

Economic Policy #09

Growth Policies

Growth Policies

- Measuring growth
- Stylized fact about growth
- Growth enhancing policies

BOX. Why growth matters

- Anything that effects the long-run rate of economic growth – even by a tiny amount – will have huge effects on living standards in the long run.

annual growth rate of income per capita	percentage increase in standard of living after...		
	...25 years	...50 years	...100 years
2.0%	64.0%	169.2%	624.5%
2.5%	85.4%	243.7%	1,081.4%

Source: Cronovich (2007)

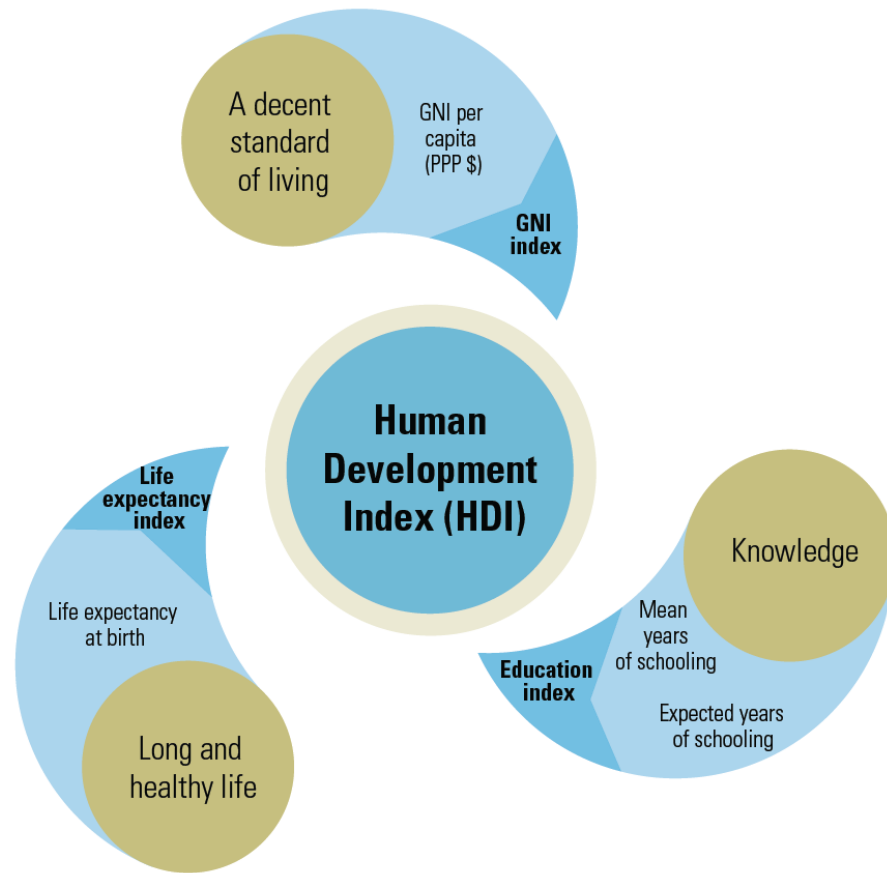
Growth vs. stabilization policies

- Stabilization policy seeks to mitigate short-term cyclical fluctuations whereas growth policies aim at raising potential level of production in the long run.
- But, there are interrelations between long-term trends and short-term fluctuations because of:
 - *precautionary behavior*: excessive inflation is bad for long-term growth
 - *unemployment hysteresis*: skills of unemployed workers deteriorate and they become less employable even in boom

Measuring economic growth

- GDP per person (per capita) corresponds to the average standard of living
- Comparability issues (prices, exchange rates ...)
- GDP per person is not well-being
 - correction for: pollution, working time, shadow economy, life expectancy, inequality, sustainability
- HDI => measure of development
- Labor productivity is better indicator of productive efficiency than GDP per capita.

BOX. Human development index



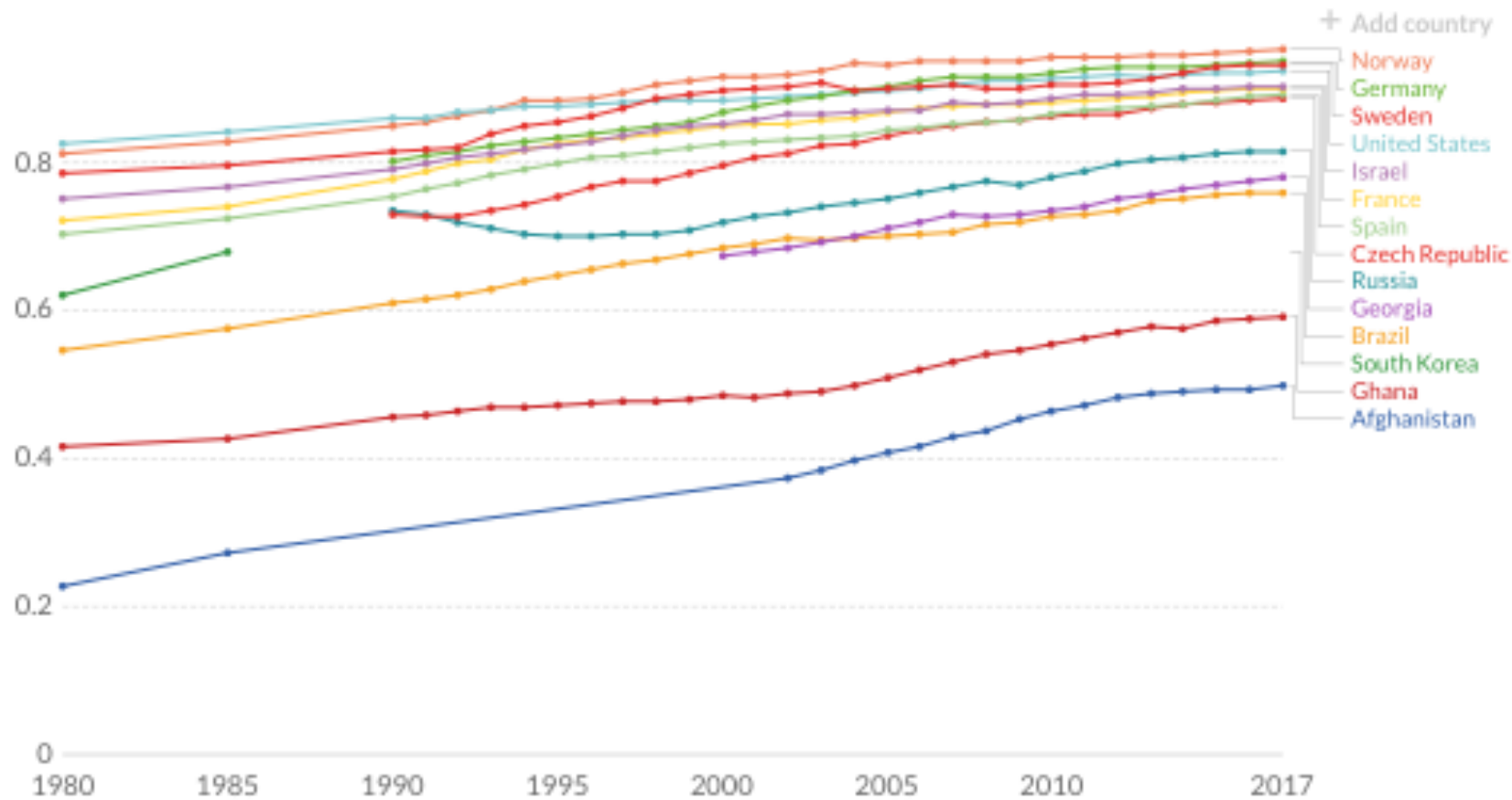
Source: <http://hdr.undp.org/en/humandev>

