

Why Some Countries Grow and Others Do Not? An Institutional Perspective

By

Migara De Silva

Senior Economist

Eastern Europe & Central Asia (ECA) Region

World Bank

A disclaimer

- The findings, interpretations, and conclusions expressed here are those of the author (presenter) and do not necessarily reflect the views of the Board of Executive Directors of the World Bank or the governments they represent.

Plan of the Presentation

- Introduction
- A puzzle – why some countries grow?
- A quick review of some of the answers found in growth theory/development economics
- Is the study of ‘institutions’ the missing link?
 - *If so, what are “Institutions” and why are they important?*
 - *How do institutional change occur?*
- Conclusions

Introduction

A puzzle

- Countries/regions with similar initial natural endowments have differential performance over time. Some resource abundant countries exhibit less growth than those with fewer natural resources.
- Some economies show persistently poor performance over time. Only a handful of others break away from this pattern.
- The recommended macro & micro policies are often similar but policy outcomes differ significantly.

Introduction.. Cont.

Vast disparities across countries:

- Income per capita in sub-Saharan Africa on average is 1/20th of the U.S. income per capital
- In Mali, Democratic Republic of Congo (Zaire), Ethiopia, it is 1/35th of the U.S per capital
- **Reversal of fortune**: Singapore, South Korea, Taiwan were some of the poorest in Asia in 1948 while Philippines, Sri Lanka, had several times higher per capita incomes than these. Today, it is exactly the opposite
- Nigeria with vast oil and natural resources remains poor while South Korea and Taiwan have become rich with virtually no natural resources

Why?

- Higher savings?
- Better human resources?
- Technology?
- Geography?
- **Culture?** (when defined as a separate phenomenon from what we would later define as 'institutions').
 - {Acemoglu (2005) defines culture as differences in beliefs, attitudes and preferences; North (1990) considers 'culture' as part of 'institutions'}
- Or largely due to the types of **Institutions which** exist in a particular country and if so, what are those critical institutions?

Some attempts to answer

Solow model (1956; 1957) - some key assumptions:

- ✓ Technological progress is exogenous (each individual firm takes this as given) (one of the driving force of growth in the long-run)
- ✓ Rate of technological progress is constant which is
- ✓ Another key ingredient, the growth rate of population is assumed to be exogenous
- ✓ Constant returns to scale and diminishing returns to each inputs (capital & labor; accumulation of human capital also subject to declining marginal productivity)
- ✓ Smooth elasticity of substitution between the two inputs
- ✓ Constant savings rate

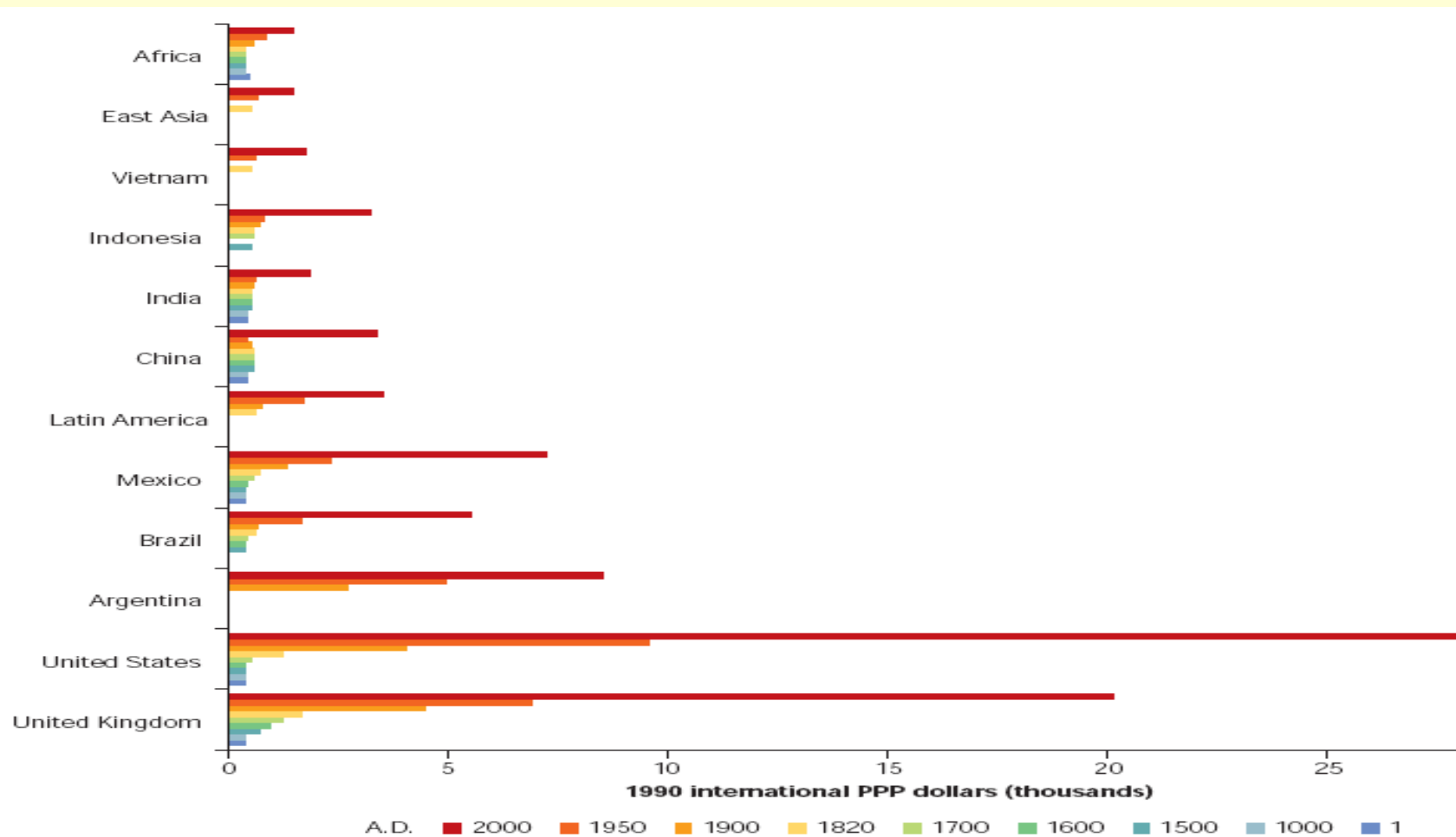
Predictive powers of Solow Model

- ❑ Capital and labor output depend on savings rate, rate of population growth, and technology;
- ❑ Growth rate of a country declines over time when its capital intensity rises; so countries with higher capital intensity will grow more slowly than those with lower capital intensity
- ❑ Due to diminishing returns to capital, economies with less capital intensity (less capital per worker) where capital is more productive will have higher rates of return on capital (so does output per labor – labor productivity) relative to economies with more capital intensity;
- ❑ *Lower the starting level of real per capita GDP, faster is the growth rate (due to higher labor productivity);*

Does convergence really happen?

- ❑ Faster capital accumulation in developing countries leading to faster growth of growth of income per capita (output per capita is an increasing function of capital intensity)
- ❑ In the long run, the gap between poor and rich countries will decline leading to a state of **convergence** (*conditional convergence*, as Barro and Sala-i-Martin, 1992, point out)
- ❑ In Solow model long run per capita growth rate is entirely determined by one factor – rate of technological progress – which is exogenous, a major shortcoming
- ❑ Conditional convergence may explain growth across countries and regions to some degree; especially within groups of some rich countries
- ❑ Data does not support unconditional convergence

