Development Economics

Lecture 13: How institutions develop and why they matter

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EC 2273

Today

1. Midterm (March 20, in class)
2. PS 3 Due Wed Mar 15

3. How do institutions develop?
    1. Open question during all of this discussion: Can we think about the events in Ukraine, or the Arab Spring (Tunisia, Libya, Egypt, and Syria) and its aftermath through the lens of institutions?
4. Reversal of fortune: those who were rich in the past are poor now

Exam Second Monday after break

- Coverage:
  - All assigned readings, including Easterly book
  - Models we have done in class
  - Lectures get the most weight, but there may be some questions from readings we did not cover in lecture
- Format
  - Several True/False/Explain questions
  - Several short answer questions
  - One or two questions like short problem set questions, possibly a conceptual "essay" question
- Wednesday before exam: finish up lectures, review practice exam as a study guide (no answer key though).

Framework for evolution of institutions

- Acemoglu, Johnson and Robinson (and others)
  - Discussion and framework from 2004 NBER paper "Institutions as the Fundamental Cause of Long-Run Growth" on reading list
- Basic idea:
  1. institutions evolve endogenously and ***depend on*** the distribution of resources in society
  2. institutions affect economic growth, and ***affect*** the distribution of resources in society
- So institutions, economic growth, and the distribution of resources evolve together

1. Institutions lead to economic outcomes

- Economic institutions matter for economic growth
  - Shape the incentives for investment, and organization of production
  - Institutions are the major source of cross-country differences in economic growth
  - Institutions affect the distribution of resources in the future

$$\begin{tikzcd}
 & \textbf{Economic Performance}_{t+1} \\
\textbf{Economic Institutions}_{t} \arrow[ur] \arrow[dr] & \\
 & \textbf{Distribution of Resources}_{t+1}
\end{tikzcd}$$

2. Institutions are endogenous

- Economic institutions are determined by choices made by society
  - But not all members of society prefer same outcomes, leading to conflicts of interest
  - The group with most political power will tend to prevail, and so choose the institutions it most prefers.

$$\textbf{Political Power}_t \longrightarrow \textbf{Economic Institutions}_t$$

3. Commitment is impossible

- Groups who obtain power cannot (credibly) commit to the polices in the future
  - Those who have political power cannot commit not to use it in their own best interests
  - Result: since groups will use their political power to enhance their own interests, it is impossible before hand to agree to implement the most efficient policies in return for a "compensating transfer"

4. Political power is endogenous

- Form of political institutions changes who has political power
  - *de jure* (from the law) political power arises from the particular political institutions in place, and who gets to exercise power
  - Monarchy (government by one), Autocracy (government by elites), democracy (government by the people) determine who gets to “vote”

Political Institutions$_t$ → ***De Jure*** **Political power$_t$**

5. Political power also comes from distribution of economic resources

- Economic power—having much command over resources—results in political power
  - Economic power allows one group to pay off, or use force against, other groups, and so results in *de facto* political power
  - Often economic power, de facto and de jure political power are one and the same: feudal systems
  - Corruption in government is one place where *de jure* and *de facto* political power may be in conflict

