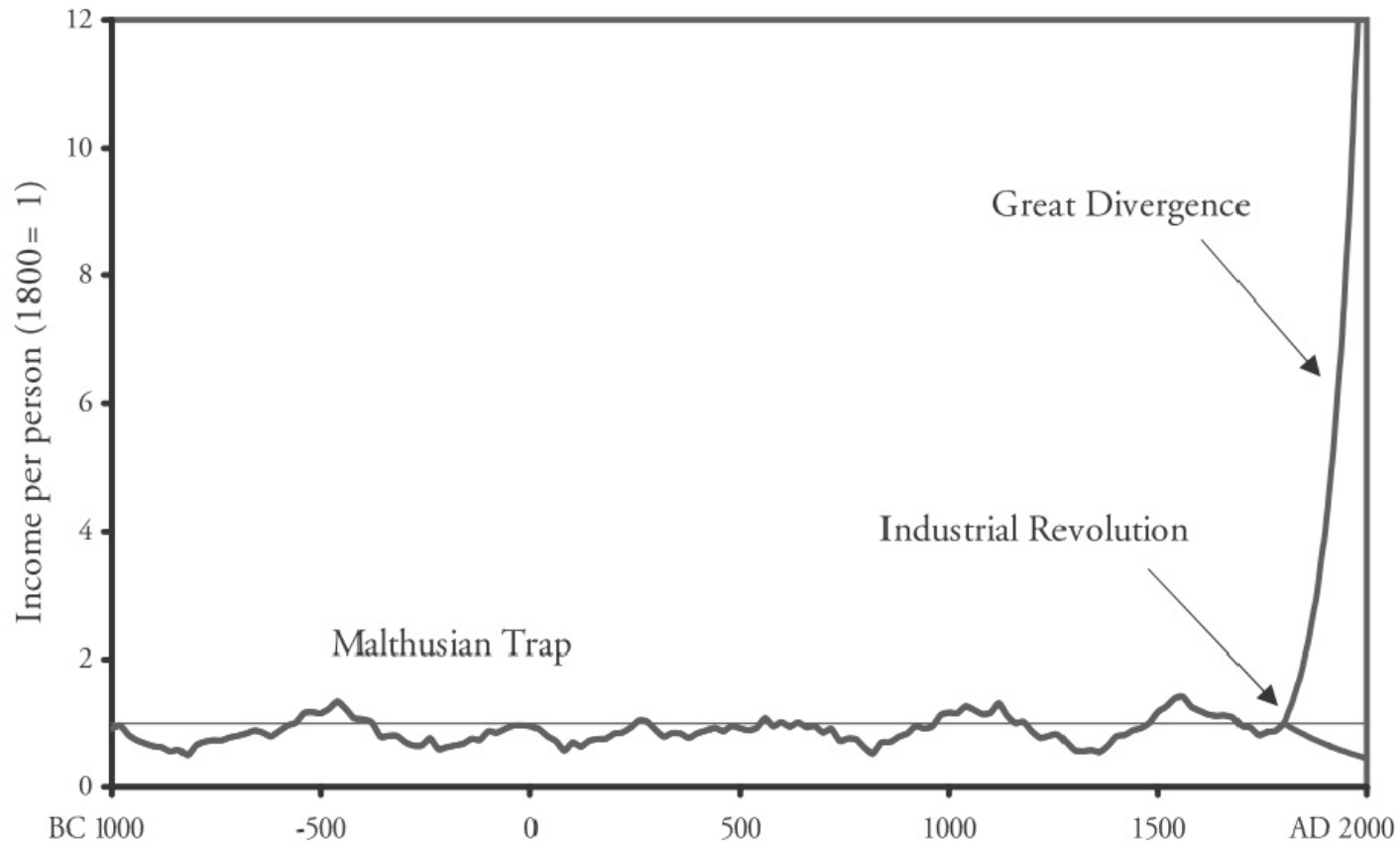


Figure 1.1 World economic history in one picture. Incomes rose sharply in many countries after 1800 but declined in others.

The Problem

“The world is divided roughly into three kinds of nations: those that spend lots of money to keep their weight down; those whose people eat to live; and those whose people don’t know where the next meal is coming from . . . the old division of the world into two power blocs, East and West, has subsided. Now the big challenge and threat is the **gap in wealth and health that separates rich and poor**. These are often styled North and South, because the division is geographic; but a more accurate signifier would be West and Rest, because the division is also historic. Here is the greatest single problem and danger facing the world of the Third Millennium.”

— David Landes in the *Wealth and Poverty of Nations* (1998)

Some more quotes:

“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? If not, what is it about the “nature of India” that makes it so? 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) [see, also, Econtalk: Lucas on Growth]

“These inspirational words from Lucas have probably become the most frequently quoted passage in the growth literature. Thus it is ironic (and rarely mentioned) that, even while Lucas was writing his ideas, India had already begun to grow faster than Indonesia and Egypt. The growth rates of GDP per person from 1960 to 1980 were 3.2% per year in Egypt, 3.9% in Indonesia, and 1.5% in India. In contrast, from 1980 to 2000, the growth rates of GDP per person were 1.8% per year in Egypt, 3.5% in Indonesia, and 3.6% in India. Thus, the Indian government seems to have met Lucas’s challenge, whereas Egypt was faltering.”

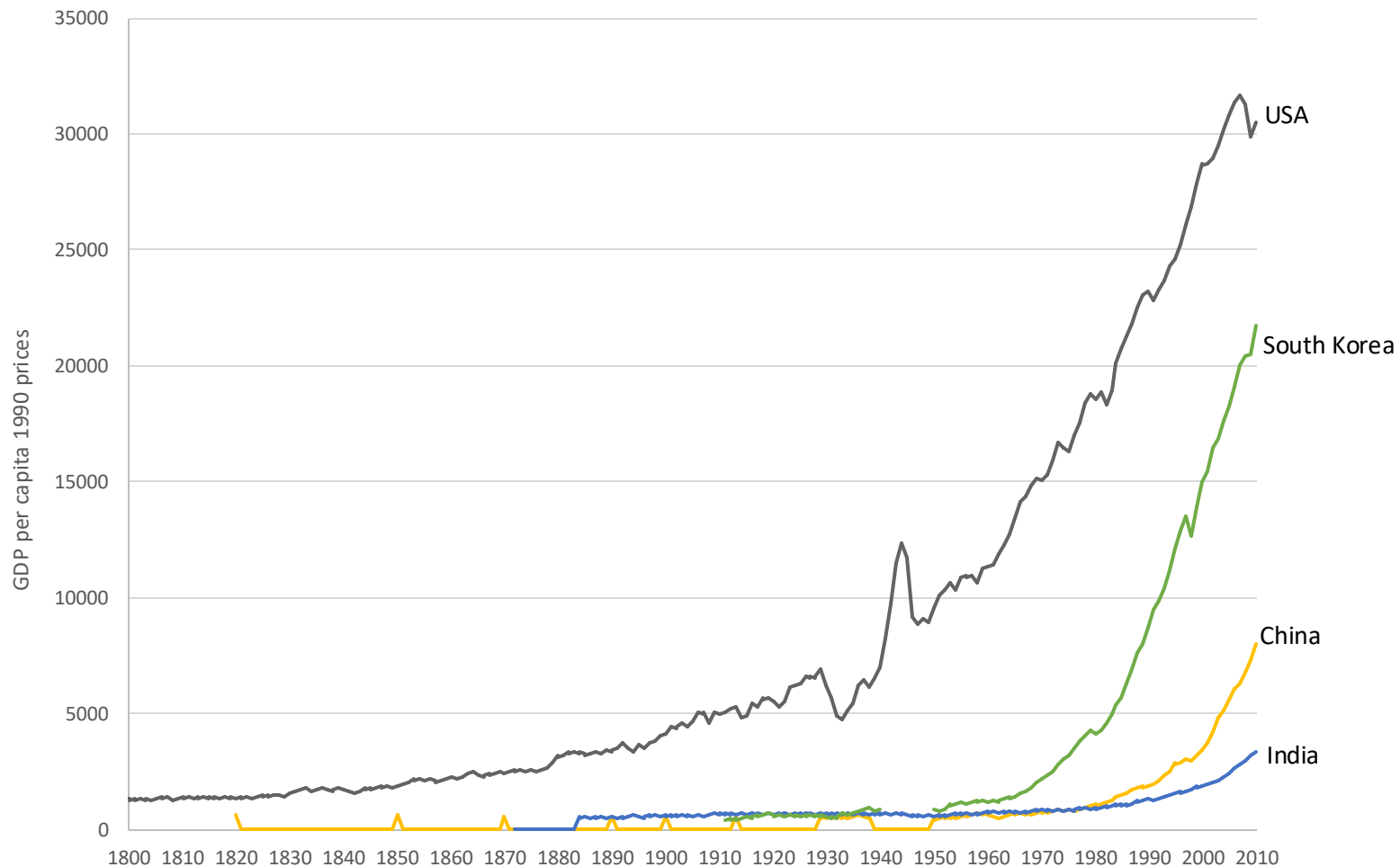
— Robert Barro and Xavier Sala-i-Martin (2000)