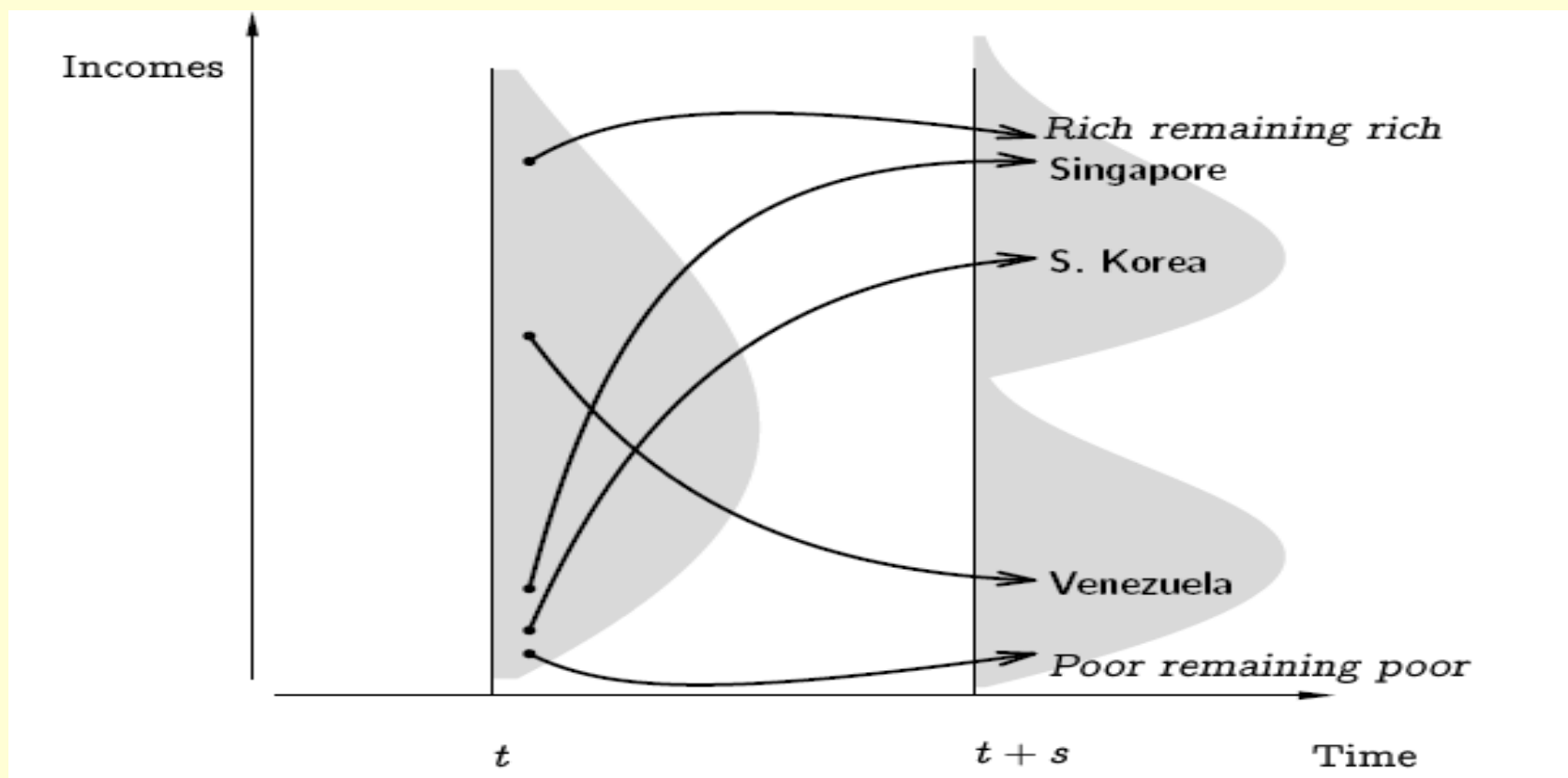
Convergence: Little Evidence



Source: Angus Maddison's Web site, www.ggd.c.net/Maddison.

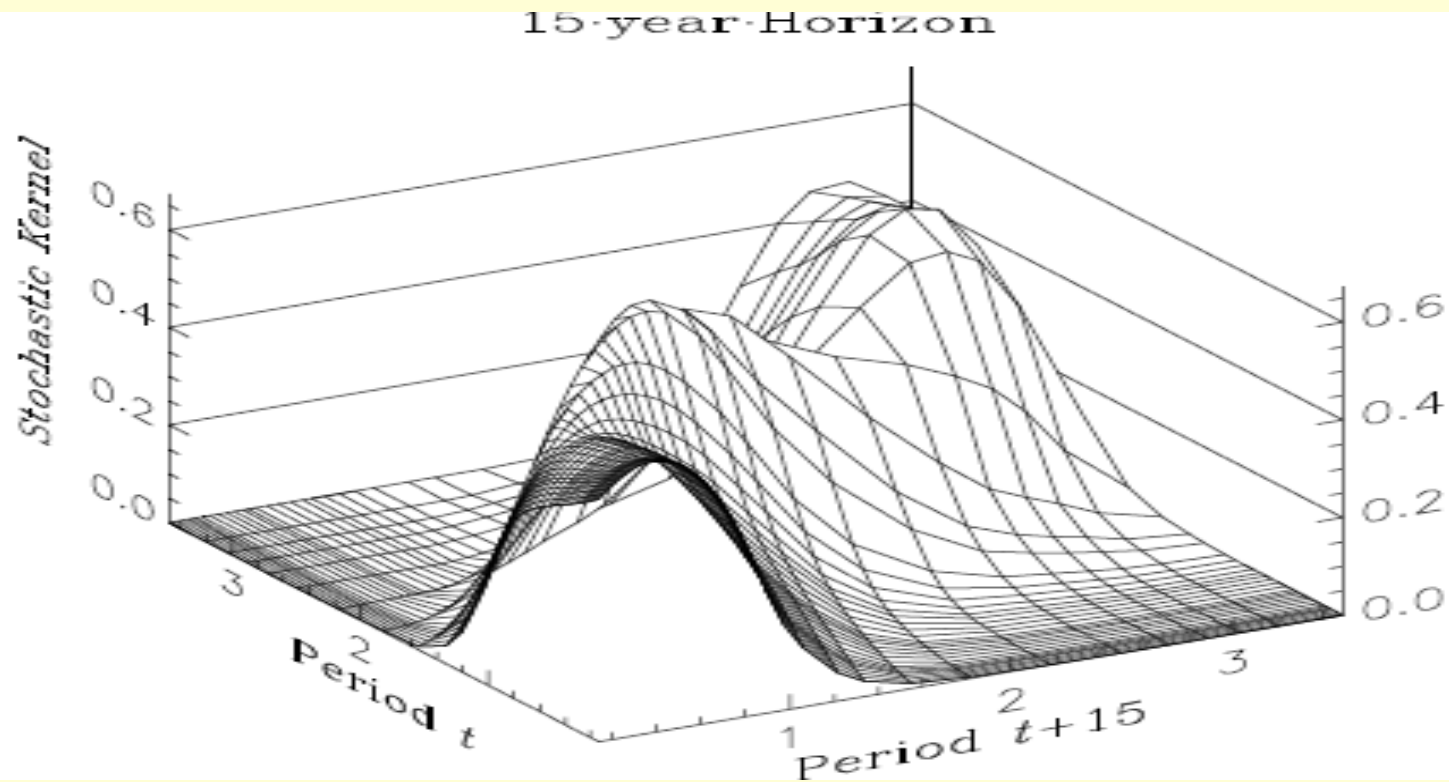
Note: PPP = purchasing power parity.

Income Distribution: Twin Peaks (little evidence on convergence)



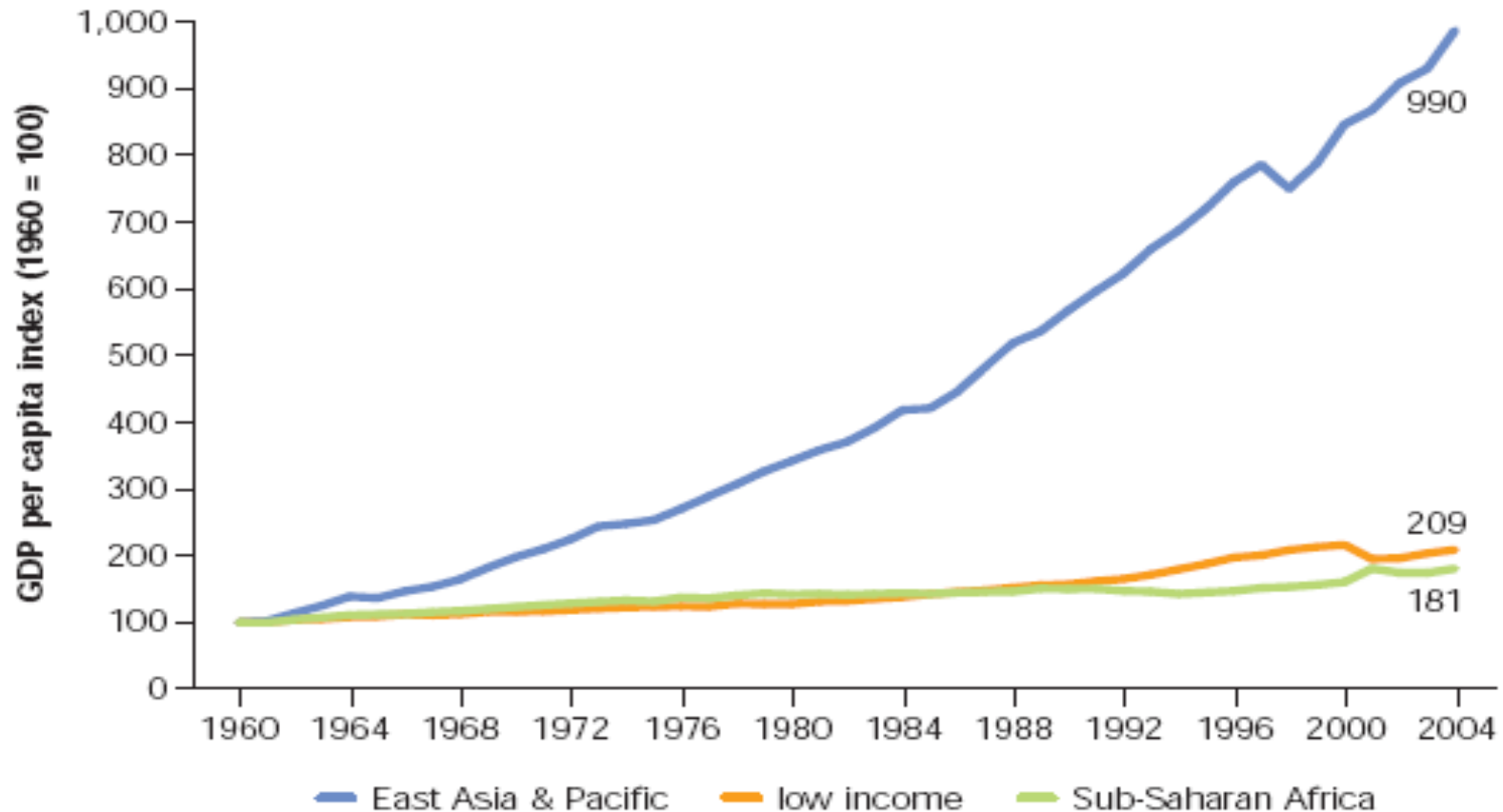
- Danny Quah, *Growth and Distribution*, 2007, p.4