Distribution of Resources$_t$ → ***De Facto* Political Power$_t$**

6. Political power determines political institutions

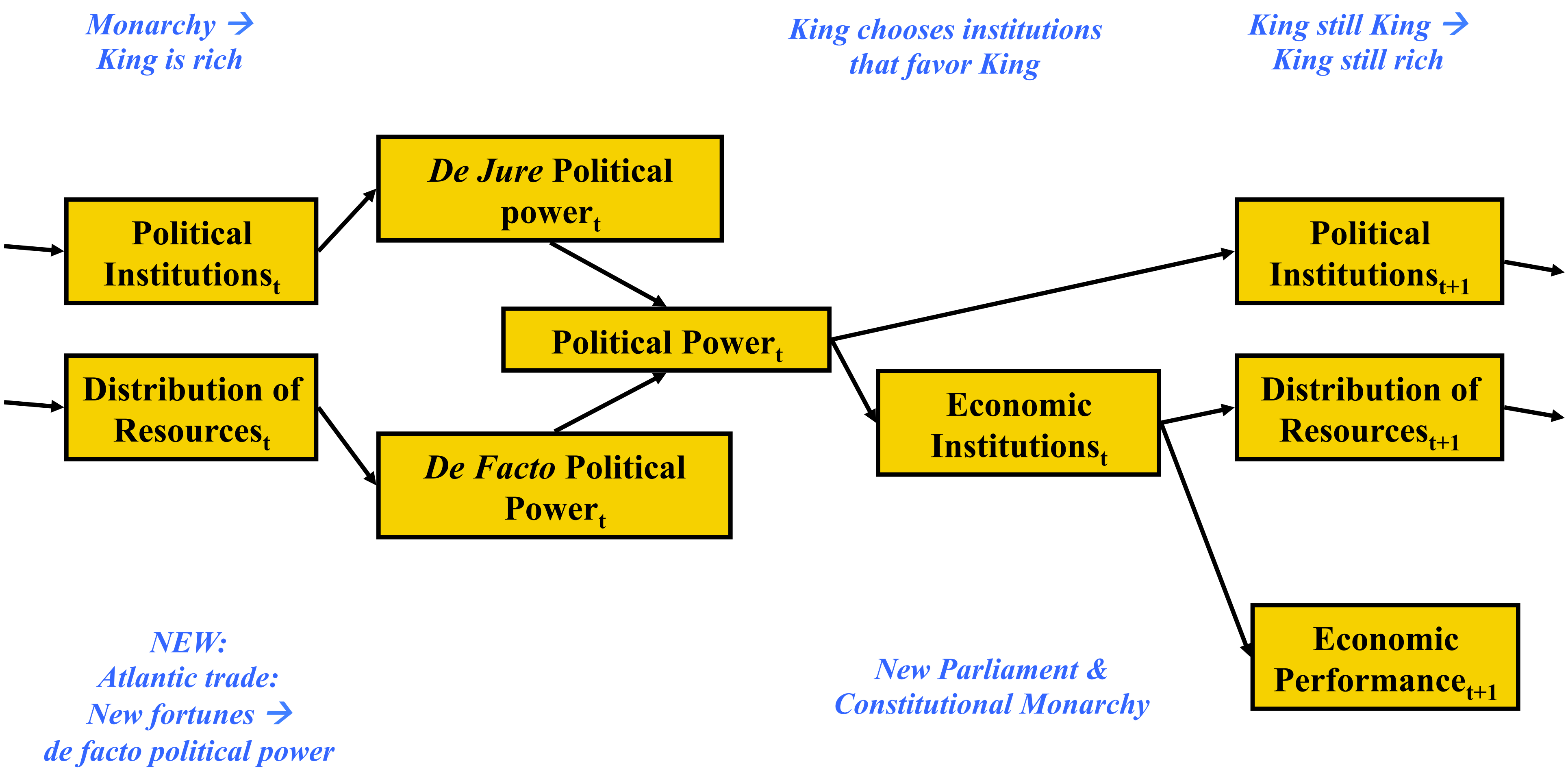
- Those who have political power (whether *de jure* or *de facto*) get to determine the next round of political institutions
  - Form of government in long term
  - *De jure* political power generally slowly changing
    - Constitutional convention, redistricting, power of government
  - *De facto* political power occasionally produces big changes, may also affect whether rules are obeyed
    - Revolutions, corruption

Political Power$_t$ → **Political Institutions$_{t+1}$**

Persistence

- Framework makes it seem like everything changes every period
- Lots of persistence—usually things evolve very slowly
  - Political institutions are durable, so fairly large changes in distribution of political power necessary for changes in political institutions
  - A group that is rich relative to others has *de facto* power, and so will tend to push for favorable political and economic institutions, which will tend to reproduce or enhance its relative economic power

