Institutions

Prof. Lutz Hendricks

Econ520

January 3, 2016

Objectives

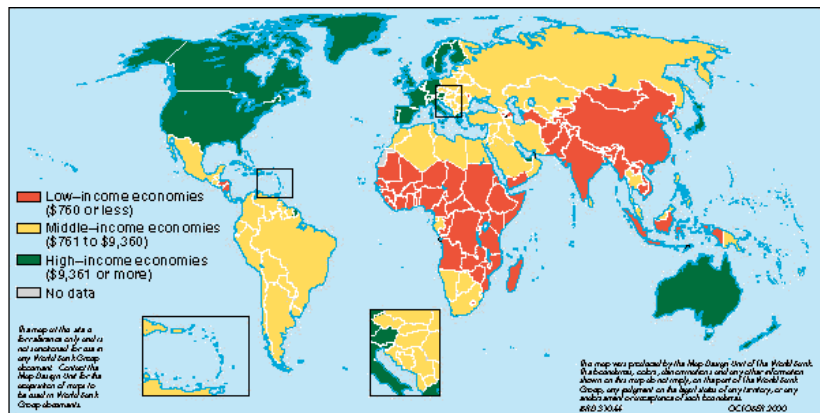Most economists believe that institutions are the main cause of cross-country income differences.

In this section you learn:

1. what institutions are
2. which evidence supports the importance of institutions
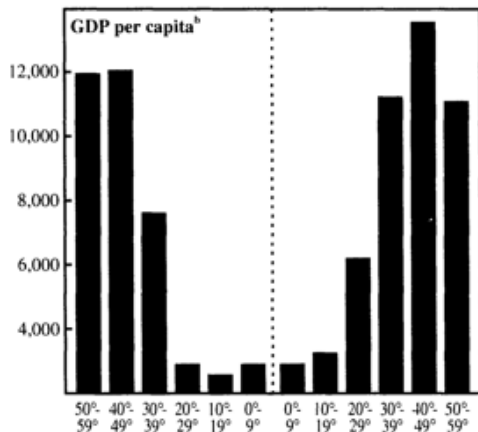3. about the colonial origin of institutions

Geography

Geography

Prosperity is geographically concentrated.

Geography

International dollars

Geography is very strongly
related to development.
Is this relationship **causal**?

Bloom and Sachs (2008)

Recent causal interpretations

1. Jeffrey Sachs: "Disease burden"
   - Many infectious diseases occur in tropical areas (malaria).
   - The resource cost of fighting diseases reduces growth.

2. Jared Diamond:
   - "Guns, Germs, and Steel"
   - Some regions are more suitable for agriculture / dense settlement.
   - These regions get a head start in adopting / developing technologies.

Problems With the Geography Hypothesis

- Growth miracles
    - Some countries transformed themselves from poor to industrialized in a few decades
    - South Korea, Taiwan, Japan
- Most economists believe that the geographic pattern reflects institutions.

Institutions

Institutions

What are institutions?

▶ Vaguely: "Humanly devised constraints that shape human interaction." (North 1990)

Examples

- Protection of property rights.
    - Russia: If a property burns down, the owner loses ownership of the land.
- Rule of law.
    - Peru: It takes 290 days to start a small business (paying 2 bribes; De Soto).
- Freedom of speech.
    - Galileo.

How Do Institutions Affect Output?

Reduced return on investment:

-
-

Misallocation of resources:

-
-

Less competition

-

Evidence: Institutions Matter

How to Measure Institutions?

- Objective measures:
    - openness to international trade
    - communism

- Subjective measures:
    - provided by companies that advise investors
    - e.g. "index of government anti-diversion policies"
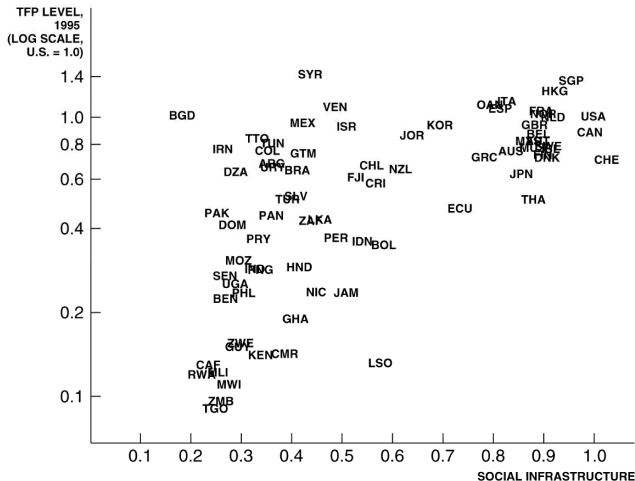
Rich Countries Have Good Institutions

FIGURE 7.3 **UNDERSTANDING DIFFERENCES IN TOTAL FACTOR PRODUCTIVITY**

Economic Growth, 2nd E
Copyright © 2004 W. W. Norton &

Social Infrastructure: index of various institutional measures by **?**

How About Causality?