Emerging Twin Peaks



- Danny Quah, Ibid, p. 75

Regional Divergence: Sub-Saharan Africa vs. East Asia, 1960-2006



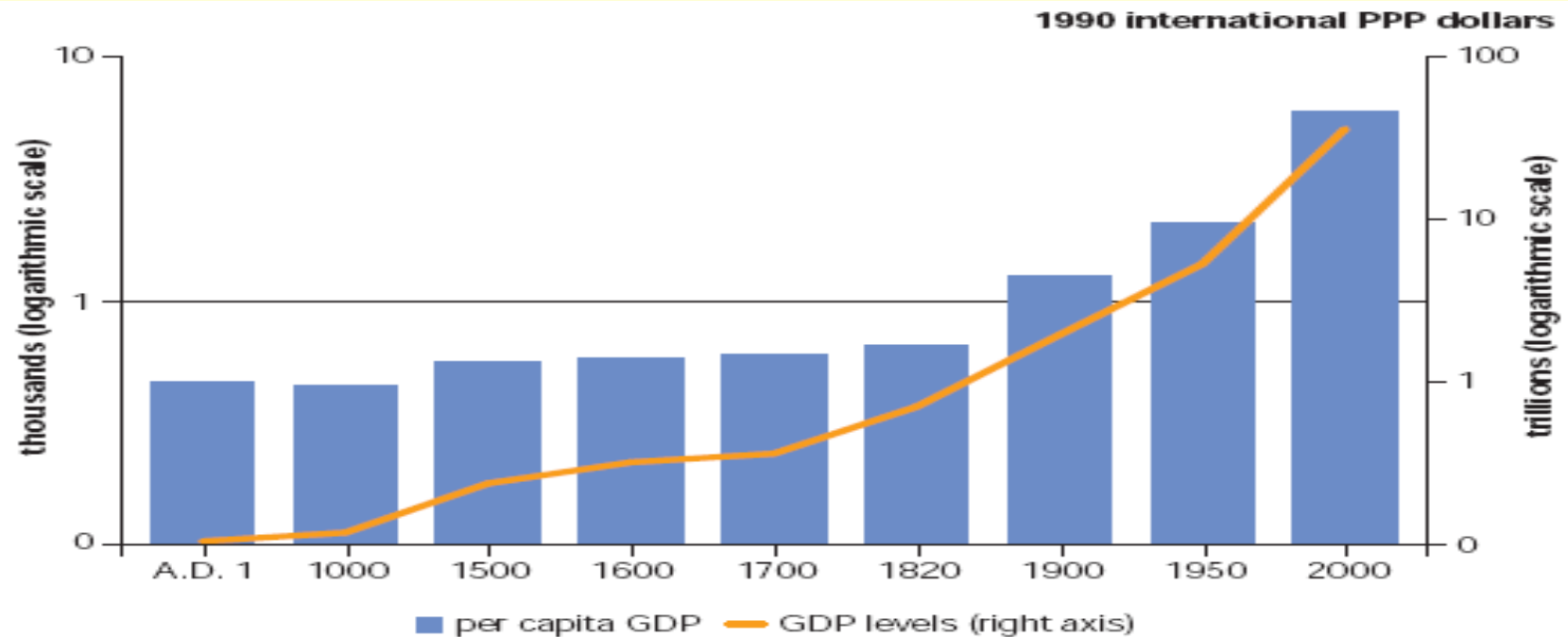
Source: Arbache, Jorge, Go, Delfin, and Page, John. 2008. "Is Africa at a Turning Point?" Policy Research Working Paper 4519, February. World Bank, Washington, DC.

Some improvements to neoclassical growth model

- ❑ Externalities with positive spillover effects on the overall economy (diffusion of one's ideas/discoveries quickly to benefit the overall economy since the 'stock of knowledge' is a non-rival/public good, i.e. marginal cost of providing an additional unit is zero)
- ❑ Thomas Jefferson once said that *"if you light your candle with mine, it does not darken (reduce) my flame"*
- ❑ Therefore growth may continue indefinitely as some capital goods – including human capital – may not exhibit diminishing returns

Catching up will be quicker for developing countries

- Per capita GDP during the last 2000 years – Latecomers could assimilate new technologies faster than pioneers could invest them (Growth Report, WB, p. 34)



Source: Maddison, Angus. 2007. *Contours of the World Economy, 1–2030 AD*. Oxford, UK: Oxford University Press.

Note: PPP – purchasing power parity.

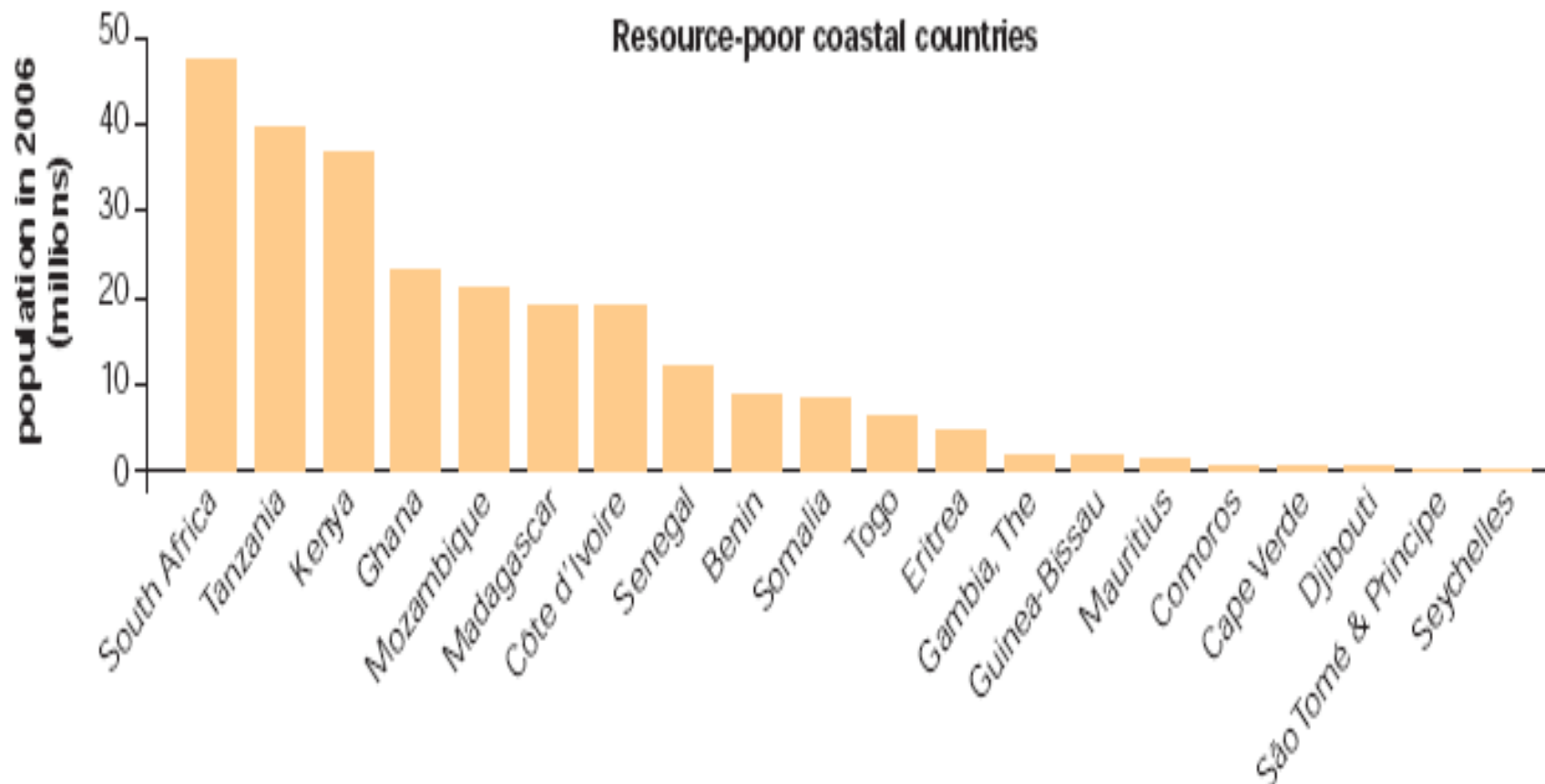
Externalities... etc..