BOX. Human development index

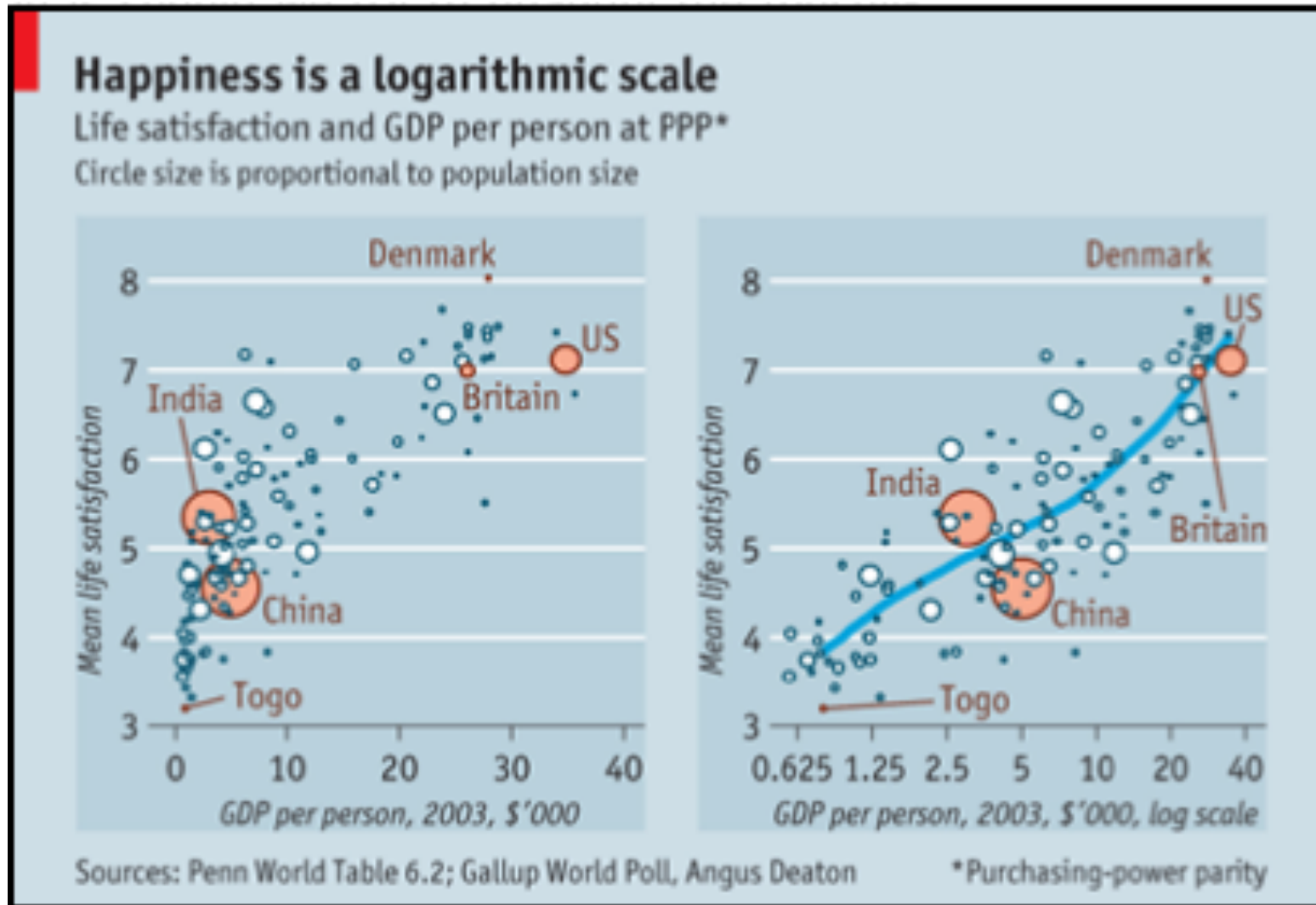
Human Development Index

The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

Our World
in Data



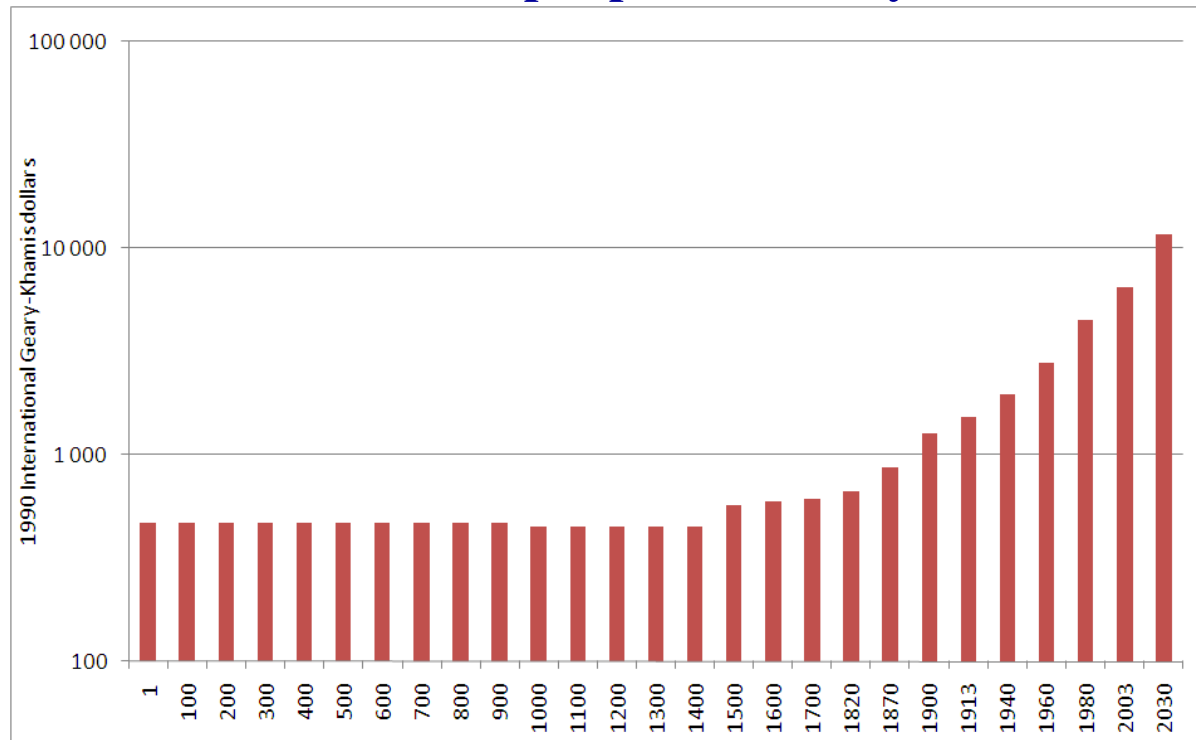
BOX. Growth and happiness



Some stylized facts about growth

#1 Growth is a recent phenomenon by historical standards.

