

# Institutional economics

# What this course is about?

I this course we study the role of economic institutions in shaping economic performance and provide instruments for the analysis of institutions and their design

# **General information**

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#### Lectures

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#### **Seminars**

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# **Required reading**

Eggertsson, T. Economic Behavior and Institutions. Cambridge University Press, 1990

# **Course framework**

- 2 modules
- Different activities
- Strict deadlines

#### - NO EXAM

Cumulative mark = Homework\*0.1+Research paper\*0.3+Seminars\*0.3 + Mini CW\*0.15+Control works\*0.3 Today we talk about what institutions are, why they are important for economic performance

We also formulate some questions that we will be able to answer at the end of our course

# Institution: definition

Institutions are the rules of the game accompanied by enforcement mechanisms

- Institutions rules of the game
- Organizations players

# Institutions: examples

Actors	Drivers/Car owners	Land owners	Members of organization
Strategies	Parking strategies	How land could be used?	Strategies regarding clothing and appearance
Rules	Parking rules, determined in Traffic Law	Land code	Dress Code in Organization
Sanctions	Organized sanctions (including fines and forced evacuation)	Organized sanctions by state authorities	Sanctions by management and peers
Institution	Traffic Law	Property rights	Corporate culture

At the micro-level, institutions help to solve coordination, cooperation and distribution problems that arise in social interactions and economic transactions

# **Coordination problem**

- Multiple equilibria
- Limited opportunities for communication
- How to choose actions that will allow to reach an equilibrium?

# **Example 1: Road game**

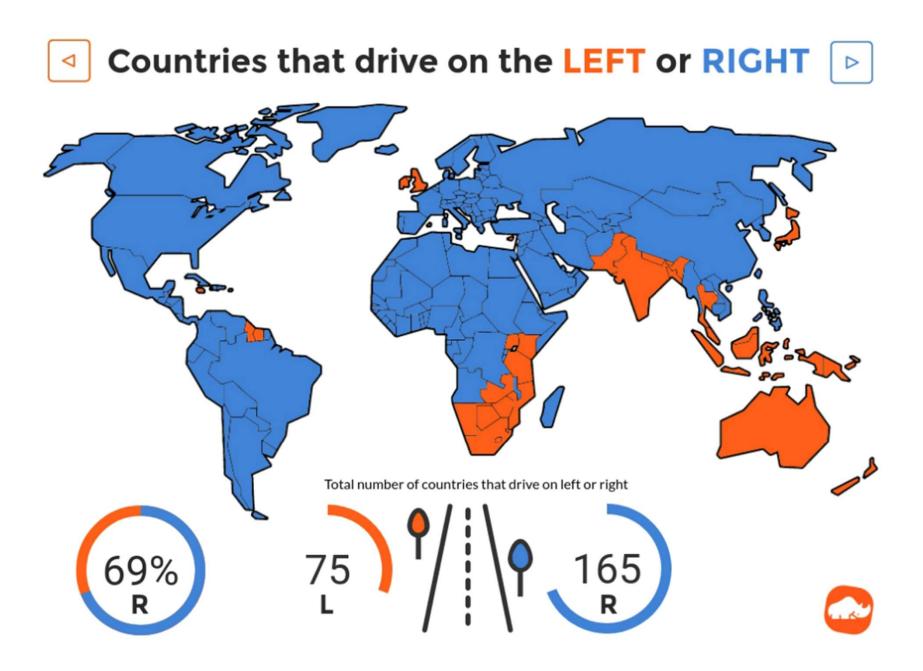
		Driver 2	
		Right	Left
Driver 1	Right	10,10	0
	Left	0	10,10

Actors may refer to their previous experience (then, conventions emerge)

#### OR

Actors may use existing **rules** 

Institutions create and maintain informational infrastructure



# **Example 2: Mean of payment**

Equilibria are not necessarily equally attracted to the actors

		Firm 2	
		Money	Barter
Firm 1	Money	10, 10	0
	Barter	0	6, 6

- They may be locked in the inefficient equilibrium
- It may be complicated to switch from one equilibrium to another – why?