- ❑ Great variation even after taking into account the investment in R&D and human capital
- ❑ Why?
- ❑ *It depends on whether there are ‘institutions’ which encourage the accumulation of private knowledge and its applications*
- ❑ This factor was critical in the transformation of Western economies into modern economies (Mokyr, 2002)

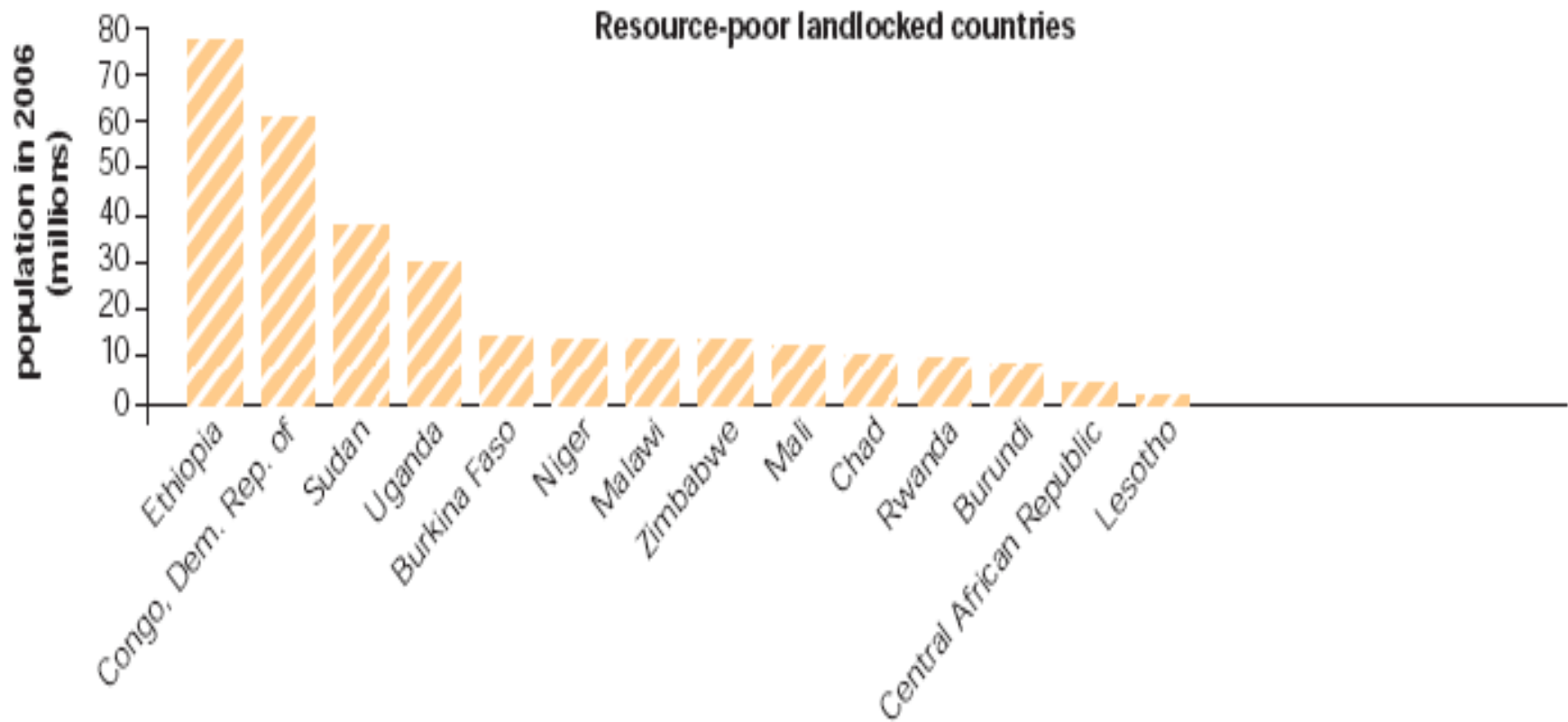
The role of geography

- ❑ Countries/regions that are temperate and have access to sea - for trade - have an advantage over those which are tropical and land-locked (Jeffrey Sachs, 2001, NBER Paper no. 8119). **“Certain parts of the world are geographically favored”**
- ❑ Tropical agriculture (reduced productivity); infectious diseases; etc. in the tropics
- ❑ How to explain the “reversal of fortune” – countries which were rich in 1500 are poor in 1995 and vice versa
- ❑ Acemoglu, Johnson, and Robinson (2002) found two explanatory indicators – (i) **degree of urbanization**, and (ii) **population density** (per unit area). Negative correlation between living standards in 1500 and 1995 (i.e., countries which were rich in 1500s are no longer rich, some have become poor)
- ❑ Soil and climatic advantages in 16th century were lost with the advent of new agricultural technologies which favored temperate regions (Sachs, 2001)