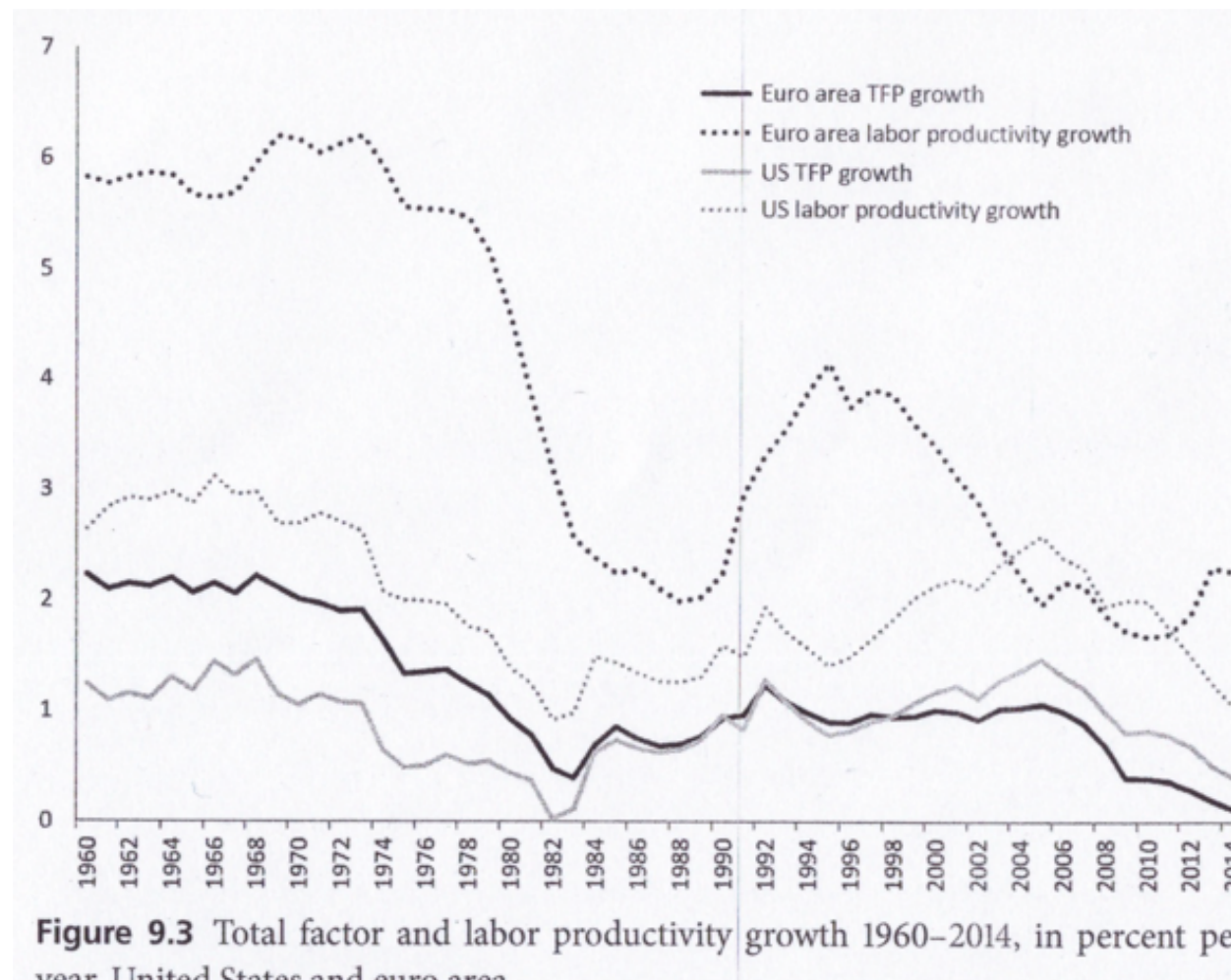
World GDP per person since year 1



Source: Maddison (2007).

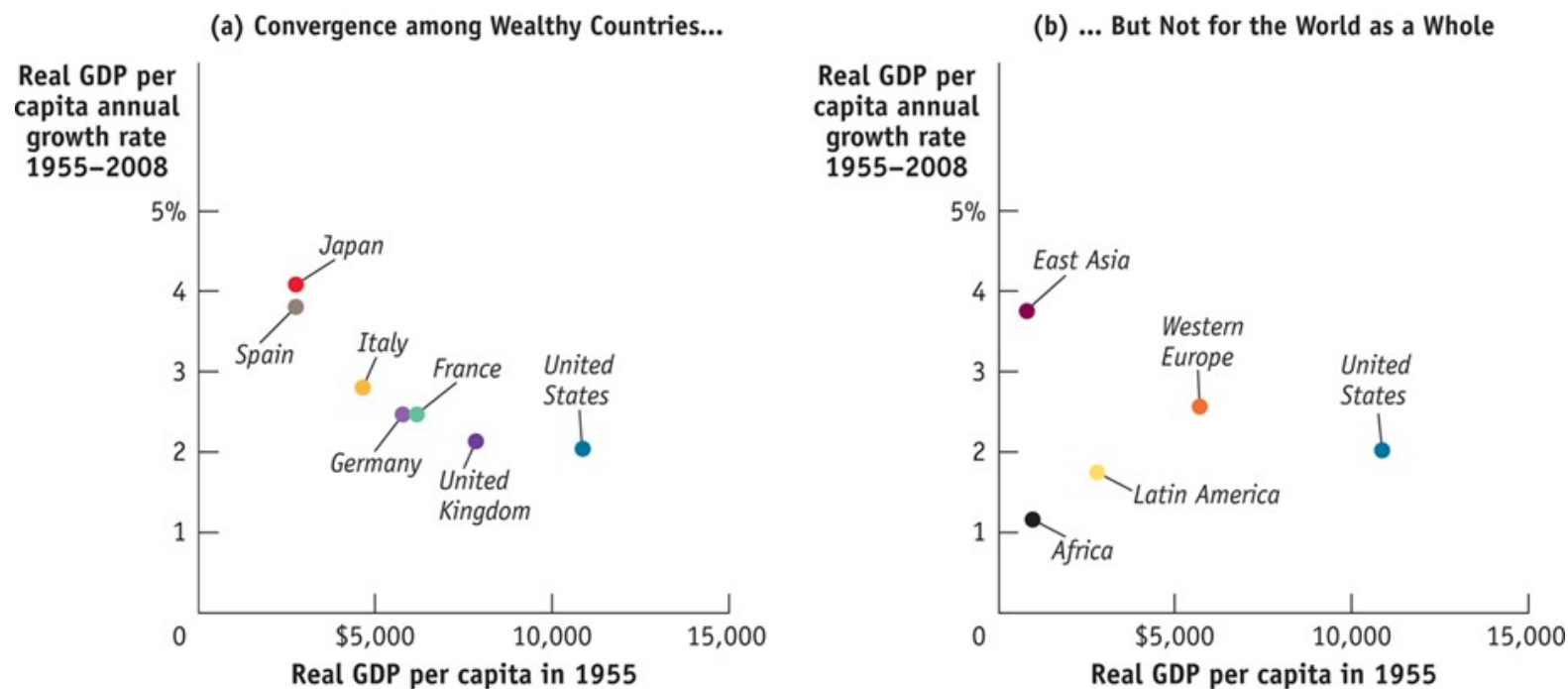
Some stylized facts about growth

#2 Since the turn of the 21st century, productivity has been on declining trend.



Some stylized facts about growth

#3 Some countries have caught up towards the richest countries, some have not and even further diverged.



Source: Krugman&Wells (2012)

Convergence clubs

=> groups of comparable countries within which convergence is at play.

Conditioning variables needed to join the club:

- the quality of human capital
- the functioning of markets
- macroeconomic stability
- political stability

Some stylized facts about growth

#4 While remaining high, global income inequality has somewhat subsided while inequality within nations has deepened.