Stylized Facts on Economic Growth

1. Economic Growth the dominant feature of macroeconomics evolution
 - Tremendous growth in **rich** countries since the industrial revolution

Stylized Facts on Economic Growth

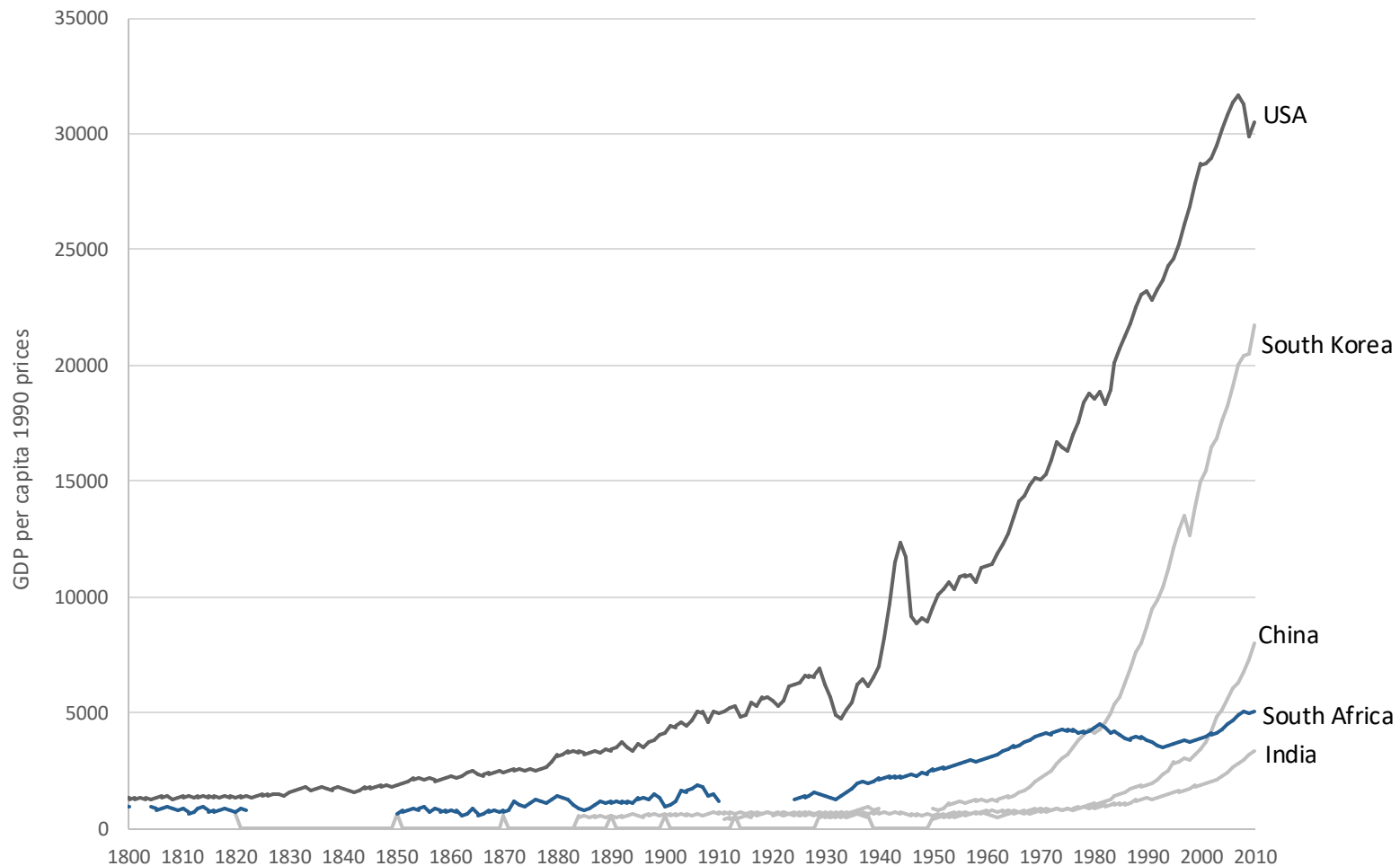
23 fold increase in per capita income in USA since 1800



source: Maddison Project (<http://www.ggdc.net/maddison/maddison-project>)

Stylized Facts on Economic Growth

South Africa?



source: Maddison Project (<http://www.ggdc.net/maddison/maddison-project>)