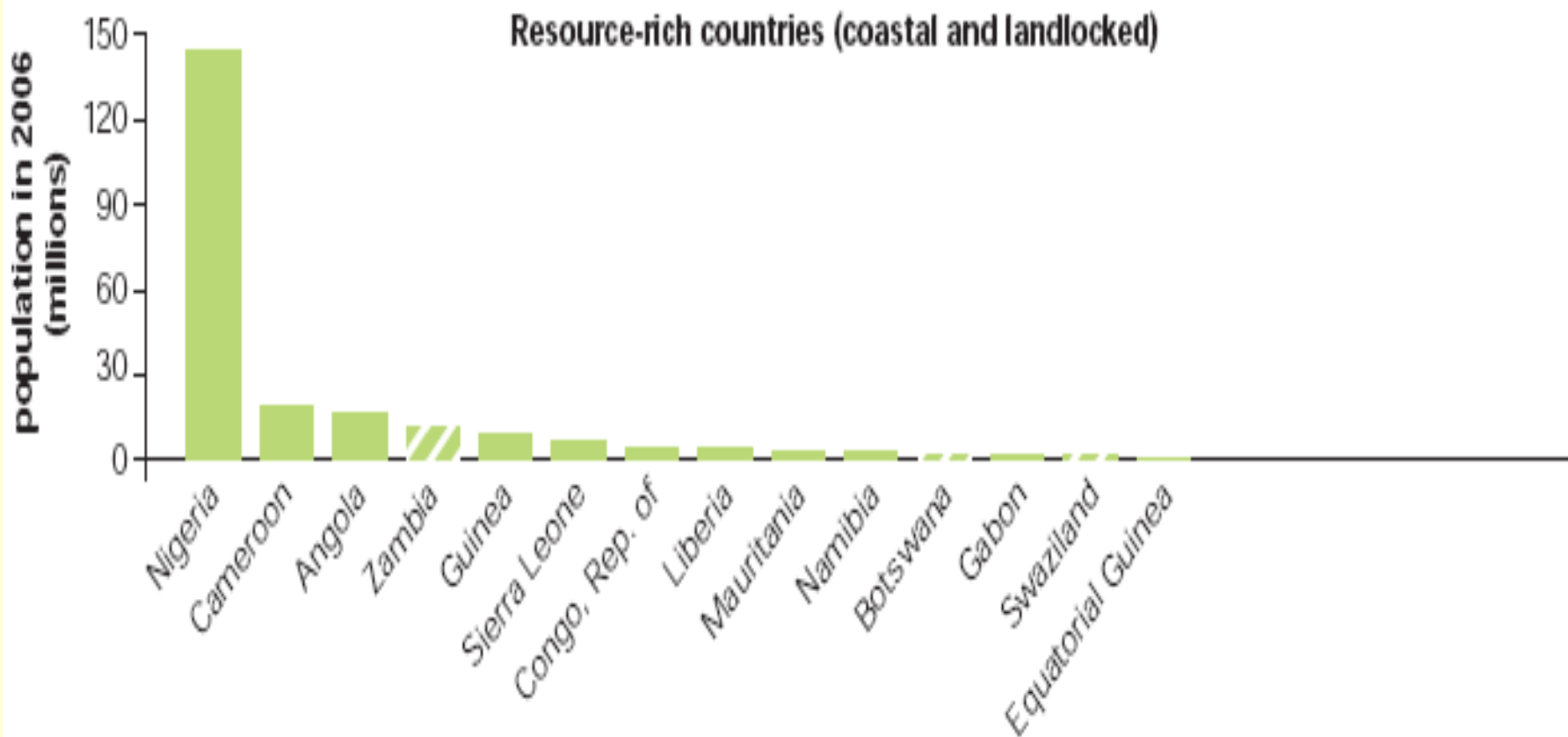
Resource-poor coastal countries



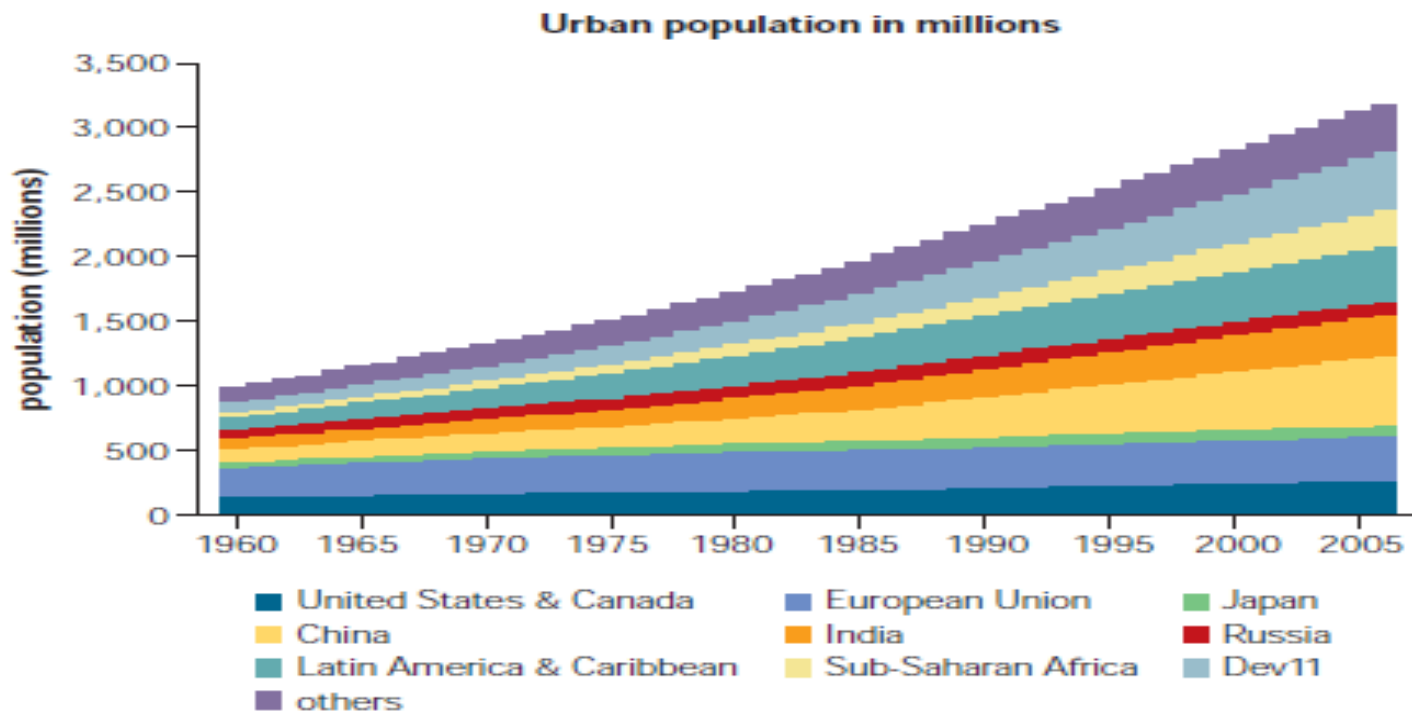
Resource-poor land locked countries



Resource-rich coastal and landlocked countries

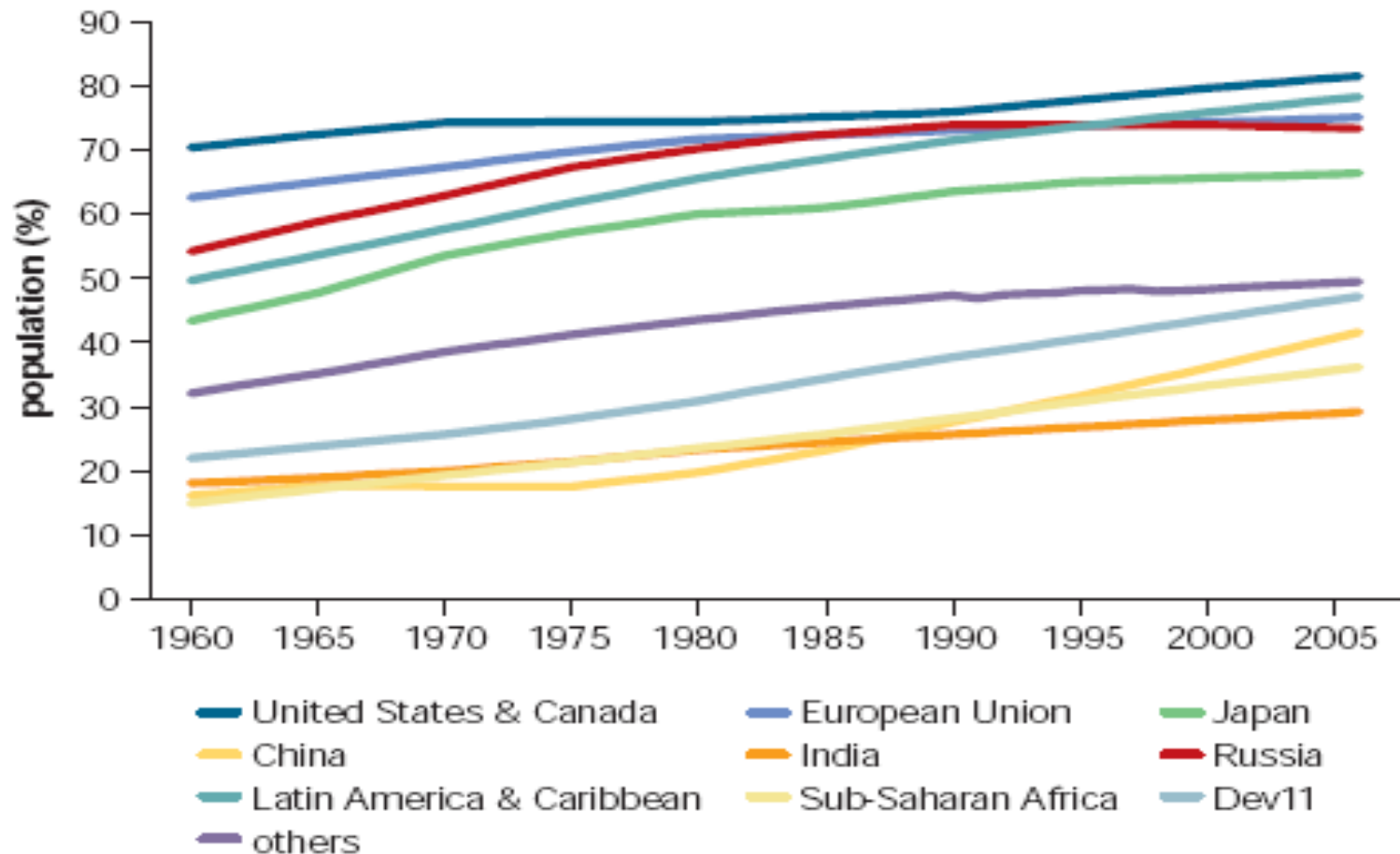


Increasing Trend in Urbanization



Source: Commission of Growth (2008)

Increasing Trend in Urbanization



Sources: United Nations World Urbanization Prospects; World Bank, World Development Indicators 2007.

An attempt to solve the puzzle

- ❑ None of the following provides an adequate answer:
 - Differences in physical capital (lower/higher saving rates)
 - Differences in human capital (investment in human capital formation)
 - Differences in technological acquisition
 - Geographical differences
 - Culture (when viewed as a separate phenomenon and not itself as a unique amalgamation of institutions)
 - Different macro, fiscal policies, social development policies adopted

An attempt to solve the puzzle...cont.

- ❑ Most of these differences given above - except perhaps geography (that too to some extent) – are the results/outcomes of growth or lack thereof, rather than fundamental causes which determine why some countries grow and the others do not.

Attempt to solve the puzzle...

- Economic growth occurs whenever people take resources and rearrange them in more valuable ways. Mix *ingredients* (resources) according to a recipe. ***Growth springs from better recipes and not just from more cooking***
- An example: the augmentation of capital and labor without any significant productivity gains as it was the case in the Soviet Economy
- **New recipes are ideas**, but what is lacking are incentives (ex: patent laws, etc.) for citizens to both acquire ideas from the rest of the world and to develop new ideas, new technologies, etc.

An attempt to solve the puzzle...

- ❑ Economies that will do really well are those that come up with the best institutional framework for simultaneously achieving both the production of new ideas and their widespread use (Romer, 1999). Ideas alone are not adequate.
- ❑ Example: former Soviet Union had a large number of research scientists whose innovative ideas were not known beyond a small group and were rarely used in the market place as valuable inputs for production.

What are “Institutions”?

- ❑ The incentive structure is directly influenced by the prevailing ***institutions***. The problem area of adjustment is increasingly identified as one of implementation - *a shift from substance of policies to the policy environment itself where institutions matter.*
- ❑ “*Institutions*” are the **“rules of the game”** (formal rules such as contracts; **informal** rules such as behavioral norms, conventions, etc.) – more precisely formal and informal constraints on political, economic, and social interactions (Douglass North, 1990: “Institutions, Institutional Change and Economic Performance”).