The framework: Industrial Revolution



Evolution of property rights in England

- Monarchy—the king holds both *de jure* and *de facto* political power
  - Kings protected their own property rights, but not the rights of others—reneged on debts, taxed arbitrarily, reallocated land, expropriated
  - Political institutions in which the king had power led to economic institutions benefiting the king
  - Landowners, merchants, producers had bad incentives to invest, so low growth
  - Since king maintained economic/political power, system stable

Evolution of property rights in England

- **Change**: 17th century expansion of Atlantic trade
  - Increased fortunes of landowners and merchants
  - More wealthy landowners and merchants acquired *de facto* political power
  - Increasing *de facto* political power eventually lead to the Civil War (1641-51) and Glorious Revolution (1688),
  - Restricted power of monarchy—leading to *de jure* political power and new political institution: constitutional monarchy
- Newly powerful parliament, major changes in economic institutions
  - Strengthened property rights
  - Better economic institutions led to economic growth, industrial revolution

Some observations

1. Political institutions that place checks on those who hold political power more likely to lead to good economic institutions
   - Without checks those with political power choose economic institutions that are good for them, but bad for rest of society
2. Good economic institutions are more likely to arise when political power is widely distributed
   - Then those with political power benefit from economic institutions that promote growth
3. Good economic institutions more likely to arise and persist when the ability of power holders to extract from the rest of society is limited
   - The easier and more rewarding it is to take from the rest of society, the bigger the incentive to obtain and protect political power and use it to create economic institutions that facility extraction

How important are institutions?

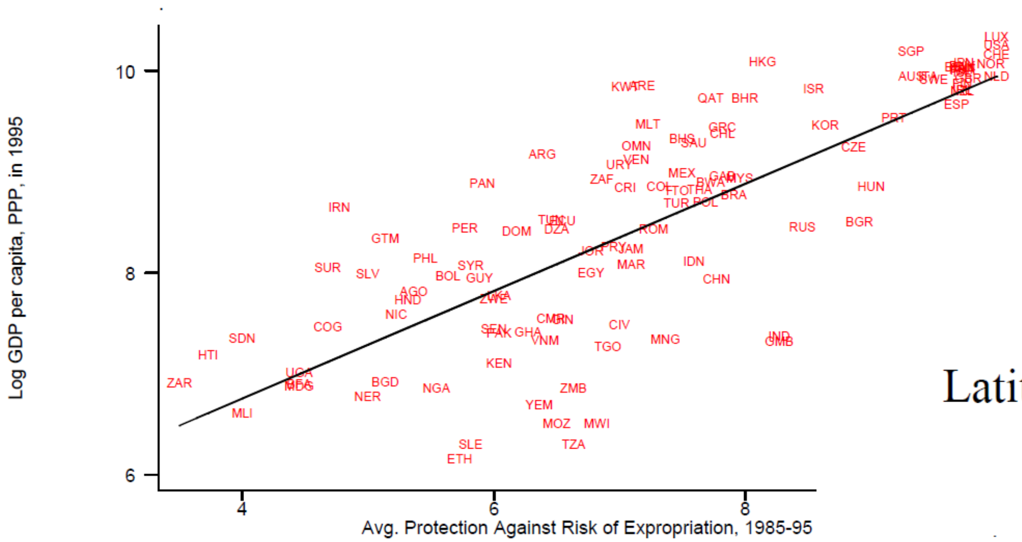
- Natural experiments and history suggest important
  - North and South Korea
  - Haiti and Dominican Republic
  - China and West
- But are they **fundamental**?
- We have already established that factor accumulation does not fully explain differences across countries, so factor accumulation not fundamental cause (instead "proximate cause")