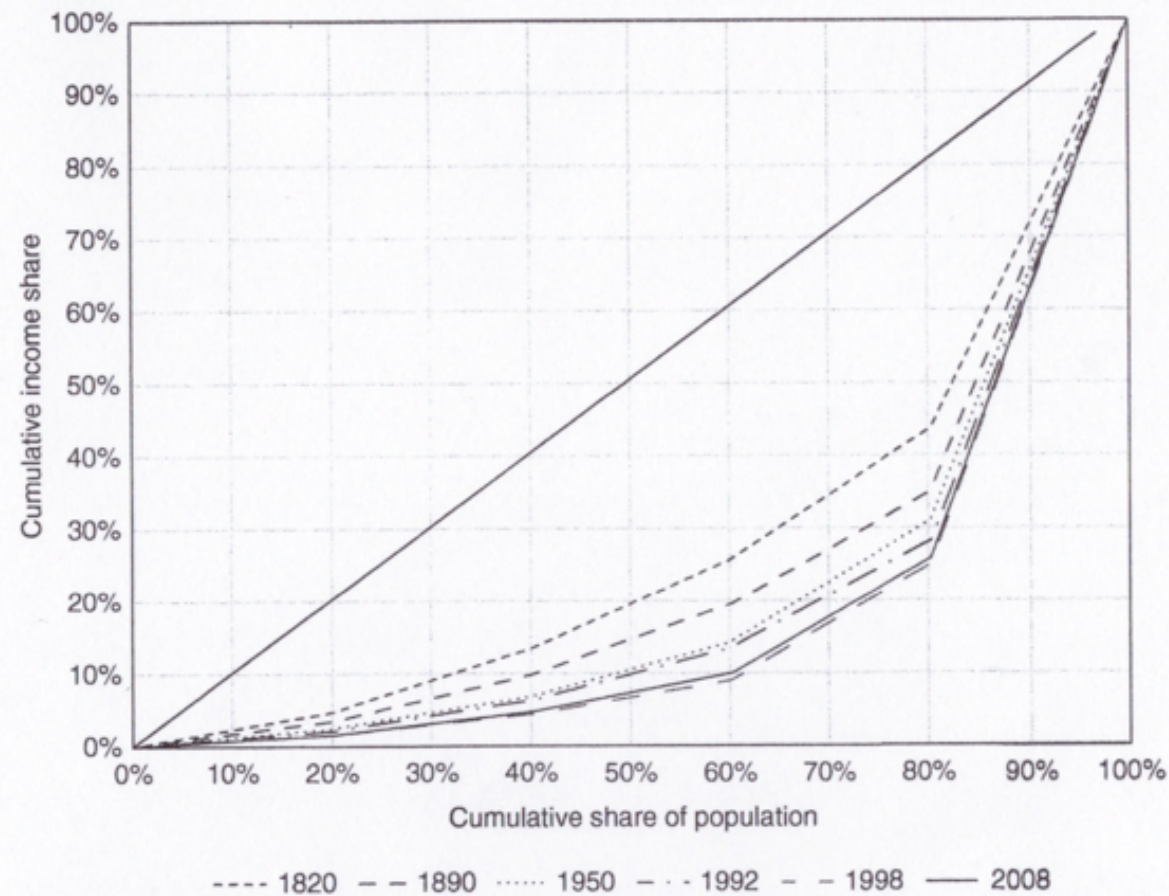


Figure 9.7 Lorenz curve of global income distribution.
Bourguignon and Morrison (2002), Lakner and Milanovic (2015).

Theoretical background

Education, innovation, structural reform, market structure...

$$Y = A \cdot F(K, L)$$

Investment and capital markets

Labor supply and labor markets

Theoretical background (cont.)

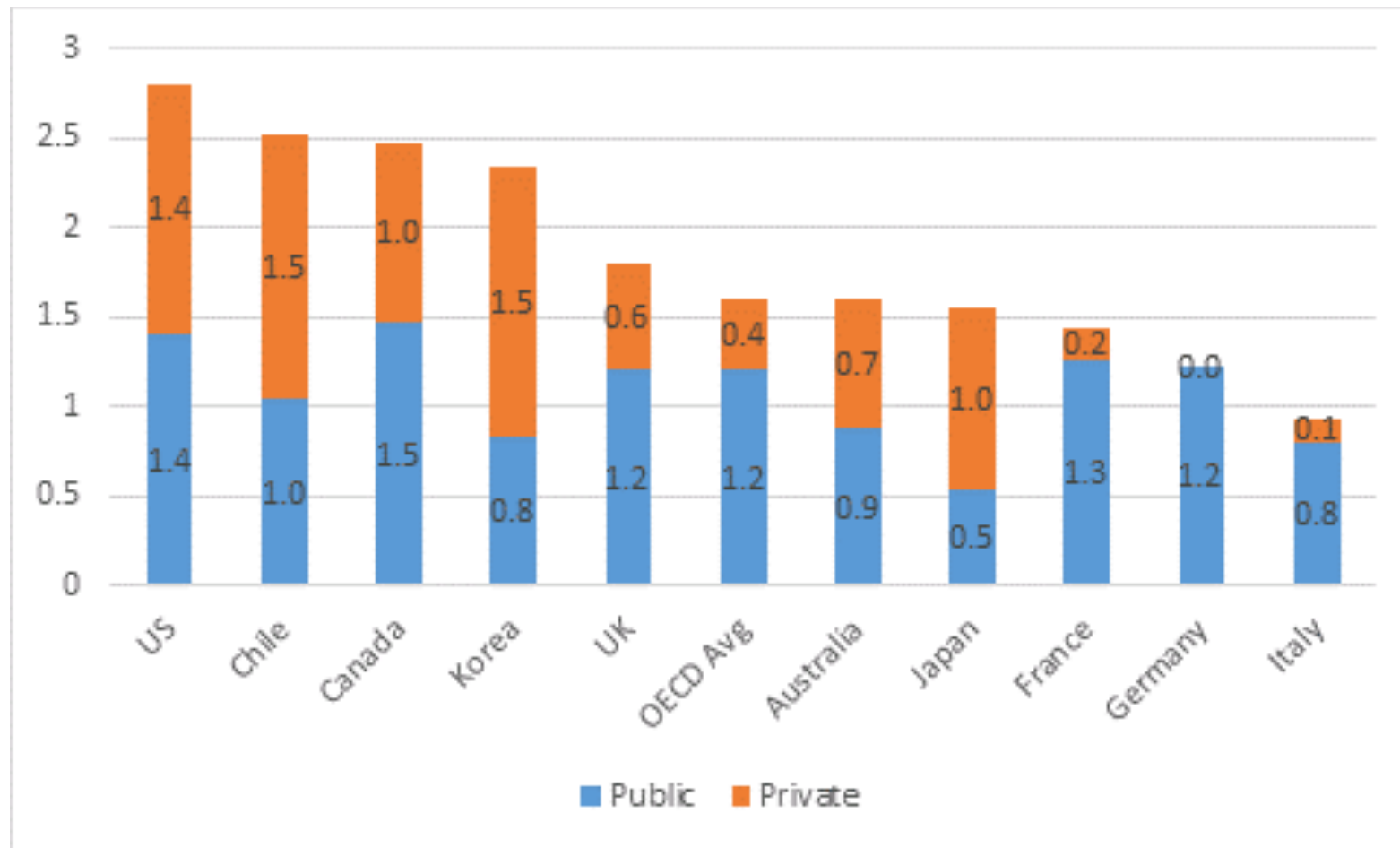
- In the short run (a few months to a few years), potential output is exogenous; growth is dominated by cyclical fluctuations and by stabilization policies
- In the medium run (a few years), governments can influence potential output through investment and labor supply
- In the long run (many years), GDP and the labor/capital mix are determined by demography, technology, institutions and market structures