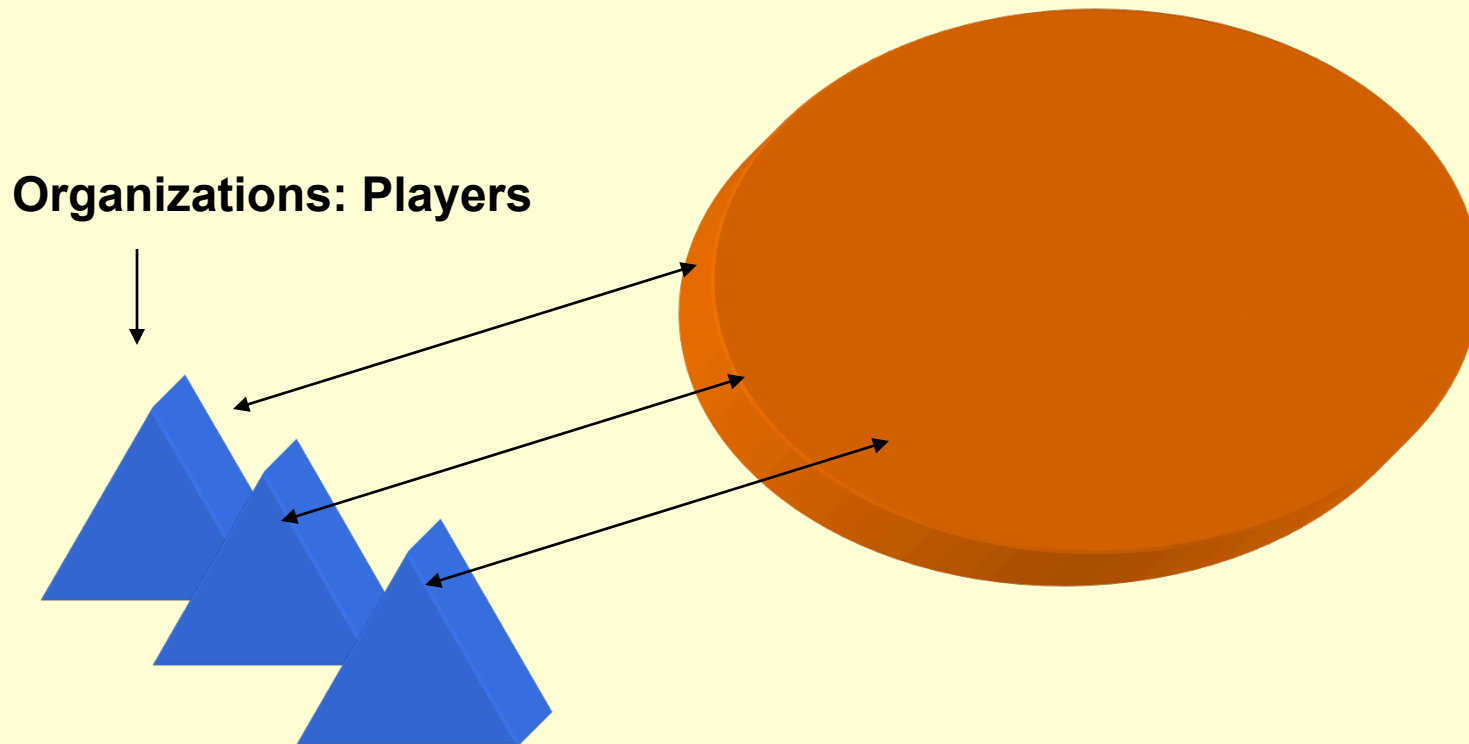
What are “Institutions”?...cont.

- **Some examples:** procedural devices, regulatory framework (regulation governing labor, product and financial markets), commitment devices (balanced budget amendments; independence of the Central Bank, trade agreements)
- *Institutions are different from “organizations”* (ex: the **firm**). Institutions provide the framework within which organizations are created and continue to operate. **Institutions are the rules (formal and informal) and organizations are players.** Each exert influence on the other.

Institutions vs. Organizations

Institutions: Rules of the Game

Organizations: Players



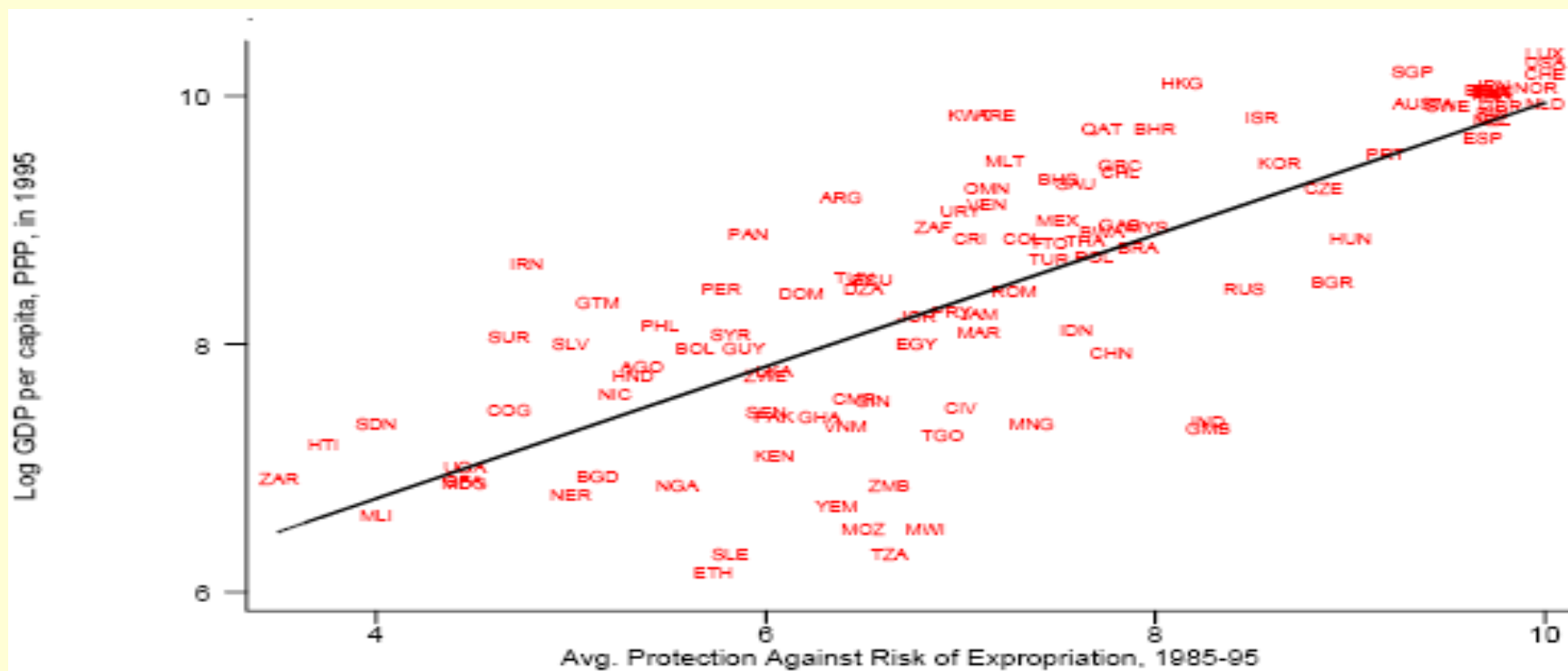
Why are they important?

- *Institutions influence our behavior; the choices we make, as individuals and societies (ex: norms rewarding knowledge, hard work; rules guaranteeing freedom of speech, etc.) - incentives & disincentives.*
- Institutions affect the cost of exchange among parties ("transaction cost"); thus allocation of resources and the structure of economic organization.
- They reduce uncertainty of economic actors through well-defined property rights (or protect some prop. rights which hinder, rather than promote growth). **Ex: Frequent failure of privatization efforts**
- Influence the flow of information (since information is a 'commodity', changing transaction cost structure will facilitate the exchange).

Good vs. 'Bad' Institutions?