The possible contenders

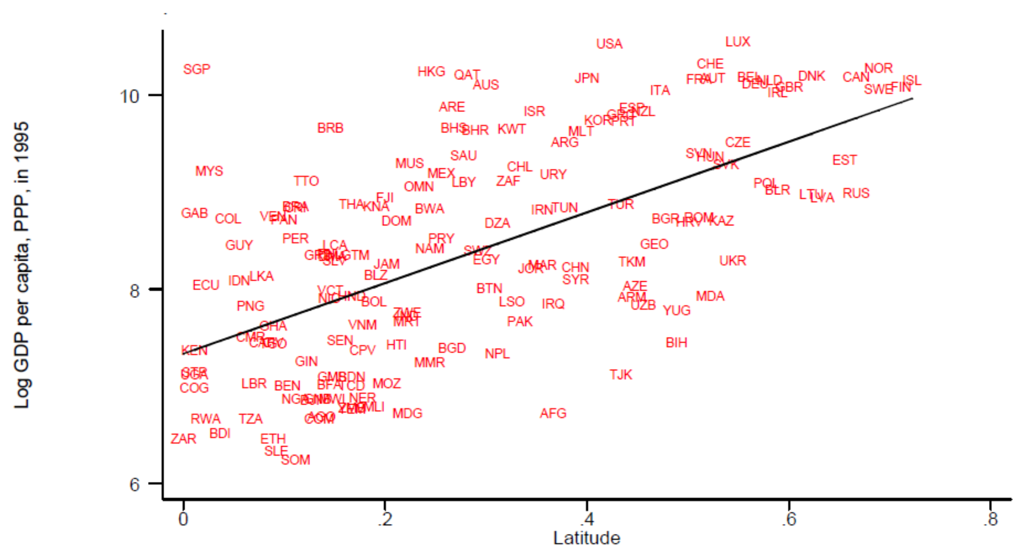
- Institutions
- Geography
  - Climate and agriculture
  - Availability of resources (coal)
  - Ports, rivers, transportation
  - Disease burden (malaria)
- Culture
  - Shaped by and shapes institutions (hard to disentangle)
  - But maybe some fundamental differences exist
    - Maybe some societies (English) value leisure less than others (French).
    - Or maybe the political and economic power of French unions creates economic institutions which force lots of leisure

Is it institutions or geography?

Average Protection Against Risk of Expropriation 1985-95