- ► We know that correlations do not imply causation.
- ► How can we establish that institutions cause income?
- ► A general problem in economics.

Common approaches:

1. Build a model (not yet feasible for institutions).
2. Natural experiments.

Natural Experiments

- ▸ Why is it hard to establish cause-effect?
  - ▸ because "other" variables may vary with institutions
- ▸ The science approach: controlled experiments
  - ▸ vary one variable at a time
  - ▸ hold all others constant
  - ▸ example: medical trials with control groups
  - ▸ rarely feasible in economics

Natural Experiments

- Natural experiments approximate controlled experiments.
- Look for historical cases where a "random event" changes a variable.
- Examples:
  - a war or natural disaster destroys capital – what happens to output?
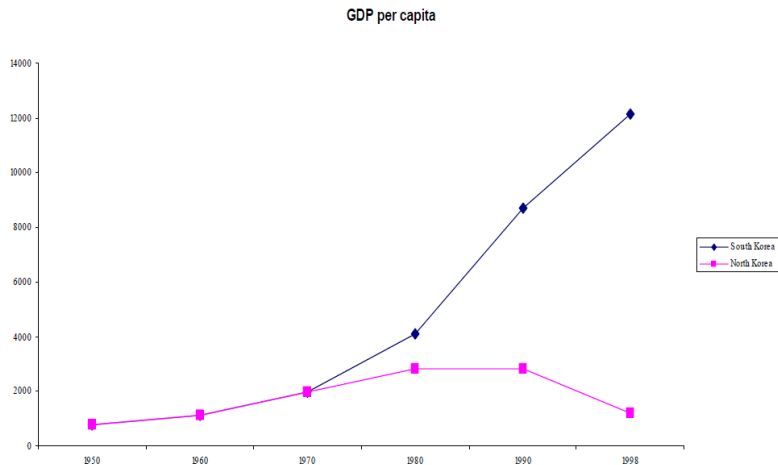 - countries are divided and adopt different institutions
  - countries are colonized

Divided countries

Natural experiments that almost prove the importance of (communist) institutions:

- East & West Germany
- South & North Korea
- Hong Kong and Taiwan vs. China

Divided Countries: Korea

GDP per capita in North and South Korea, 1950-98

GDP per capita

Source: Acemoglu et al.

Colonies

- Colonies can be used to shed light on:
  - where do bad institutions come from?
  - how much do they matter for output?

Colonies: The Story

- A large part of the world was colonized by Europeans after 1500.
- In some colonies, democratic institutions were put in place
  - North America, Australia, New Zealand
- In other colonies, dictatorial / expropriating institutions were put in place
  - Africa
- Today's institutions are strongly related to those imposed on the colonies hundreds of years ago.

Colonization as Natural Experiment

So far we have **not** shown that bad institutions cause low incomes.

- ▶ Why not?

To get clean evidence, we need to look for "accidental" factors that shaped the institutions of colonies.

- ▶ then we have a **natural experiment**
- ▶ some colonies ''accidentally'' have bad institutions while others have good institutions
- ▶ we can estimate the effect of institutions on output by comparing the two groups

Where Did Colonizers Choose Bad Institutions?

Colonies come in two types:

1. Poor: Few resources and few people.
2. Rich: Endowed with resources that can be extracted (including labor).

In poor colonies, the only way to exploit the land is to **settle**.

- ▶ Settlers bring institutions which protect their own rights.
- ▶ Or settlers establish rights with force (USA).

In rich colonies, the most profitable strategy is to **expropriate** locals.

- ▶ Institutions protect the colonial minority's rights / deny rights to the local majority.
- ▶ Forced labor (South America, Africa).

Implications

This theory predicts a **reversal of fortunes**.

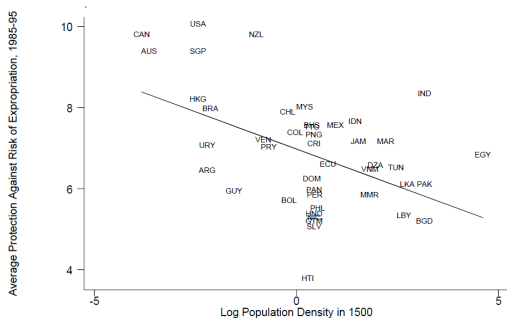Among colonies: those who were initially rich should now have

- bad institutions
- low income

The same should not be the case among countries that were not colonized.