- ❑ Good for Growth:
 - Well defined property rights
 - Institutions which can **enforce** them (court system) – **implementation capacity matters**
 - Rules influencing credible policymaking (independence of the central bank, balanced budget rules, limits on borrowing such as UK's Golden Rule, intergovernmental transfers based on objective predictable criteria, etc.)
 - Oversight (parliamentary, ministerial, electoral, citizen-based, bureaucratic, etc.)
- ❑ In short, a combination of economic and political institutions
- ❑ **Supremacy of political over economic institutions** – the degree of protection granted to private property is governed by the ideology, power base (e.g., urban labor vs. agricultural) the strength of the opposition, coalitions, etc., of the existing political regime

Property Rights (institutions) and Economic Performance



- Daron Acemoglu, 2005 (Lionel Robbins Lectures)

Tales of Two Countries

❑ **Two Koreas** (Acemoglu, 2005, Lionel Robbins Lectures at LSE):

- Ethnic and cultural homogeneity at the end of WWII
- North Korea was more industrialized; artificial separation due to geopolitical reasons
- Adopting two starkly different ideologies and entirely different outcomes

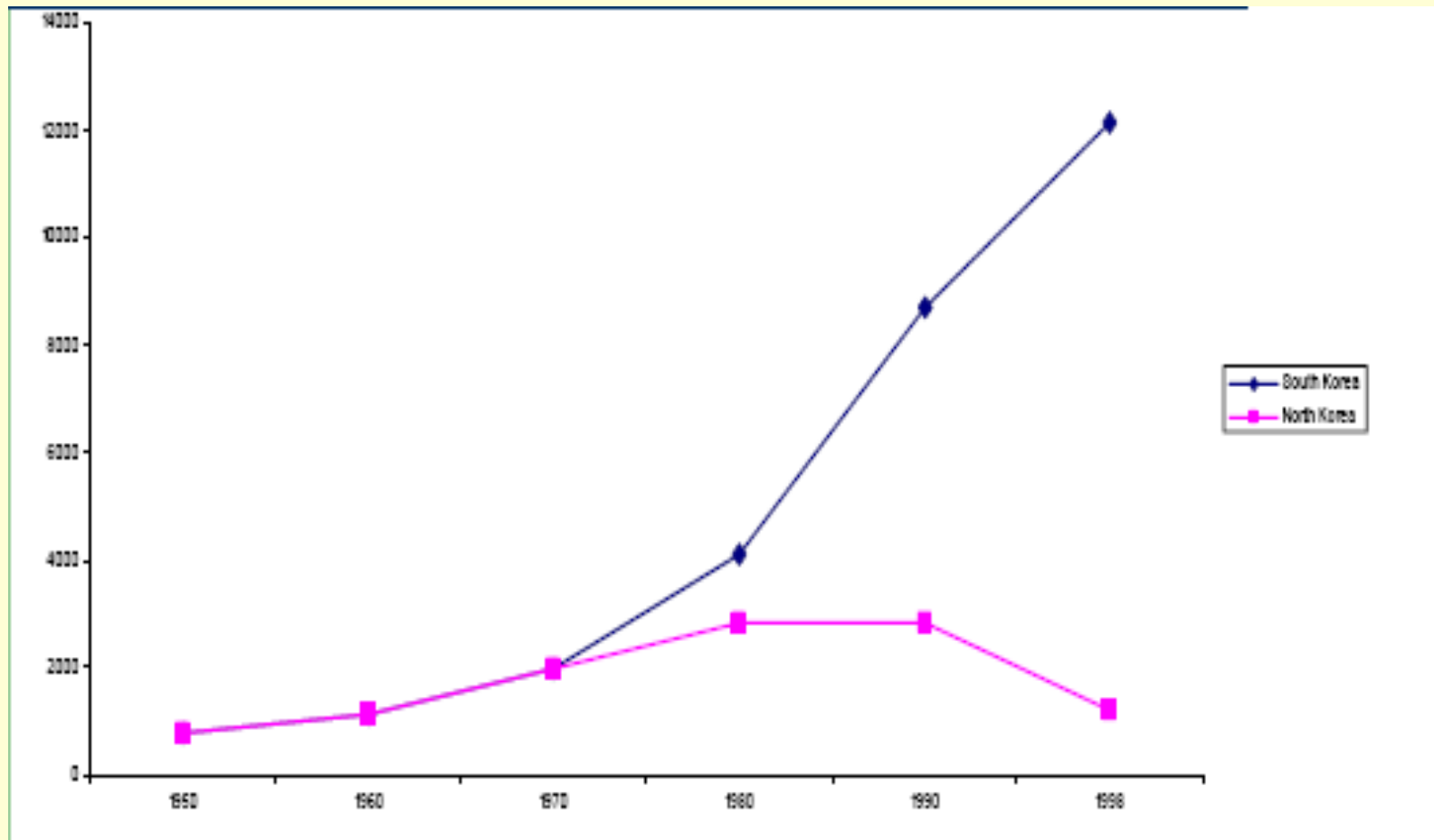
❑ **Mauritius vs. Cote d'Ivoire:**

- Both achieved independence at the same time; faces the same international market for commodities
- Mauritius followed an outward oriented growth strategy while Cote d'Ivoire 'relied almost entirely on rents of its commodity exports' (Commission on Growth, 2008)

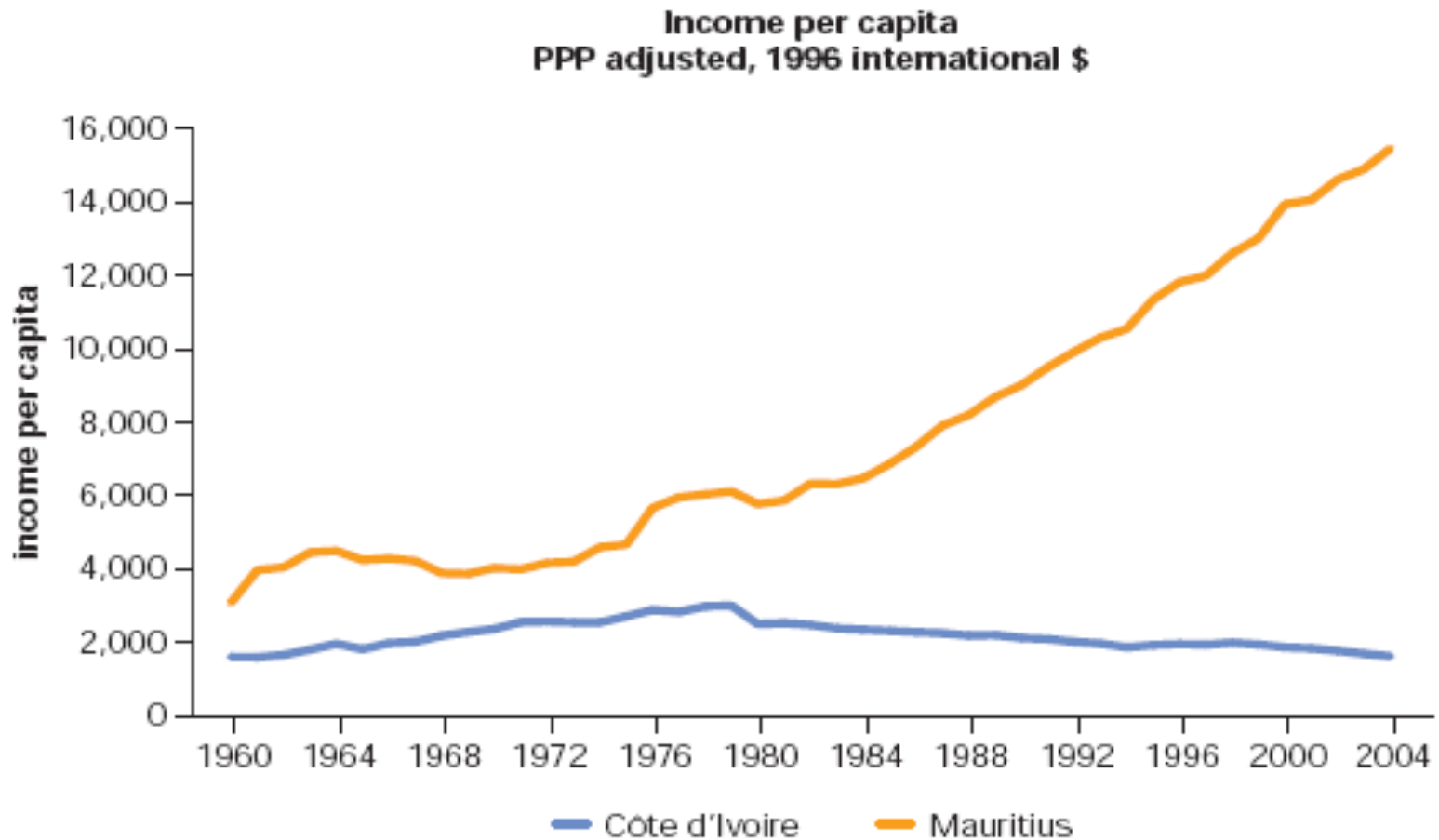
❑ **Zambia vs. Botswana:**

- Both rich in minerals; started with about the same per capita incomes; but adopted different policies due to different institutional set ups

Tale of Two Koreas (GDP per capita)