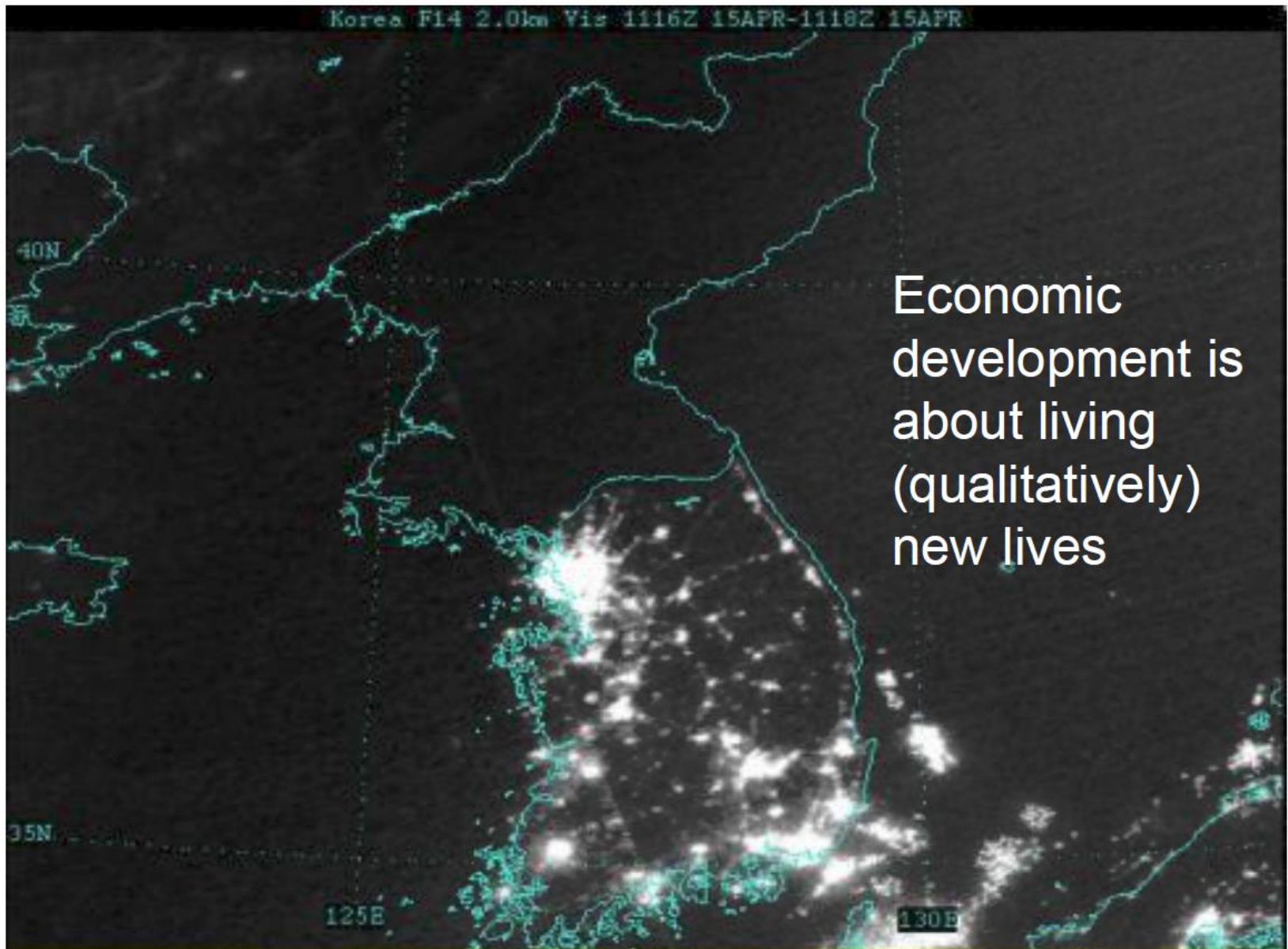
Stylized Facts on Economic Growth

1. Economic Growth the dominant feature of macroeconomics evolution
2. Growth has not been equally distributed

Stylized Facts on Economic Growth



Stylized Facts on Economic Growth

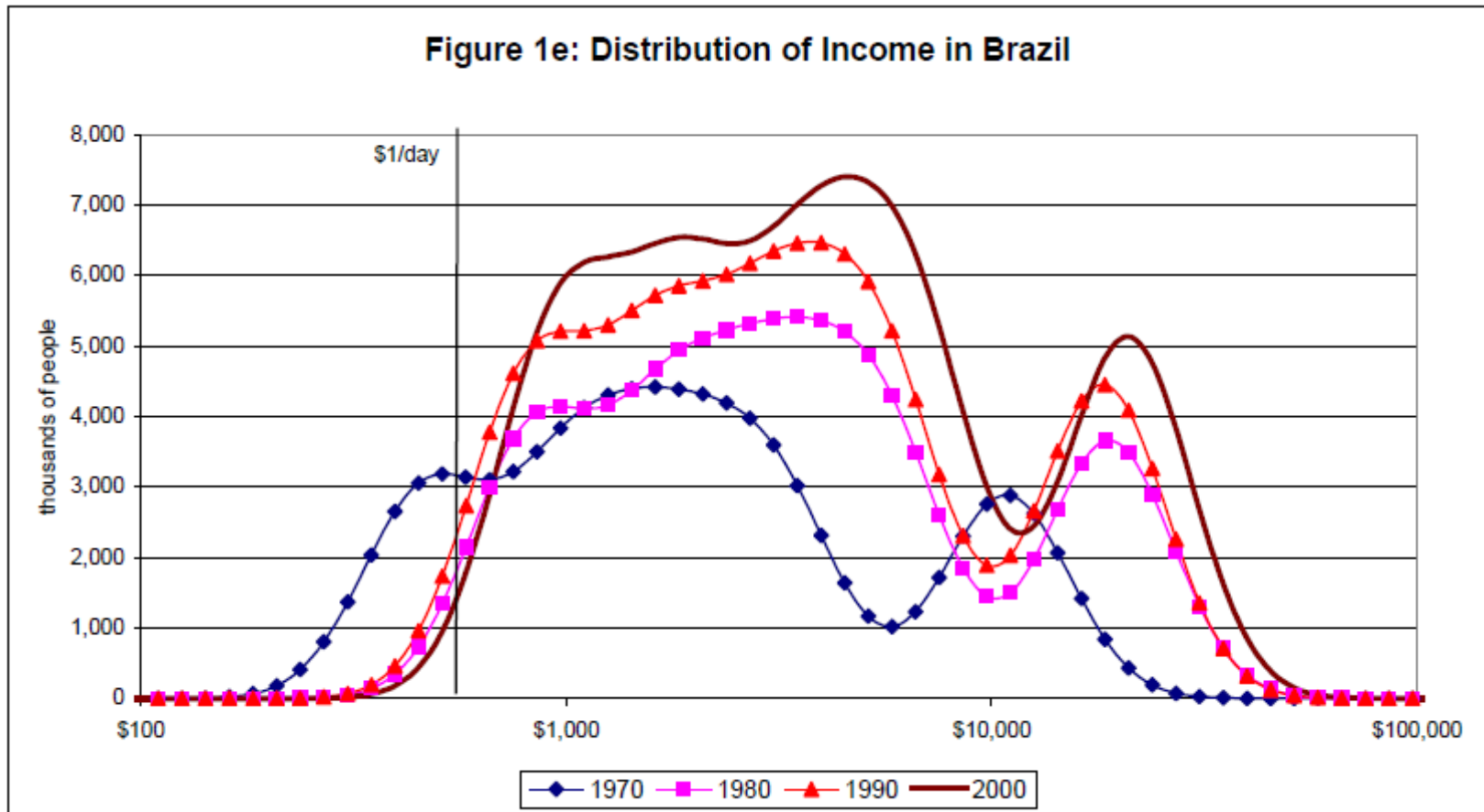


Stylized Facts on Economic Growth

1. Economic Growth the dominant feature of macroeconomics evolution
2. Growth has not been equally distributed
 - Within countries?

Stylized Facts on Economic Growth

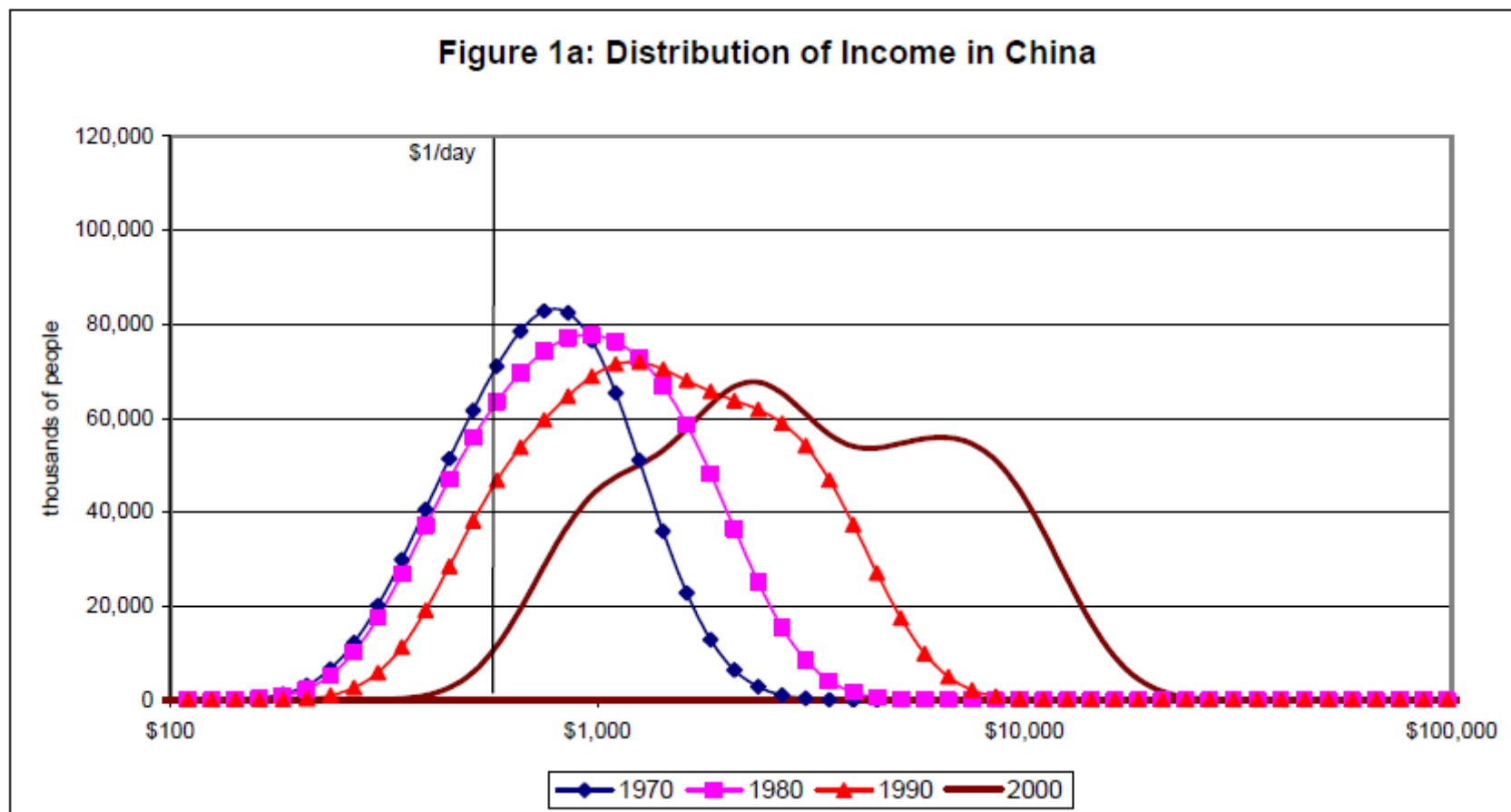
- Sharp inequalities can remain, even with growth:



Source: Sala-i-Martin (2006) QJE

Stylized Facts on Economic Growth

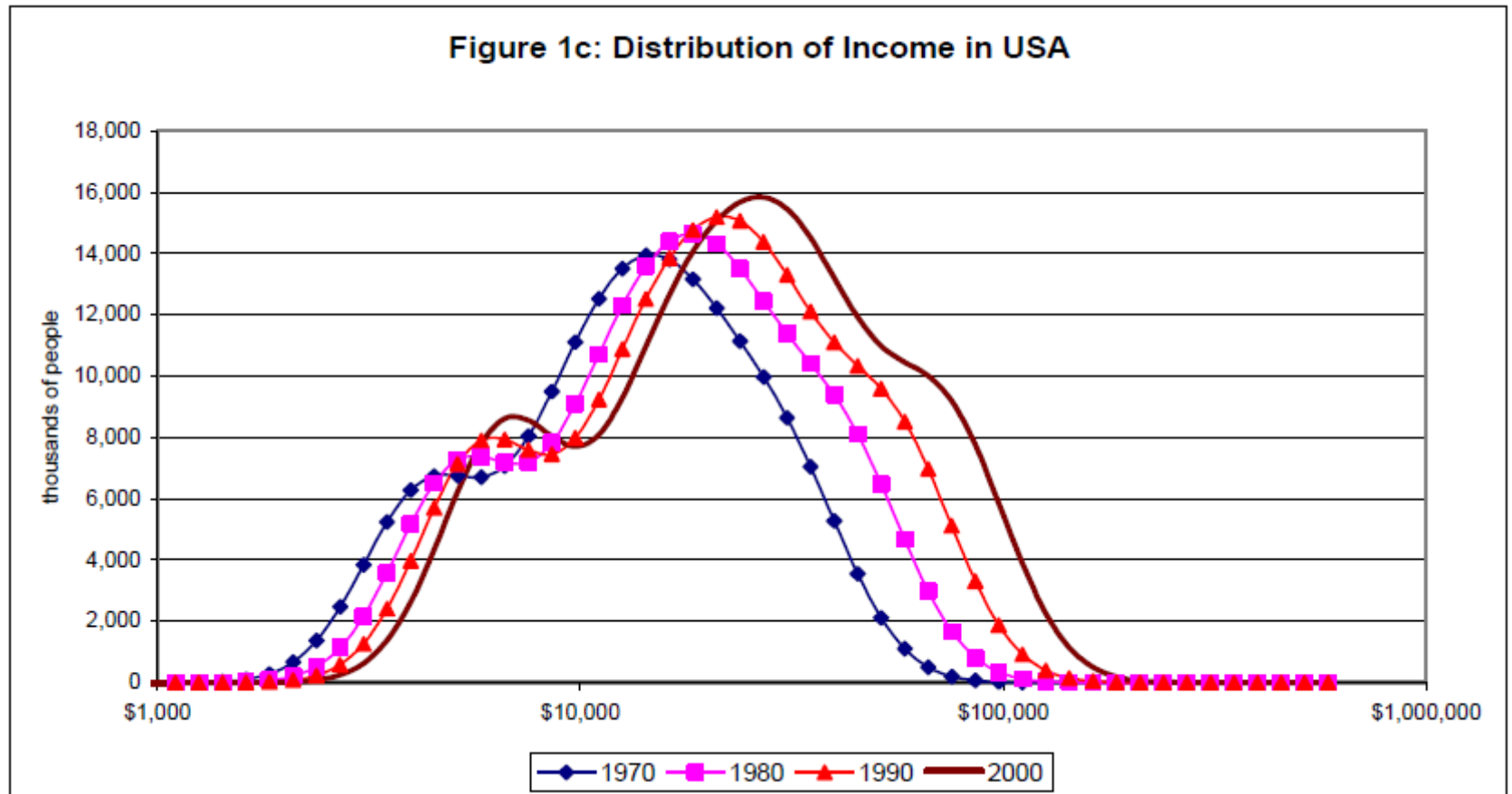
- An emerging elite? Bad, right?