# **Example: switch from one equilibrium to another**

Sweden: switch from left-hand to write-hand traffic in 1967

- Broad informational campaign
  - Awareness
  - Correct interpretation
- It's important that everyone switch to new rules at the same time

Continental Europe today: right-hand traffic





# Sweden, Stockholm, September 3, 1967. 04:50



# **Distribution problem**

Actors can have conflicting preferences on the set of equilibria

		Firm 2	
		Standard A	Standard <b>B</b>
Firm 1	Standard A	10, 6	0
	Standard B	0	6, 10

Actors may refer to their previous experience (then, **conventions** emerge) Actors may use existing **rules** 

Institutions may preserve inequality

# **Cooperation problem**

- Long-term goals and short-term interests may come into conflict
- Individual incentives to deviate can exist
- Socially desirable outcome is not an equilibrium

		Player 2	
		Cooperate	Deviate
Player 1	Cooperate	b; b	0; a
	Deviate	a; 0	C; C

- Fines
- Reputation in infinitely-repeated games

# **Example: trading strategies in Magrib and Genova**

- Magrib (North Africa, at current territory of Tunisia)
- Genova (North Italy)

One-sided prisoners' dilemma

- Long-distance trade
- "Merchant Agent" relationship
- Merchant wants to sell the goods across the sea or abroad, and he hires agent to perform this function
- Agent may behave honestly or opportunistically
- Merchant doesn't observe agent's behavior

How cooperation problem was solved?

- Magrib
  - Collective punishment, based of the distribution of information about deviant behavior within the group
  - Merchants as agents for other merchants
- Genova
  - Punishment by the third party (emergence of arbitrage courts)
  - Contract between individual and community as a basis for social structure
  - Little influence of social group on the individual

# Enforcement

Enforcing party	Enforcement system
First party	
Actor	Self-control
Second party	
Other participants of social interaction	Control from the other participants
Third party	
Social group	Informal control from the social group
State	Law system

Formal and informal institutions

#### Formal institutions

- Rules are codified
- Sanctions are organized

#### Informal institutions

- Rules are not codified (and in many cases cannot be codified)
- Sanctions are not organized

Formal and informal rules – how they are interrelated?

- Informal rules can **complement** formal ones
- Informal rules can **support** formal ones
- Informal rules can **be in conflict** with formal ones

# **Example: are formal sanctions always more efficient?**

Gneezy U., Rustichini A. A Fine Is a Price// The Journal of Legal Studies, 2000, Vol. 29, No. 1, pp. 1-17

- Kindergartens and late "arrival" problem
- No formal enforcement mechanisms
- What are informal constraints? Parents who arrive late feel guilty
- Introduction of fines in some kindergartens
- Consequences: the growth of late arrivals
- Why?

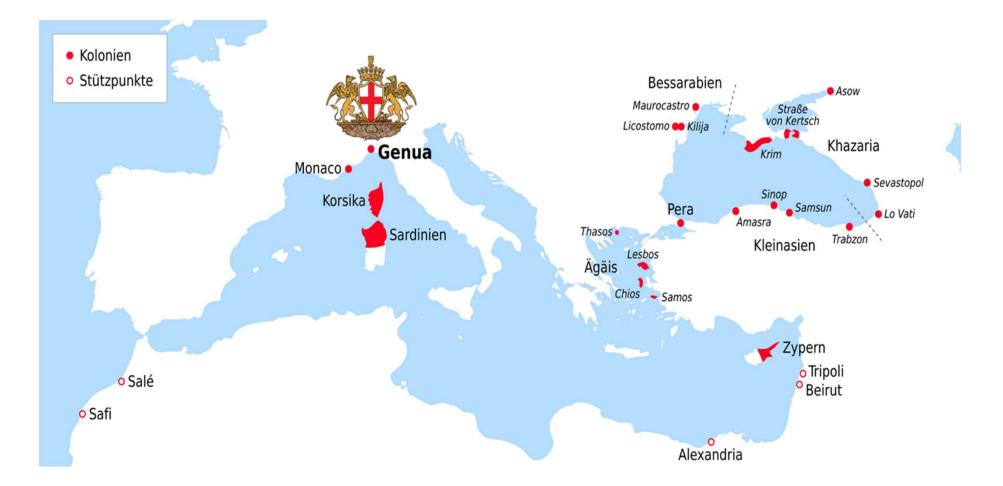
### **Back to Margib and Genova example**