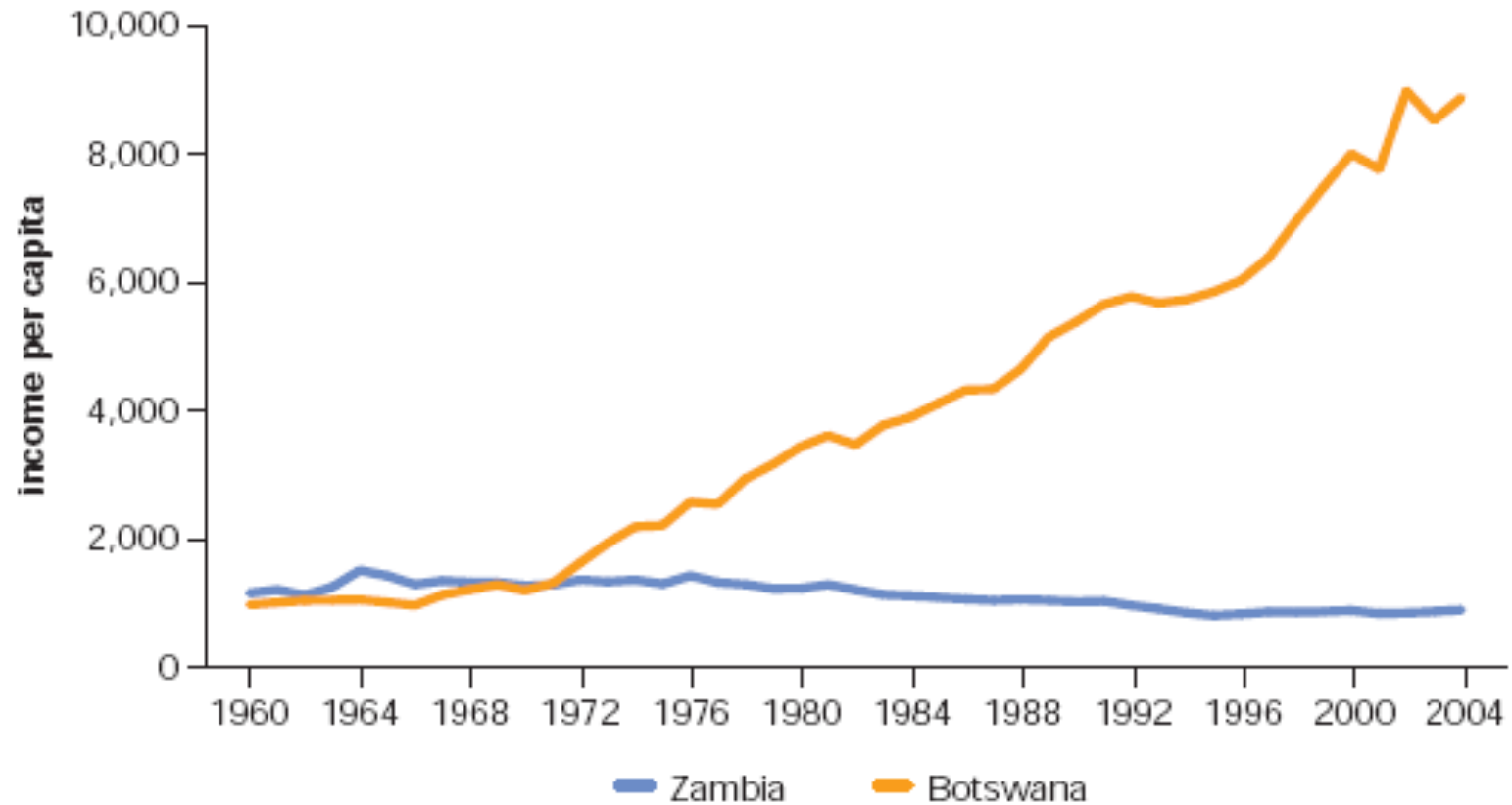


Tale of Two Countries Within Africa



- Source: “Is Africa at a Turning Point”, World Bank Policy Research Paper 4519, 2008 (Arbache, Go, and Page)

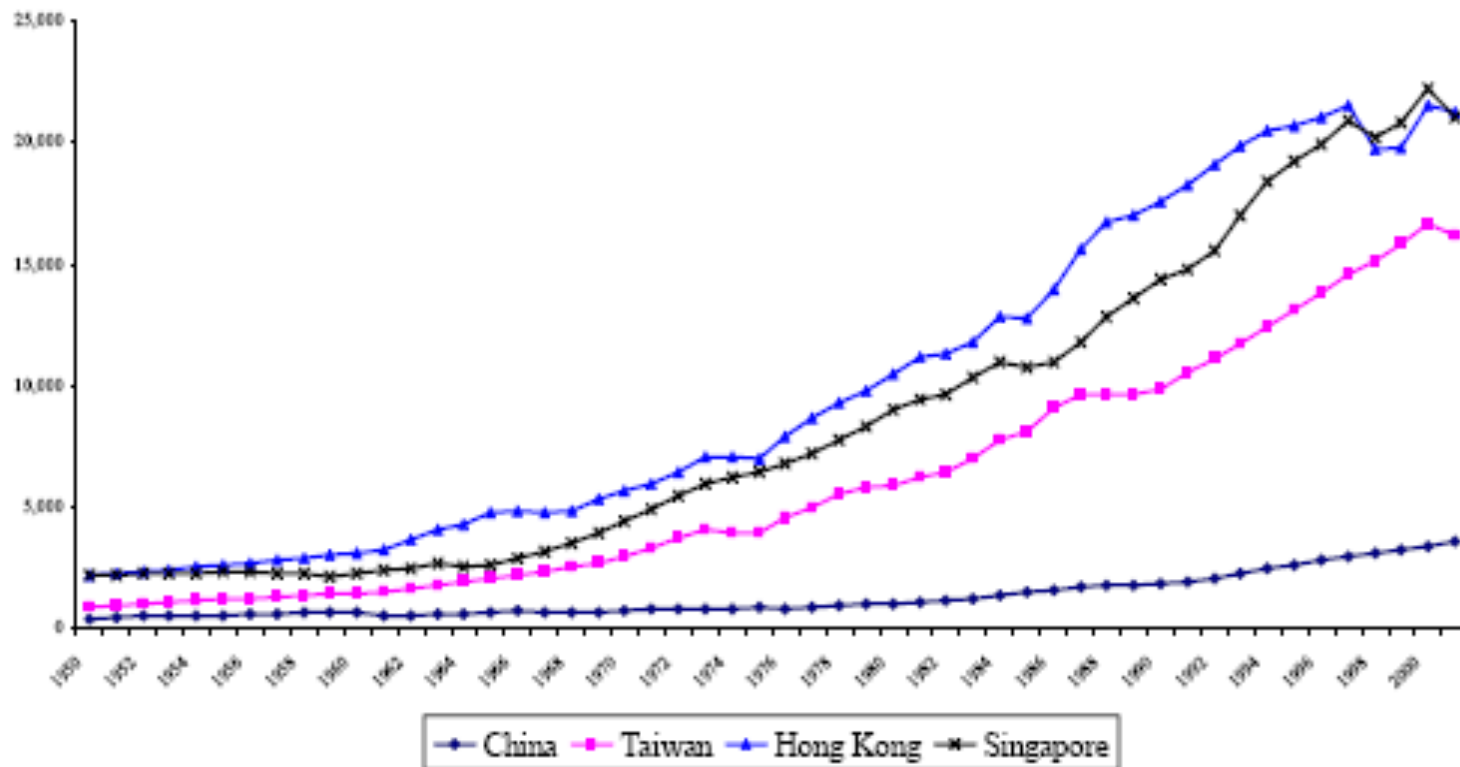
Tale of Two Countries: One More Example



- Ibid (2008)

Is it the role of culture or Institutions?

GDP per capita in China, Taiwan, and Hong Kong, 1950-2001



Good vs. 'Bad' Institutions?

- ❑ The challenge is to **come up with a hierarchy of political institutions** which support/strengthen/protect economic institutions necessary to achieve sustained growth – like the US over last 150 years; Western Europe over several centuries, China and South Korea over last three decades, India over last 15 years, etc.
- ❑ Is it democracy (China, and Korea in early period were no democracies)?
- ❑ Is it the protection of private property (physical, intellectual, etc.) irrespective of the type of regime (dictatorship vs. democracy)
- ❑ Why most dictatorships have led to a degradation of the economy with only very few exceptions which had the opposite effect (i.e., economic growth increased during the regime)?
- ❑ Is democracy a necessary or sufficient condition? **etc....**

Political institutions...cont.

- ❑ Limiting the domain of political institutions to interfere in policymaking as to to make policies credible and sustainable: - ***“protect economic policy from politics itself”***
- ❑ How? Create institutions (laws, procedures, etc.) which ***“tie the hands of the state”*** and prevent the state from reneging on its commitments (ex: freedom of speech, to own private property, ability of private citizens to litigate the state for violation of their constitutional rights, etc.).
- ❑ ***Just as Ulysses tied himself to the mast so that he could resist the Sirens’ call.***

Conclusion

To recapitulate:

- Incentives to acquire new ideas promote economic growth
- Desirable institutional change leads to (a) low transaction cost of exchange, (b) well-developed property rights, and (c) better flows of information.
- It is important to enhance the state's capacity to design and implement institutional reforms.
- Checks and balances, participation and voice of the people are just as important
- Policymakers could potentially play a ('significant') role in facilitating such institutional change; adopting them to work best in a specific context; prioritizing and sequencing institutional reforms to guarantee sustainability, etc.