Source: Sala-i-Martin (2006) QJE

Stylized Facts on Economic Growth

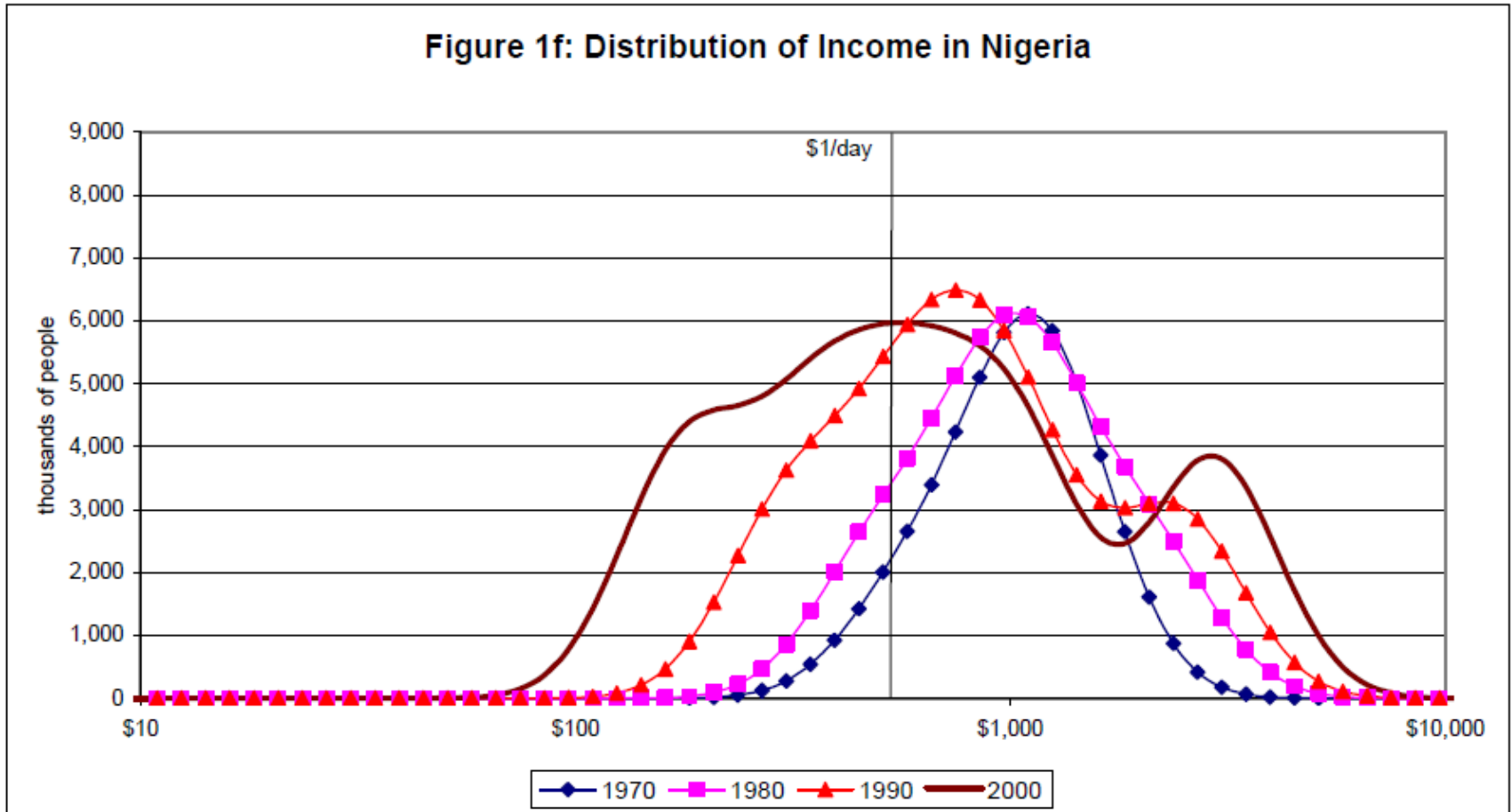
- Or is it worse that some are left behind?



Source: Sala-i-Martin (2006) QJE

Stylized Facts on Economic Growth

- Nah. THIS is bad:



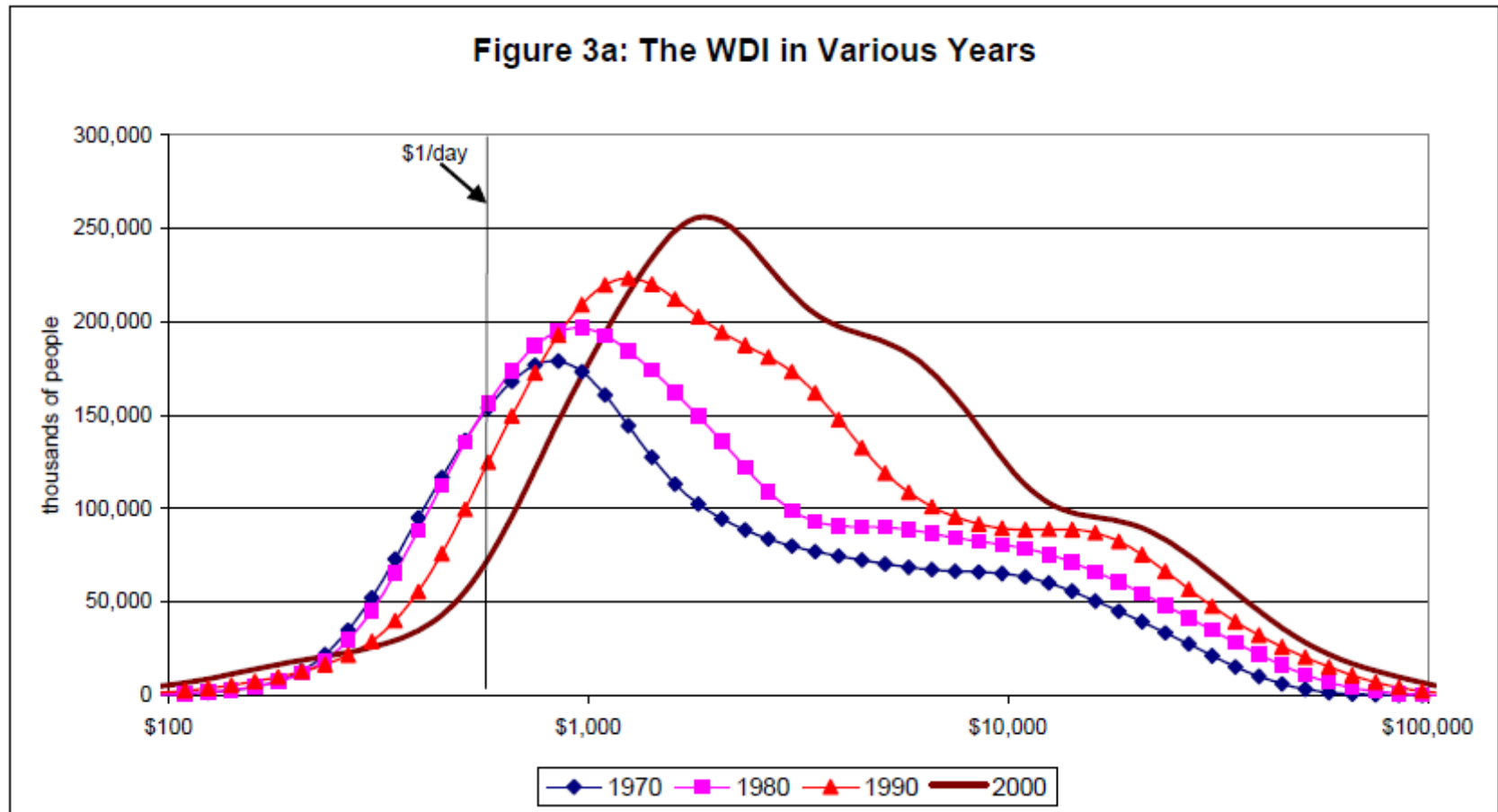
Source: Sala-i-Martin (2006) QJE

Stylized Facts on Economic Growth

1. Economic Growth the dominant feature of macroeconomics evolution
2. Growth has not been equally distributed
 - Within countries? Eye-balling the graphs doesn't seem to promising...
 - Are these the “right” measures?