Education

- Public financing is justified by credit constraints and unequal access to knowledge. It is difficult to assess private and social return to human capital
 - relative returns of primary or secondary vs. tertiary education depend on ‘distance to frontier’

Discrepancy between Europe and US in total expenditures on tertiary education. But money is not enough..

BOX. Spending on tertiary education (% GDP)



Source: OECD (2015)

R&D and innovation

- Market imperfection: investments to R&D are constrained by the unavailability of funds
- Social return on research spending generally exceeds its private return

=> Public funding of fundamental research and university clusters

=> Incentives to private funding of applied research

– Intellectual protection

– Innovation-friendly competition regime

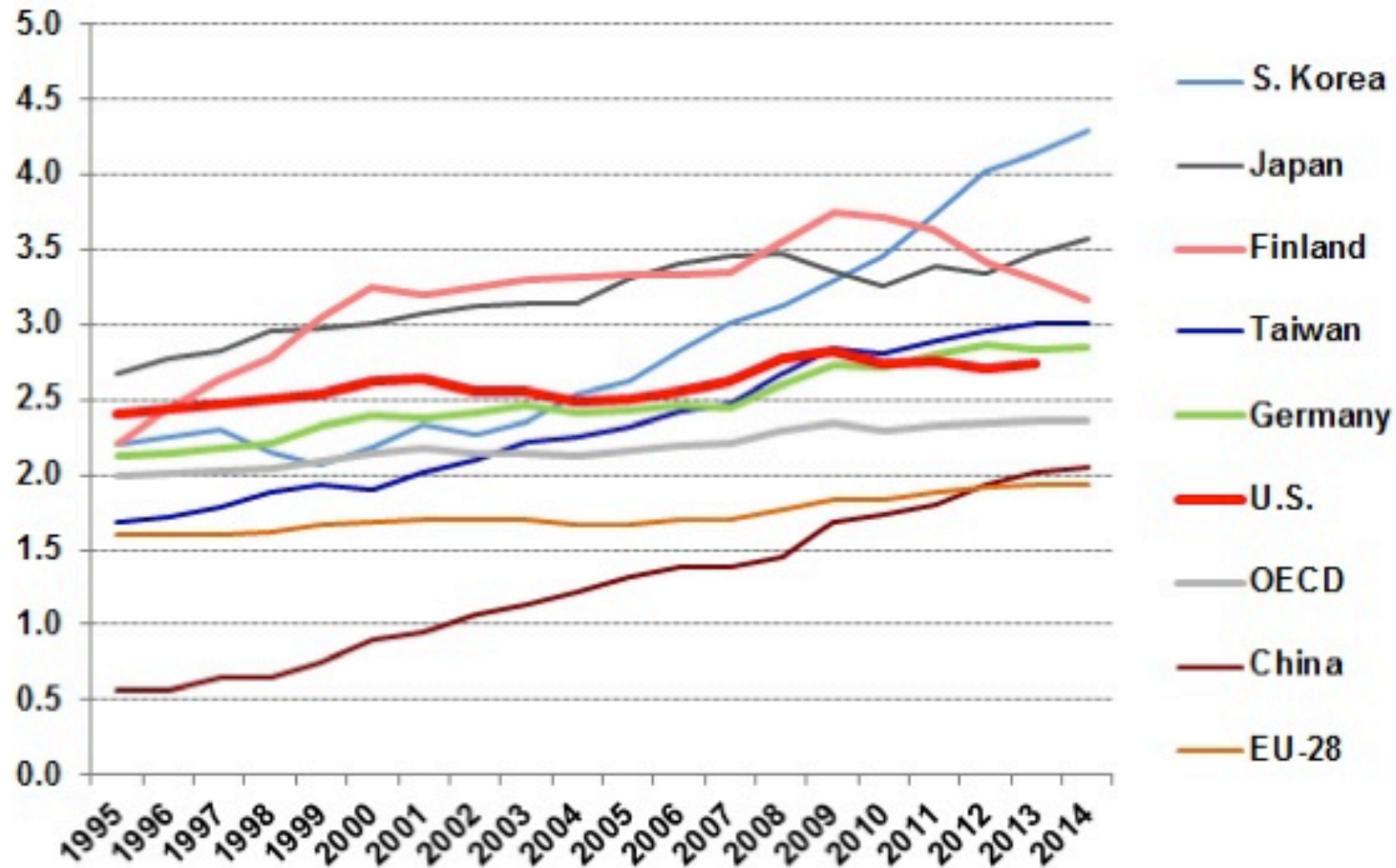
=> Channelling private savings towards R&D and innovative SME financing, e.g. through tax rebates