and log GDP per capita 1995



Latitude and log GDP per capita 1995



The Reversal of Fortune

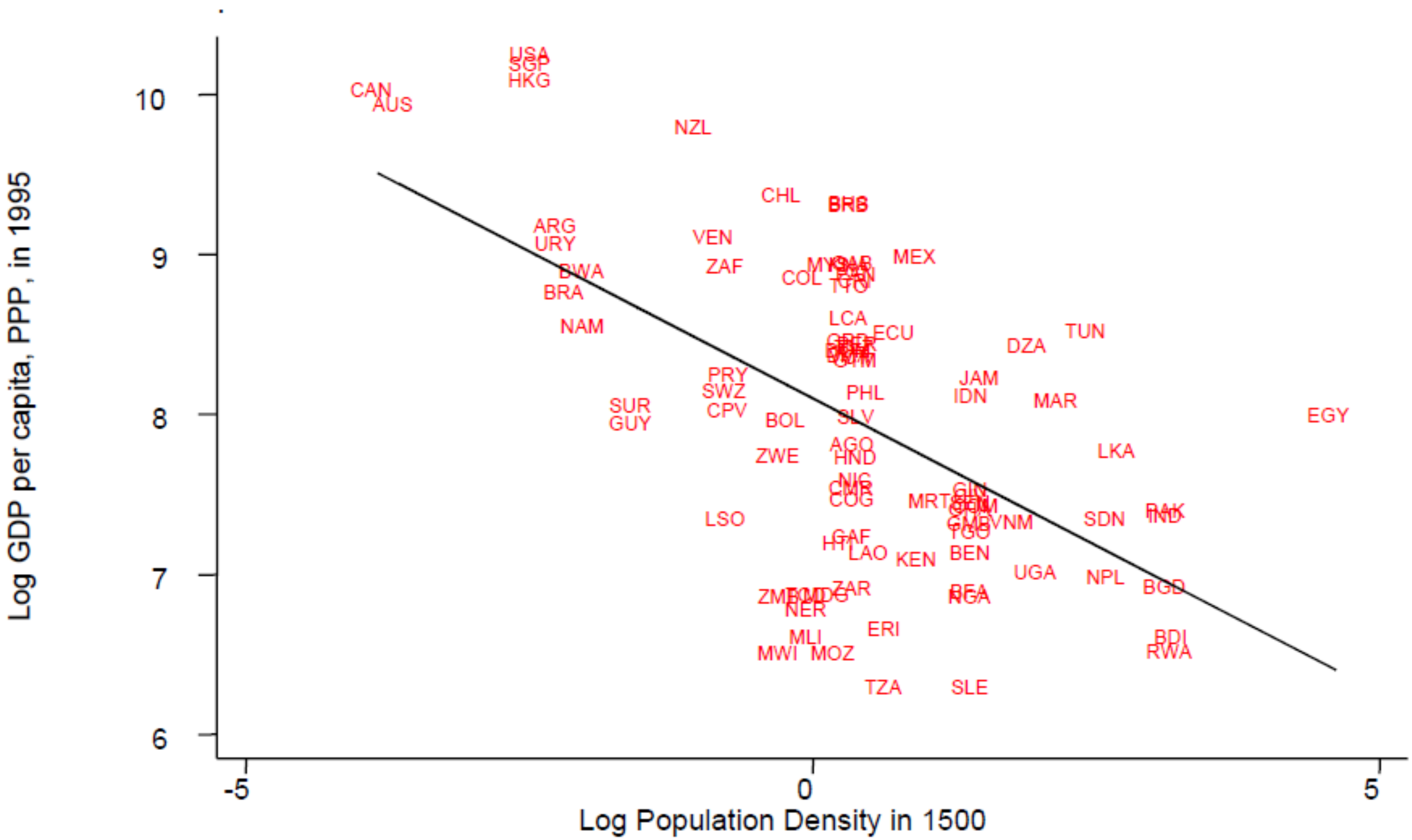
- The most famous, and convincing result from Acemoglu, Johnson and Robinson's work
- Basic idea:
  - Europeans conquered many other nations after 1492
  - Imposed different institutions in different parts of the world
    - Example: British controlled both many Caribbean islands (sugar plantations) and Massachusetts Bay colony, and set up very different institutions in each
  - The richest non-European societies in 1500, became the poorest today, because of the choice of institutions