Stylized Facts on Economic Growth

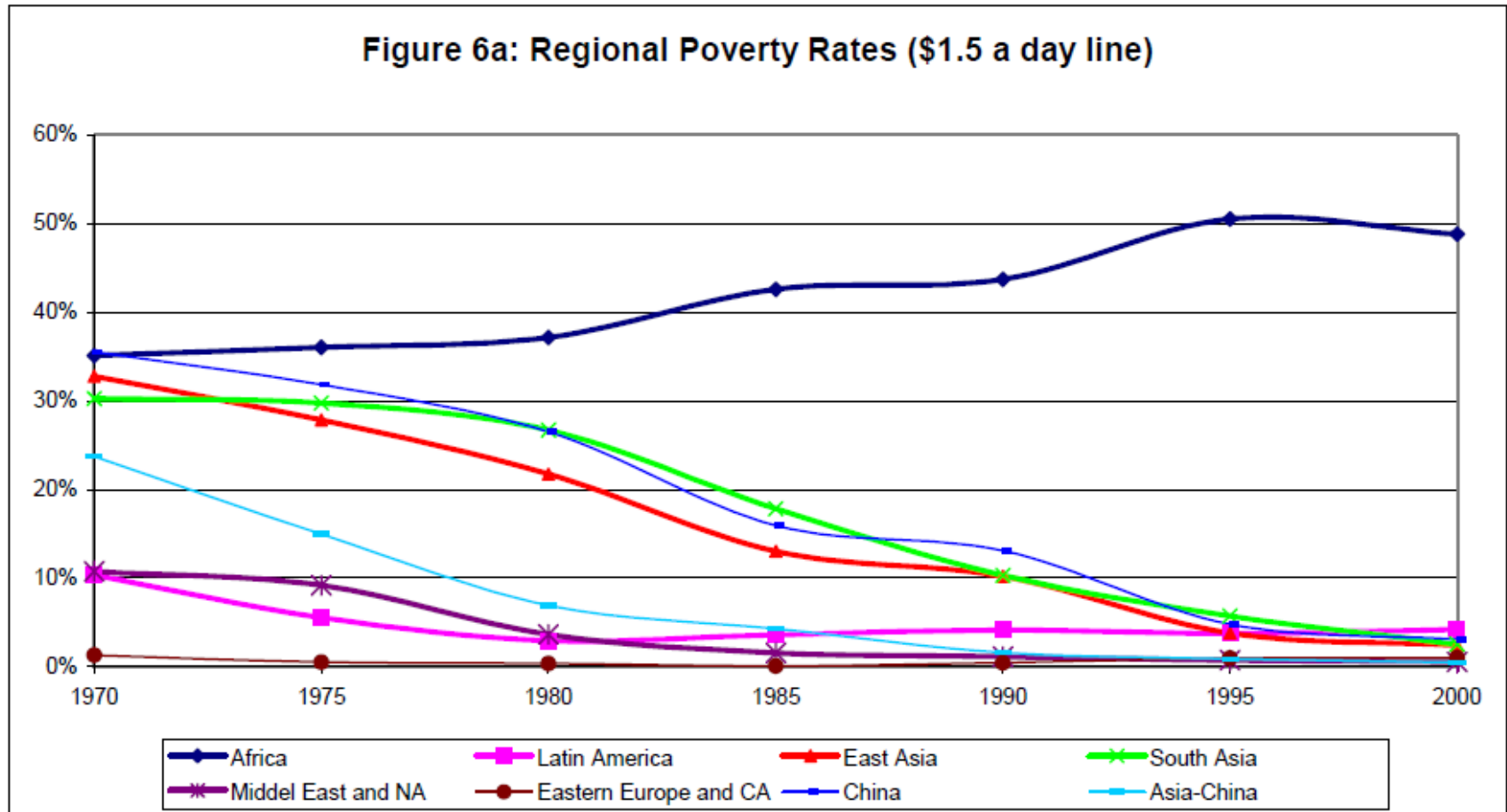
- Globally – World Distribution of Income (WDI):



Source: Sala-i-Martin (2006) QJE

Stylized Facts on Economic Growth

- Globally:



Source: Sala-i-Martin (2006) QJE

Stylized Facts on Economic Growth

- Globally:



Source: Sala-i-Martin (2006) QJE

Stylized Facts on Economic Growth

- Globally... South Africa? Gini = 0.66-0.69



Source: Sala-i-Martin (2006) QJE

Stylized Facts on Economic Growth

1. Economic Growth the dominant feature of macroeconomics evolution
2. Growth has not been equally distributed
 - Within countries? Eye-balling the graphs doesn't seem to promising...
 - Across individuals, inequality and poverty has fallen, largely due to China (per capita... and we don't really know much about China that we don't learn from the Standing Committee of the Communist Party of China)
 - Across countries?

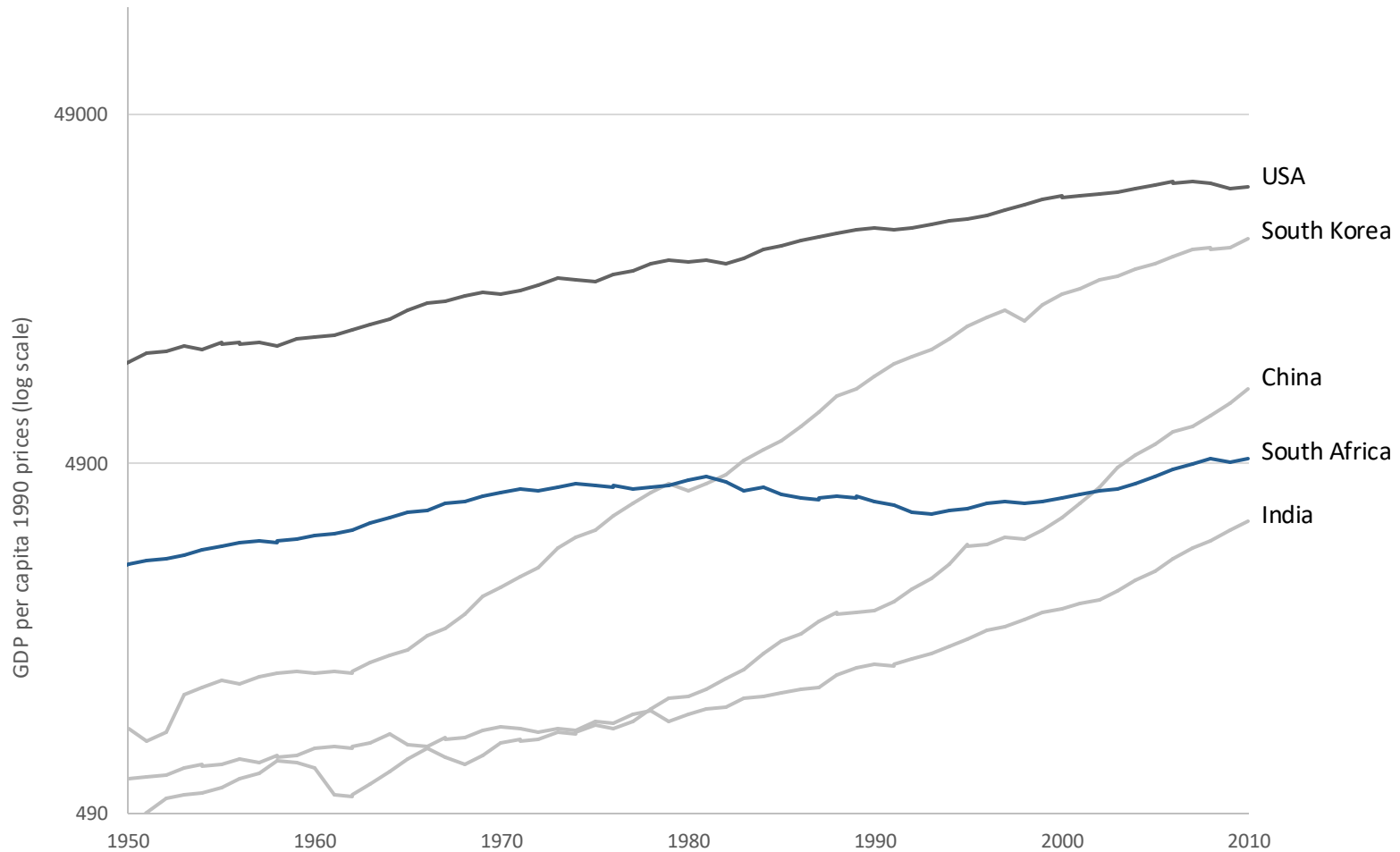
Stylized Facts on Economic Growth

- Across countries: Convergence on average, but...