Unequal R&D effort

- R&D expenditures:
 - Discrepancy among countries (see next slide)
- Different dynamics:
 - US: new innovating SMEs
 - EU: firms already in place
- In the US, innovating firm creation encouraged by:
 - risk capital and initial public offerings
 - lower entry cost
 - more favorable resolution law

BOX. R&D investments

National R&D Investment
Gross R&D as a percent of GDP



Source: OECD Main Science and Technology Indicators 2016. © 2016 AAAS

Public infrastructures

- Government intervention is needed, because:
 - many infrastructures are natural monopolies
 - infrastructures involve externalities
 - market cannot finance infrastructures by itself
- => European networks program, *public-private partnerships*

Labor supply

- How to increase labor supply?
 - Through family-oriented policies
 - Immigration
 - Welfare-to-work:
 - in-work benefits
 - pension reforms

Developing financial markets

- Often neglected in growth strategies
- Channels on influence on long-term growth:
 - lower cost of capital
 - Higher savings
 - Better allocation of capital
- Major issue in post crisis period: is there a trade-off between financial stability and growth?

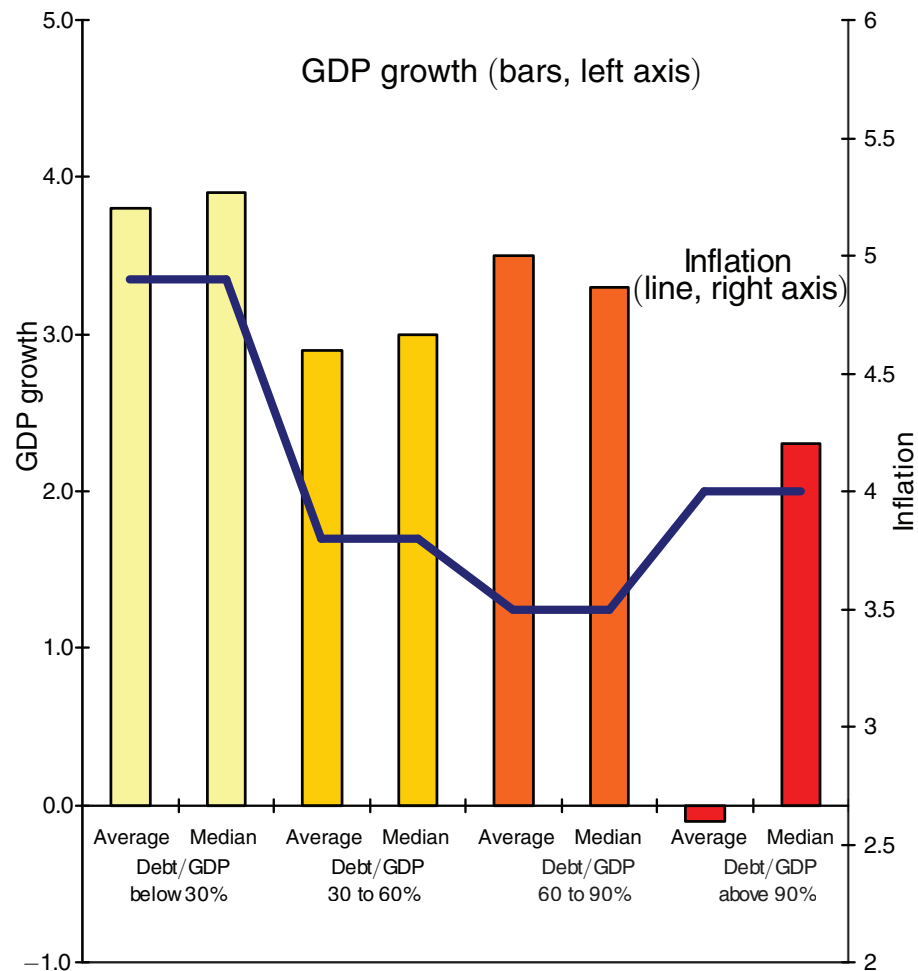
Improving institutions

General recommendations:

- create legal framework which is conducive to private initiative
- put in place effective market regulation
- achieve macroeconomic stability

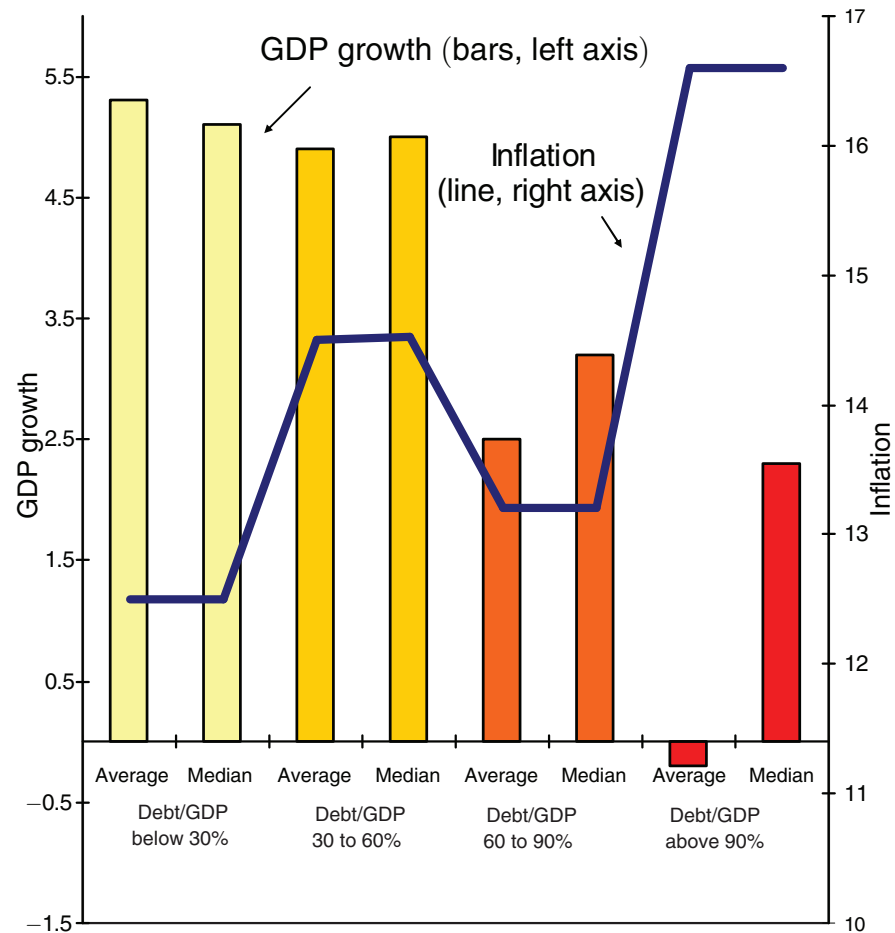
It is difficult to identify a set of specific recommendations because of different institutional set-ups.