The Reversal of Fortune

- The richest (non-European) societies in 1500 became the poorest today.
  - Areas controlled by the Aztecs, Inca, Mughals (in India) were the among the richest civilizations in the world in 1500, among the poorest today
  - Poor areas in 1500 (sparsely settled, hunter gather societies) such as what became the US, Canada, Australia, and New Zealand became the richest today
- Rich & poor have switched places

Machu Pichu, Peru
A very advanced society in 1500

Log population density in 1500 and log GDP per capita in 1995, among former European colonies



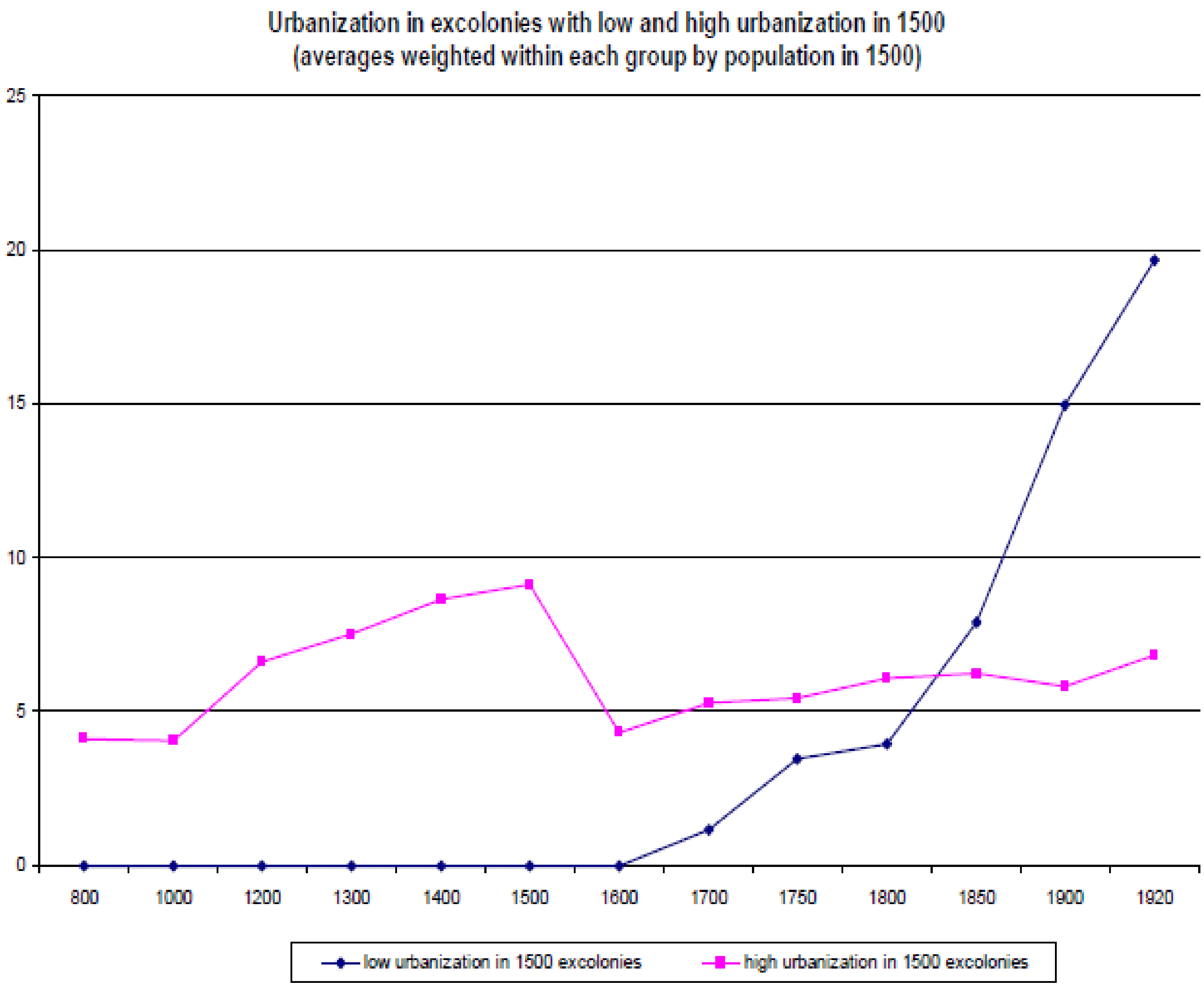
What caused the reversal?

- In initially heavily populated richer areas, Europeans put ***extractive*** institutions in place to expropriate from conquered people
  - Forced the Incans to mine for silver and gold
  - Haciendas in Mexico, as well as silver mining
- In initially less populated areas, Europeans were the settlers, so developed institutions respecting ***property rights***
- "a more developed civilization and a denser population structure made it ***more profitable for the Europeans to introduce worse economic institutions***" (AJR p. 25)

What caused the reversal?

- Until around 1800 the initially less populated areas remained poorer
- Around 1800 took off, became much richer
- Reversal occurs after 1800, exactly when ***Industrial Revolution made good economic institutions valuable***
- Some areas like Caribbean, and US South, initially low population
  - Europeans brought in people to expropriate (slaves) because of high returns to sugar and cotton

Evolution of urbanization among former European colonies



Resources, Conflict and Economic Development in Africa

Adhvaryu, Fenske, Khanna, and Nyshadham (2017)