Stylized Facts on Economic Growth

South Korea vs. South Africa 1980 →



source: Maddison Project (<http://www.ggdc.net/maddison/maddison-project>)

Stylized Facts on Economic Growth

1. Economic Growth the dominant feature of macroeconomics evolution
2. Growth has not been equally distributed

Stylized Facts on Economic Growth

1. Economic Growth the dominant feature of macroeconomics evolution
2. Growth has not been equally distributed
3. Per worker output (labour productivity) tends to grow over time, but at very different rates across countries and over time.
4. Factor accumulation (labour and capital) alone cannot account for growth

Stylized Facts on Economic Growth

5. The average rate of output growth is unrelated to the initial level of per capita income across countries

There are four important consequences that follow from this:

- a) Divergence “big time” across countries (Pritchett, 1997)
- b) Structure of convergence
- c) World cross country rankings not fixed
- d) Twin-peaked cross-country distribution

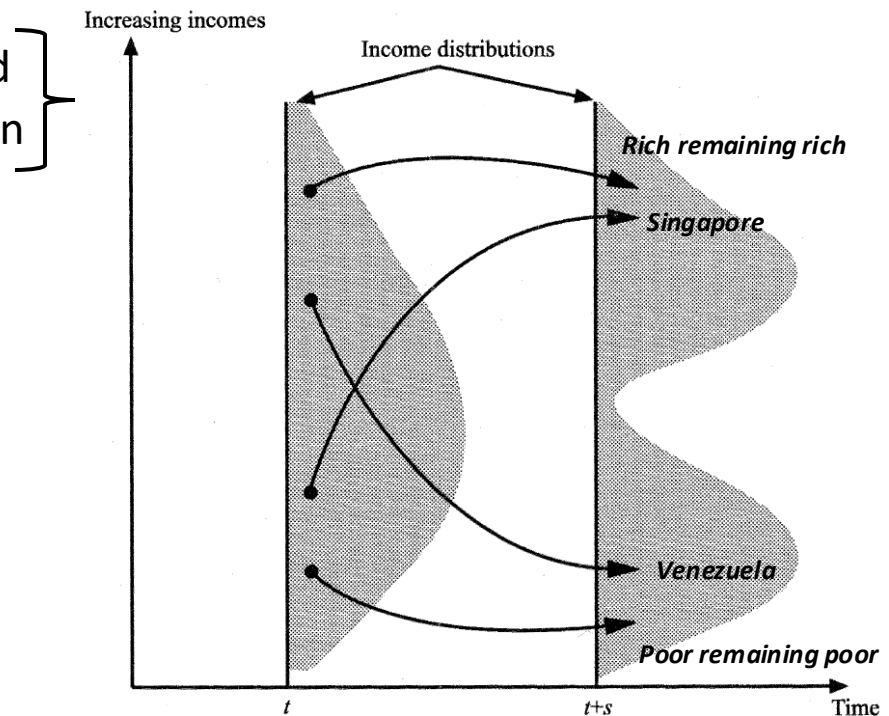
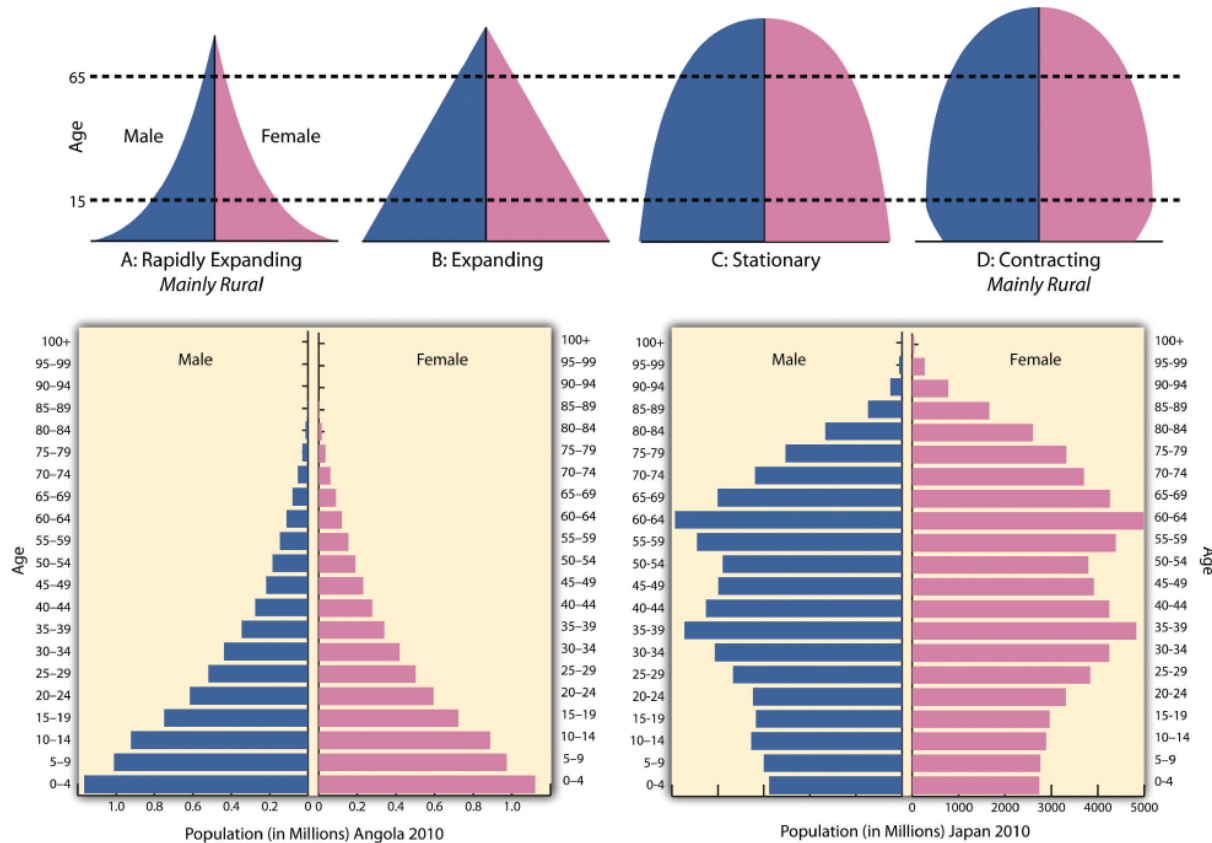


Fig. 1. Twin-peaks distribution dynamics.

Stylized Facts on Economic Growth

6. Growth is negatively related in population growth

- Holds for both the level and the growth rate of per capita income across countries.
- Negative population growth? ...



Stylized Facts on Economic Growth

6. Growth is negatively related in population growth (cont.)

- Collier and Gunning (1999)* point to the contribution of high birth rates in Africa as a source of poor economic development

“Population is like raw capital: its *value depends on what one does with it*. Used well, it can be an asset, an incentive to investment, the human material of industrialisation. Used badly it can be a crushing burden, a seedbed of emergencies and hasty improvisation, a source of political instability . . . Europe effected its population transition during its industrial transformation. The Third World today is growing more populous in advance of development, and most rapidly in the regions of slowest development.”

— David Landes in *Why Are We So Rich and They So Poor* (1990)

[emphasis mine]