*Source:* Avner Greif (1994) Reflection on Collectivist and Individualist Societies, Journal of Political Economy, Vol. 102, No. 5, pp. 912-950

As we discussed earlier, in Magrib and Genova different solutions for cooperation problem were used:

- Margib: informal norms and social ties
- Genova: formal contracts and arbitrage courts
- Does the type of solution matter?
  - Magrib: no social mobility (no reason to hire agents who do not have capital)
  - Genova: emergence of family firm
  - In the long run totally different results: Genovese colonies spread around Mediterranean see while Magrib stayed as local society
    - For Genova: doesn't matter with whom to trade with local or foreign partners
    - Growth of Genova: from 30K to 100K between 1200 and 1300

# **Colonies of Genova**



Source: Wikipedia, http://ru.wikipedia.org/wiki/Генуэзские\_колонии

#### **Questions to be addressed:**

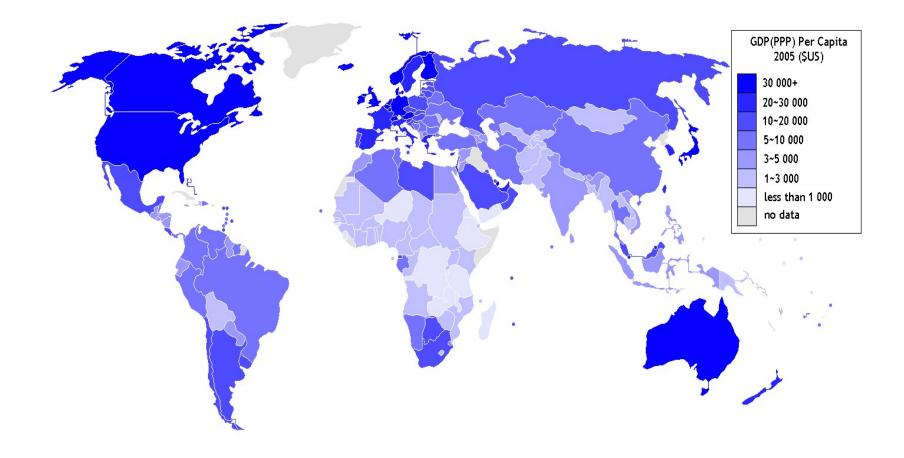
- How to explain substantial differences in levels of economic development between countries? In other words, why some countries are rich and other are poor?
- What potential explanations offer economists?
- How to establish causal links in the analysis of economic development?
- What is the role of informal institutions in economic development?

# Earth in the night



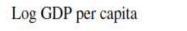
Source: NASA, www.nasa.gov

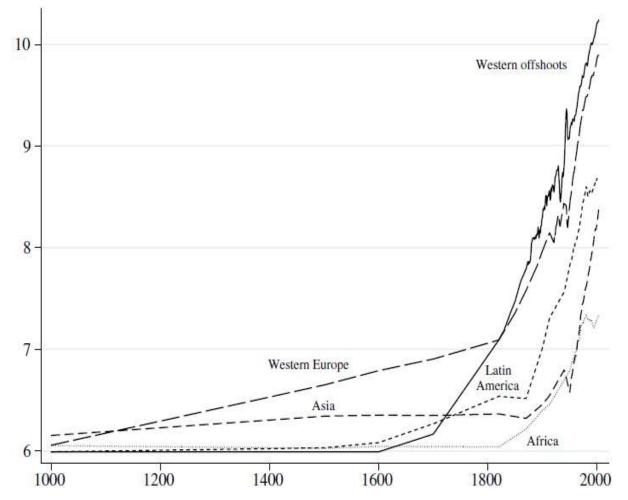
### **GDP per capita**



Source: IMF, 2010, www.imf.org

## **1000 years of World History in one picture**





Source: Angus Maddison, 2001, http://www.ggdc.net/MADDISON/oriindex.htm

#### How to explain such immense differences?

What factors are suggested by economists?