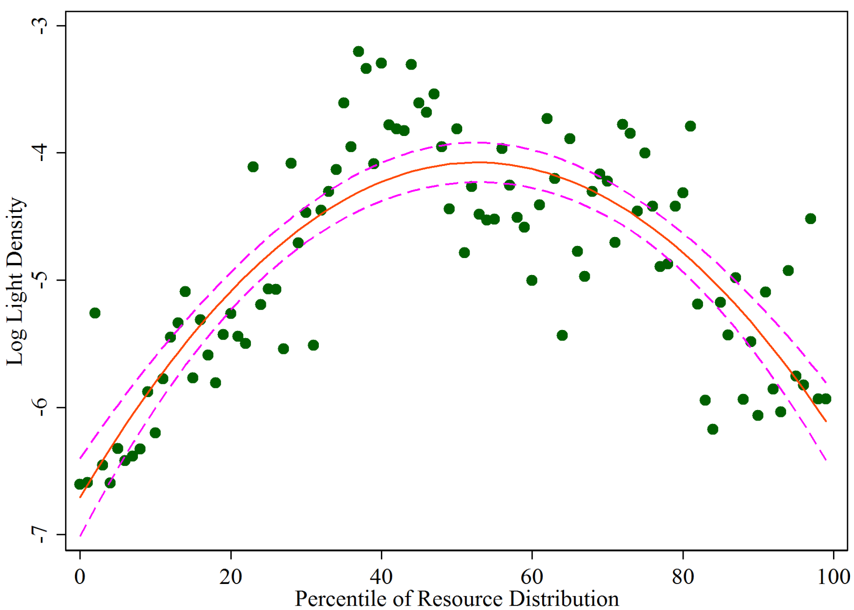


Figure 1: Log Light Density vs. Resources

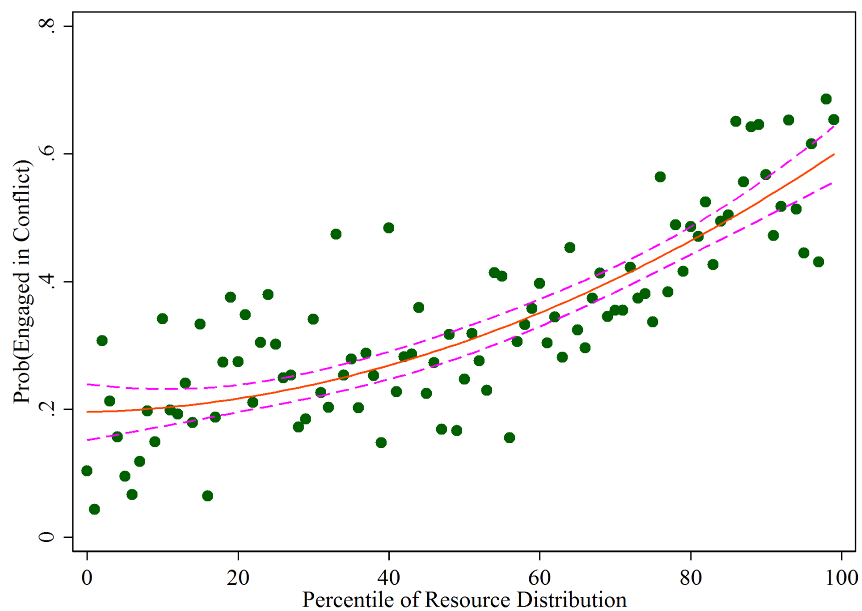


Figure 2: Prob(Conflict) vs. Resources

Resources, Conflict and Economic Development in Africa