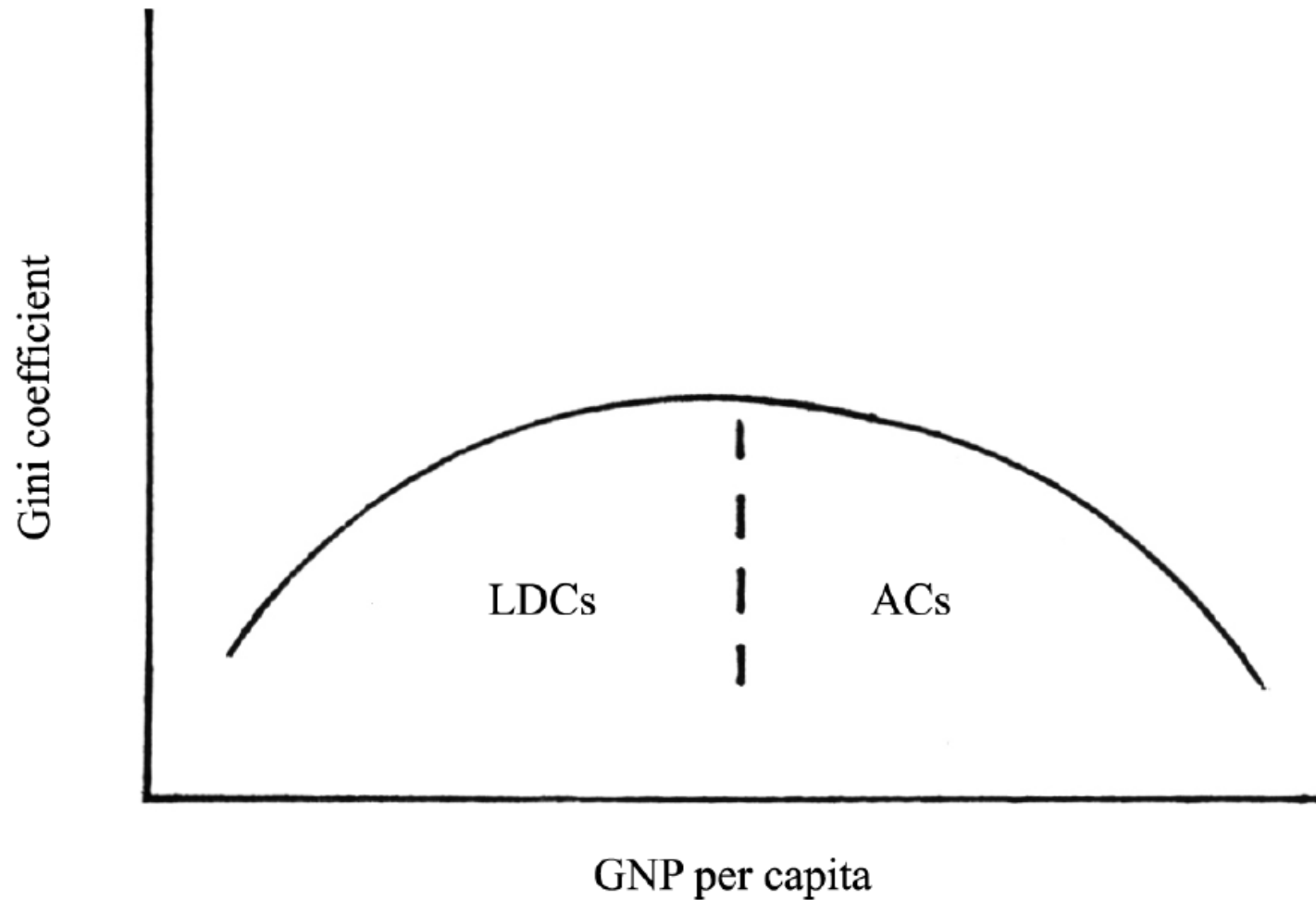
Stylized Facts on Economic Growth

6. Growth is negatively related in population growth
7. Savings rate is positively related to income, but less strongly to growth
 - Holds for both the level and growth of per capita income across countries
8. Positive relationship between both the growth of investment and the share of investment in output with the growth of per capita income across countries.

Stylized Facts on Economic Growth

9. Sustained economic growth is required for lasting reductions in poverty.
 - A developing economy must not only grow, but the growth must also be distributed in such a manner that the poor share in the spoils
 - It has long been argued that economic growth is beneficial to the poor (a rising tide lifts all boats/"trickle-down economics")
 - Indeed, it has proven difficult to substantiate this intuition
 - See **Kuznets Curve** – a trade-off between growth and equality
 - Kuznets (1973, 1981):
 - Shifts from agriculture to industry to services
 - Urbanization
 - Home production to formal employment
 - Formal education
 - Foreign commerce
 - Technological Change

Stylized Facts on Economic Growth: Kuznets Curve



Stylized Facts on Economic Growth

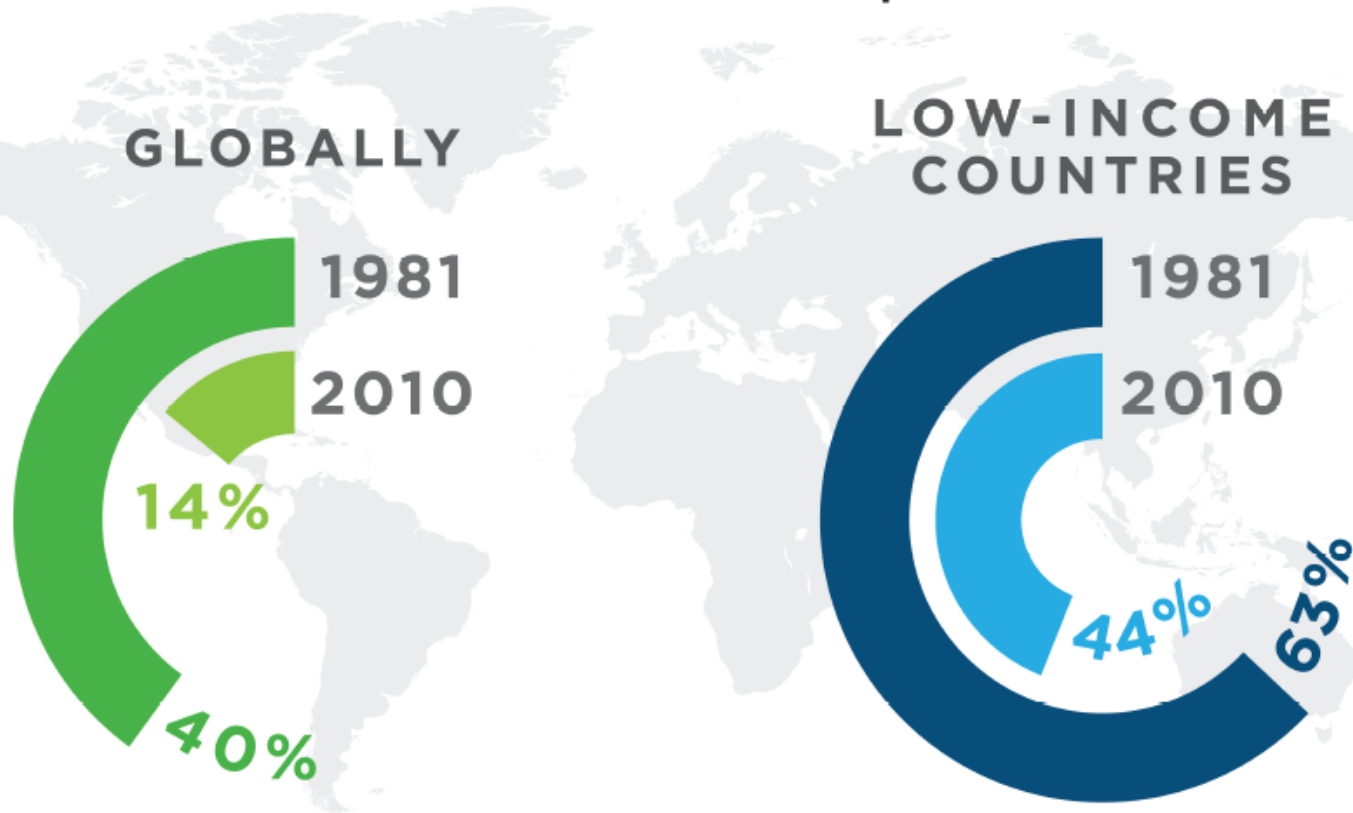
9. Sustained economic growth is required for lasting reductions in poverty.
 - The literature is expanding rapidly and some evidence of the relationship between growth and poverty has already been forwarded.
 - **Quah (2001)** finds that variation in inequality is the result of cross country factors, not variation over time
 - **Agenor (2000)** argues that as a result of economic growth, the depth of poverty has been greatly reduced

“How did aggregate economic growth change the share of people below the poverty line? The answer is quite clear: **fast growth went with fast poverty reduction, and overall economic contraction went with increased poverty.**”

— William Easterly in *The Elusive Quest for Growth* (2001)