There are several main hypotheses:

- Geography hypothesis
- Institutional hypothesis
- Modernization hypothesis

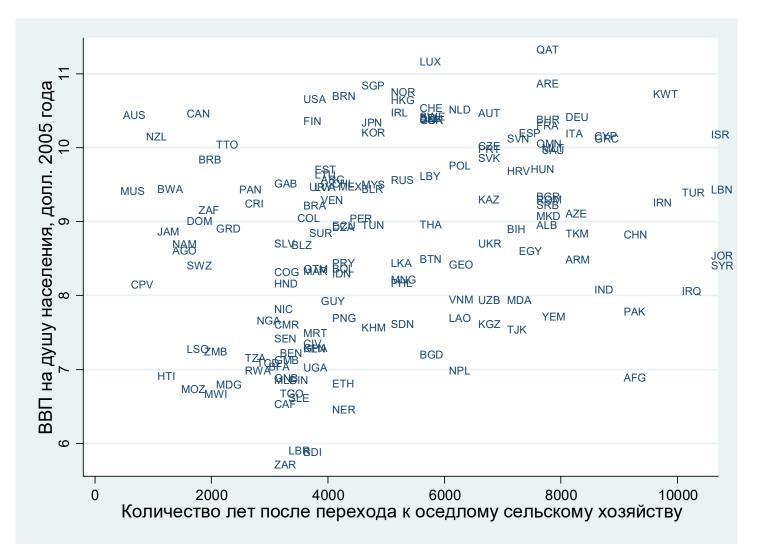
# **Geography hypothesis**

Geographical and natural conditions may be an important factors of development, especially at earlier pre-industrial (agricultural) period of development

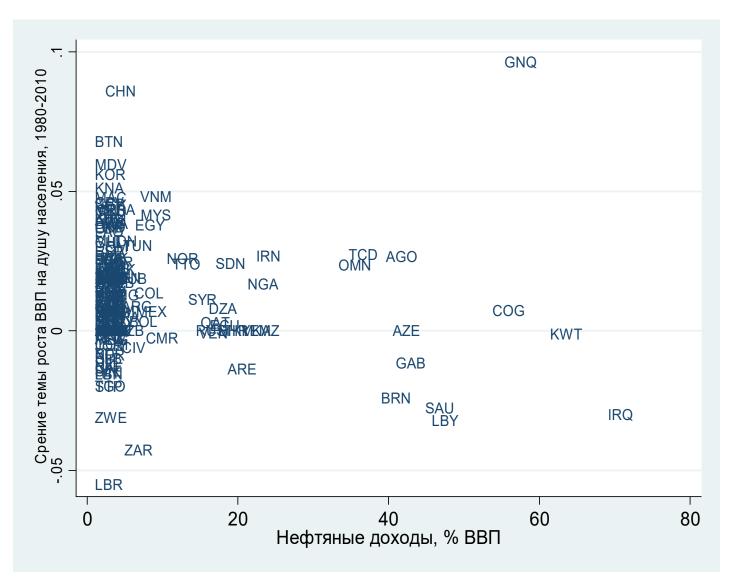
- Jared Dimond ("Guns, Germs, and Steel" (1997)): first states emerged in places with best conditions for farming and the domestication of animals
- OTHER: importance of seas and large rivers (to decrease transportation costs)
- AND: Natural resources (oil, gas, metals etc.)

However, statistical data do not confirm Diamond' hypothesis – in the contemporary world there is no relationship between earlier start of sedentary farming and GDP per capita.

# Is Diamond hypothesis supported in contemporary world?



# Oil and economic growth



Source: WorldBank, 2010

How history can help?