This idea is due to ?

Evidence: Rich Colonies - Bad Institutions

Log population density in 1500 and average protection
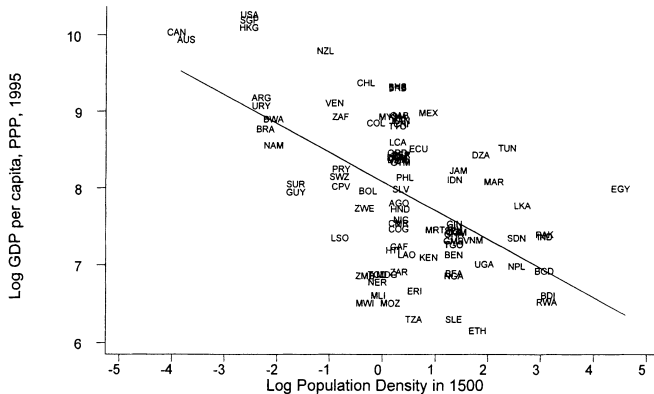against risk of expropriation 1985-95

Source: **?**

Population density is a proxy for per capita income.
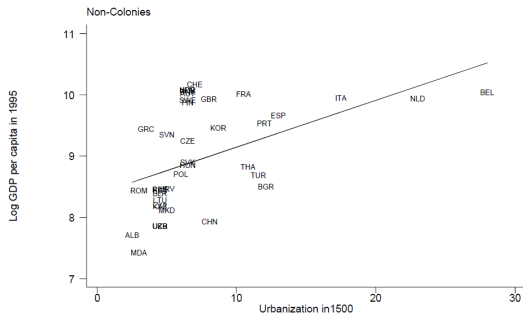
Reversal of Fortune

Colonies that were rich in 1500 are poor today.

Source: ?

No reversal among Non-Colonies

Urbanization in 1500 and log GDP per capita in 1995,
among non-colonies

Clearly inconsistent with geography as cause of development.

Quantifying the Role of Institutions

The idea:

Use variation in institutions across colonies that is "accidental."

Measure the income differences between colonies with accidentally good and accidentally bad institutions.

These income differences are **caused** by institutions.

Details in **?**

- ▶ The accidental factor is settler mortality
- ▶ Countries with lots of malaria etc could not be settled, so they were exploited

Result: Institutions account for the majority of cross-country income gaps.

Why Do Bad Institutions Persist?

Why Do Bad Institutions Persist?

- ▶ We all agree that some (common) institutions are bad:
    - ▶ state monopolies (energy, telecom)
    - ▶ non-independent central banks
    - ▶ farm subsidies (?)
- ▶ Why is it so hard to get rid of obviously bad institutions?

Commitment Problems

- Change generates winners and losers.
    - U.S. examples:
- The winners could promise to compensate the losers.
- Why does this not happen very often?

Example: Government Monopolies

- Competition in telecom would improve welfare.
- Phone customers could compensate the monopolists.
- But: they cannot *commit* to compensation.
- One the monopoly has been given up, why should the public agree to pay the former monopolists?
- Closer to home:
  - cable providers have monopolies over content delivery
  - labor unions have monopolies over certain industries / occupations

This a a very general problem It generates resistance against reforms.

Poverty Cements Power

A vicious cycle:

- Concentration of political power $\implies$ concentration of wealth.
- Wealth $\implies$ political power.

Implications:

- Those in power benefit from general poverty.
- To maintain political power, rulers must oppose profitable innovation (or expropriate it ex post).
- Example: Czars in 19th century Russia suppressed industrialization to prevent challenge from a wealthy merchant class.

Summary

- Ample evidence that institutions are important for Y/L.
  - Colonies provide a natural experiment that "randomly" assigns institutions to countries.
  - Divided countries "prove" that communist institutions reduce incomes.
- Key open questions:
  1. Which institutions are important?
  2. How much do institutions contribute to Y/L gaps?

Reading

- ▶ Jones, *Introduction to Economic Growth*, ch. 7.

Advanced Reading:

- ▶ ?, ch. 3.10.
- ▶ ? lays out the evidence in favor of institutions as fundamental causes of development.
- ▶ ? perform development accounting in a Solow type model.

References I