Stylized Facts on Economic Growth: 9. Poverty and Growth

PERCENT OF THE POPULATION THAT LIVES ON LESS THAN \$1.25 A DAY

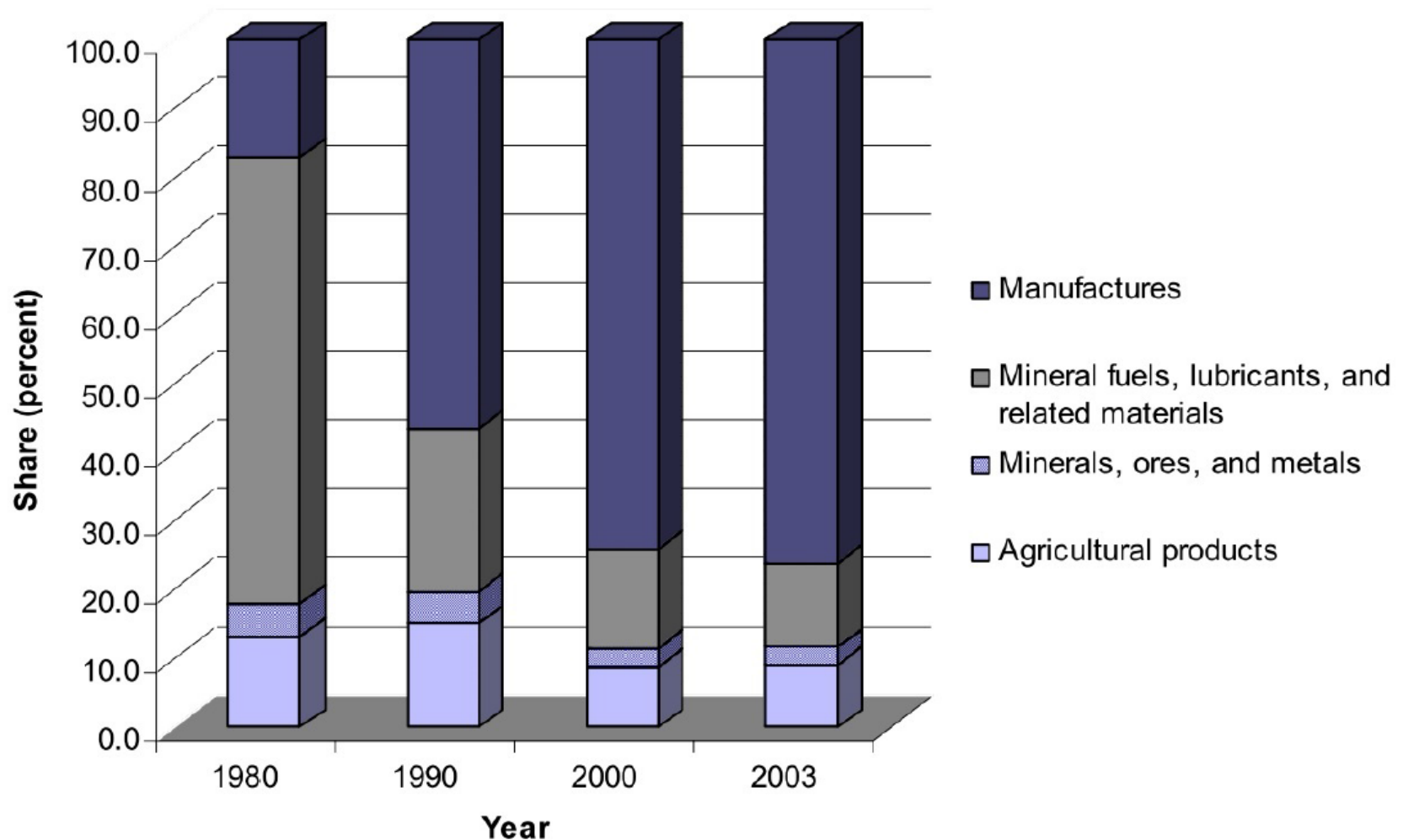


Stylized Facts on Economic Growth

10. Positive relationship between both the growth of exports and imports and the growth of per capita income across countries
- Free trade grants countries access to international markets
 - Markets are not simply a point of trade, but rather a platform to **exchange new ideas, technology and products**
 - This free trade is an important part of the adjustment mechanism for a country in the transition from poor to rich
 - Countries that have joined the global economy since the late 1970's have enjoyed greater volumes of trade in their export products, **especially manufacturing exports**

Stylized Facts on Economic Growth

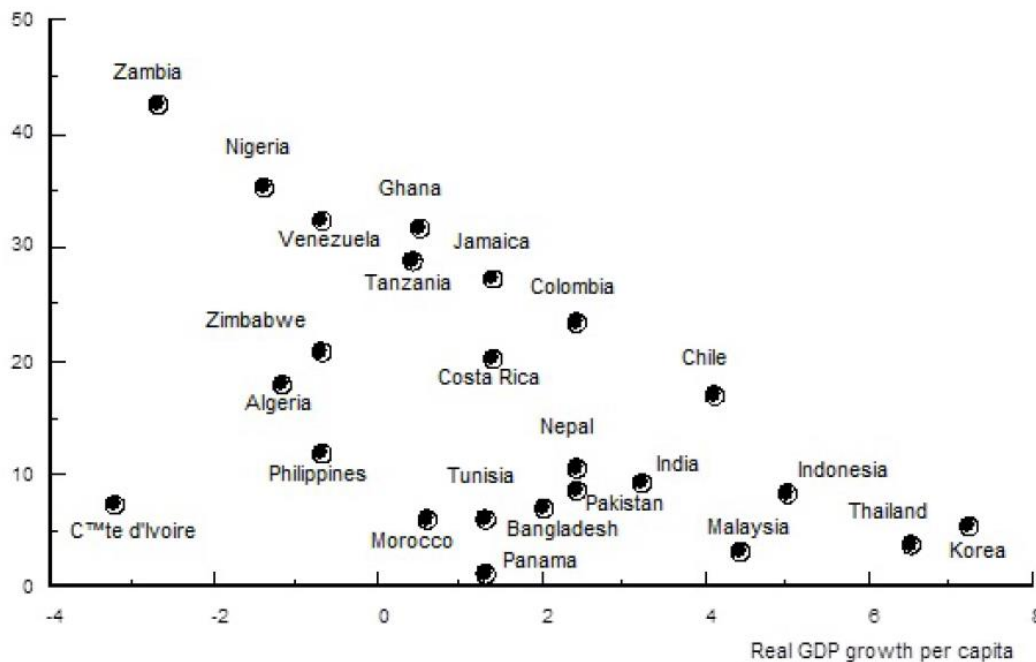
Export composition of developing economies and growth



Stylized Facts on Economic Growth

11. Negative (and non-linear) relationship between inflation and the growth of per capita income across countries

Figure 10.13
Inflation and Growth
(Average annual % change, 1980-95)



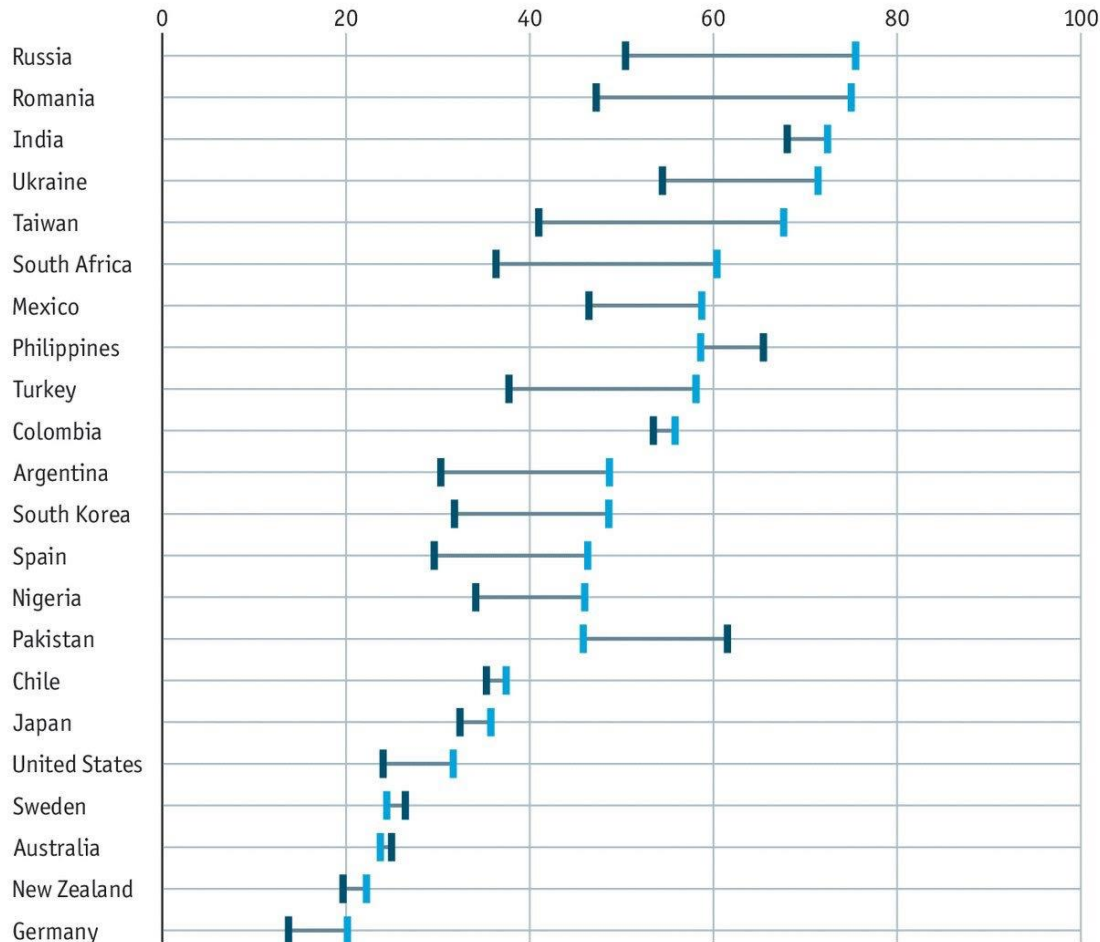
Source: World Bank.

12. Benevolent Autocrats?

Follow the leader

Share of respondents saying that having a strong leader, who does not have to bother with parliament and elections, is a good way to run their country, %

■ 1995-97 ■ 2010-14



EconTalk: [William Easterly on Benevolent Autocrats and Growth](#)

Source: "The signs of deconsolidation" by R. S. Foa and Y. Mounk, *Journal of Democracy*, January 2017