Sharp exogenous changes of institutions with all other factors being equal

□ Natural experiments

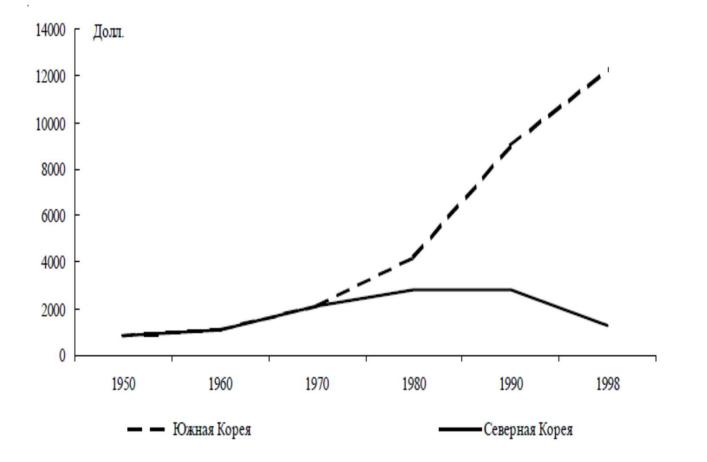
#### Example 1. Korea

□ Independence of Korea (from Japan) after WWII

□ Interests of US and SU

- Creation of People Republic of Korea, no private ownership on land or production means
- South Korea: private property, institutions of capitalist economy
- Initially: common historical and cultural grounds, same level of economic development

#### GPD per capita dynamics in North and South Korea



*Source*: Acemoglu D., Johnson S. and Robinson J. A. Institutions as a fundamental cause of long-run growth// Handbook of economic growth, 2005, ed. by Philippe Aghion and Stephen Durlauf, Elsevier, Amsterdam.

# North and South Korea by night



*Source*: NASA, www.nasa.gov

### **Example 2: Germany**

The division of Germany after WWII

- In East and West Germany :
  - During several decades people lived under different governance systems, with different economic and political institutions
- At the time of the merger the difference in average incomes was around 3.5-4 times

So, the geography fails to explain all differences in level of economic development

# Institutional hypothesis

- Examples of Korea and Germany demonstrate that geographical factors are not the main factors of economic development
- The main thing that differs these countries institutional structure (laws, rules etc.)

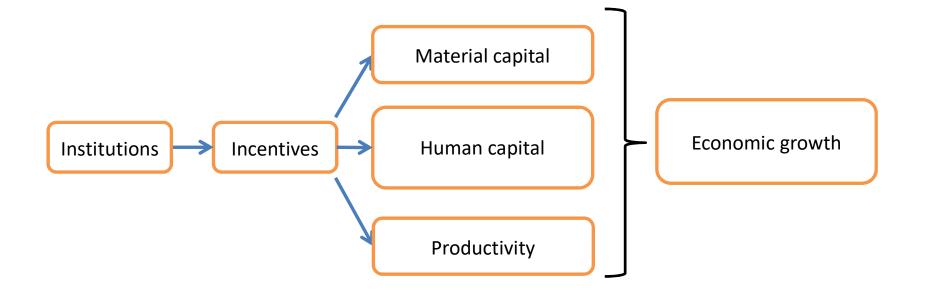
Institutional hypothesis as an alternative to geographical hypothesis

• Douglas North, Nobel Price in Economics, 1993

# **Douglas North: drivers of economic growth**

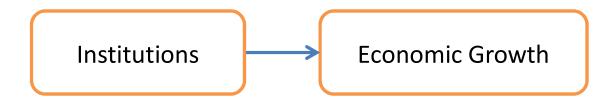
- Economic institutions (including secure property rights and efficient contract system) are critically important for economic growth
- Under weak institutions economic agents have little incentives to invest in material and human capital and innovate
- Insufficient protection of contracts and property rights creates incentives to non-productive activities (such as corruption, bribery, theft and extortion)
- Redistribution becomes more attractive than production)

## **Contemporary economic growth**



Contemporary economic growth as a result of emergence of institutions that create incentives to productive activities

# "Institutional" Hypothesis



# "Modernization" Hypothesis