BOX. Government debt, growth and inflation: selected advanced economies (1946-2009)



Source: Reinhart&Rogoff (2010)

BOX. Government debt, growth and inflation: selected emerging economies (1970-2009)

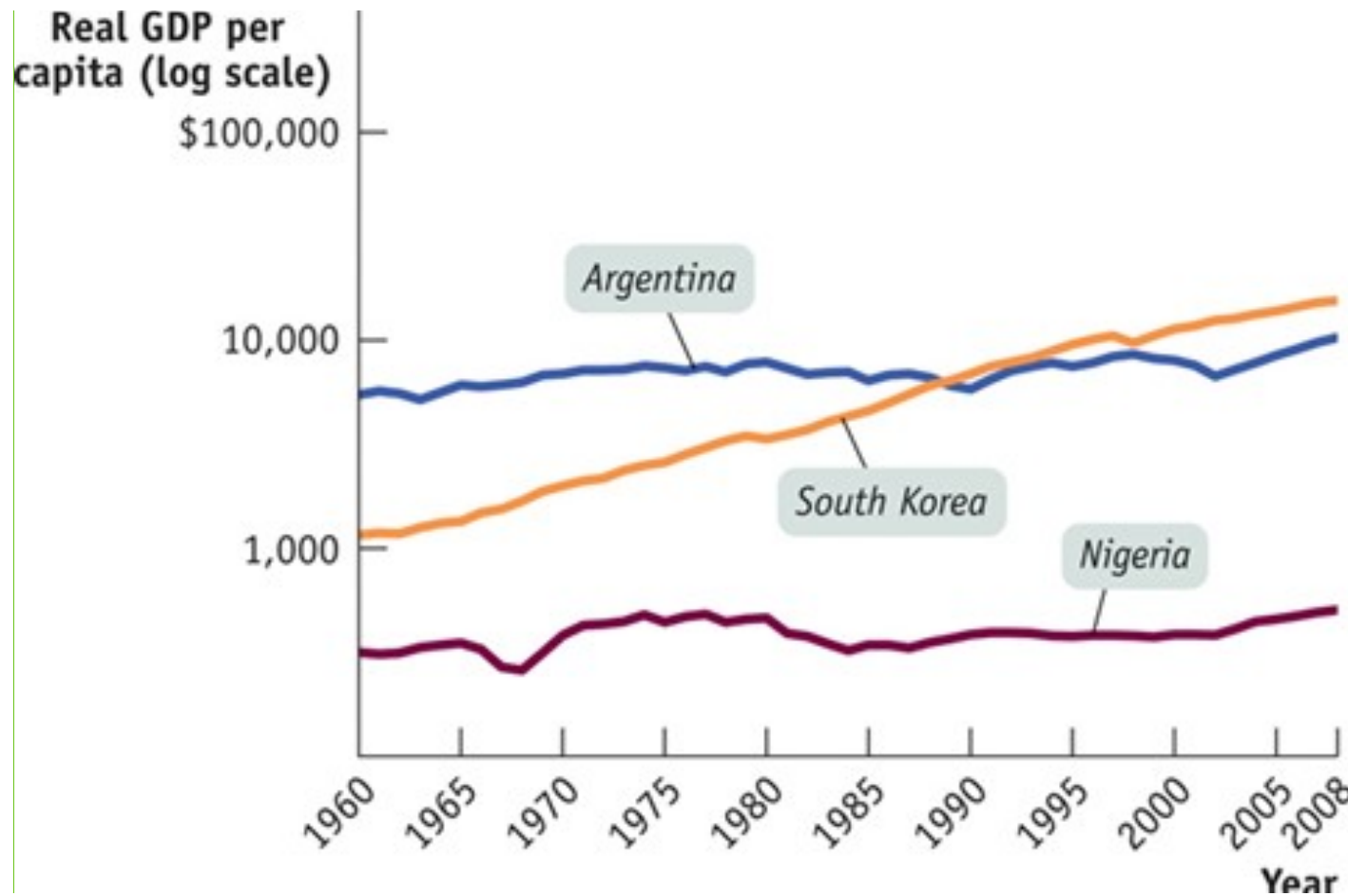


Source: Reinhart&Rogoff (2010)

BOX. Conclusions of paper Reinhart&Rogoff (2010)

- Influential paper by Reinhart&Rogoff (2010): *“Our main results is that whereas the link between growth and debt seems relatively weak at „normal“ debt levels, median growth rates for countries with public debt over roughly 90 percent of GDP are about one percent lower than otherwise; average (mean) growth rates are several percent lower.”*
- Krugman (2013): *„Reinhart&Rogoff may have had more immediate influence on public debate than any previous paper in the history of economics.“*

BOX. Economic growth: success, disappointment, and failure



Source: Krugman&Wells (2012)

Reference textbook

Bénassy-Quéré, A. et al. *Economic Policy : Theory and practise*. Oxford University Press, 2010.

Chap. 6