Figure 6: Nash Equilibria in the (r_i, r_j) space

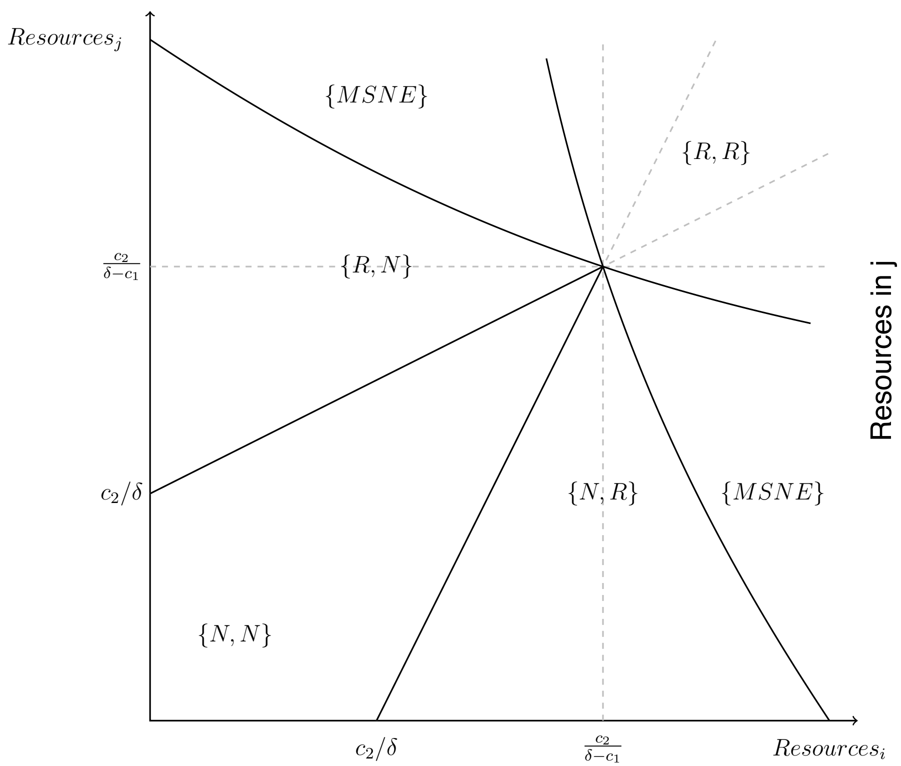
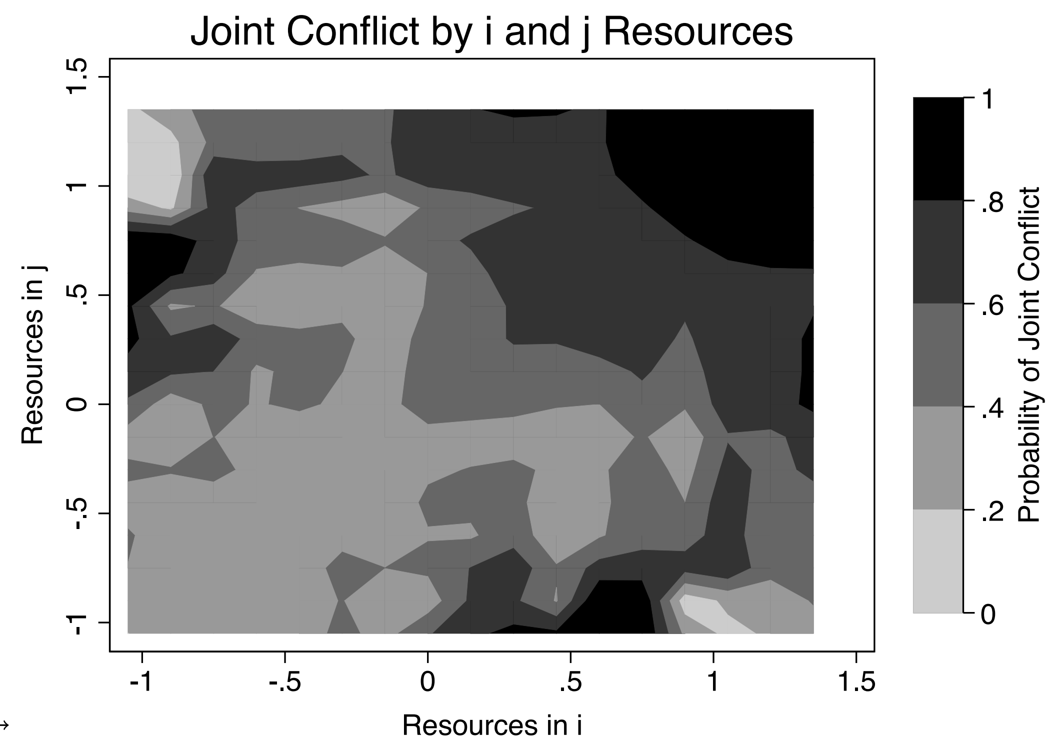


Figure 8: Heat Map of the Probability of Conflict by Resource Index



Resources, Conflict and Economic Development in Africa

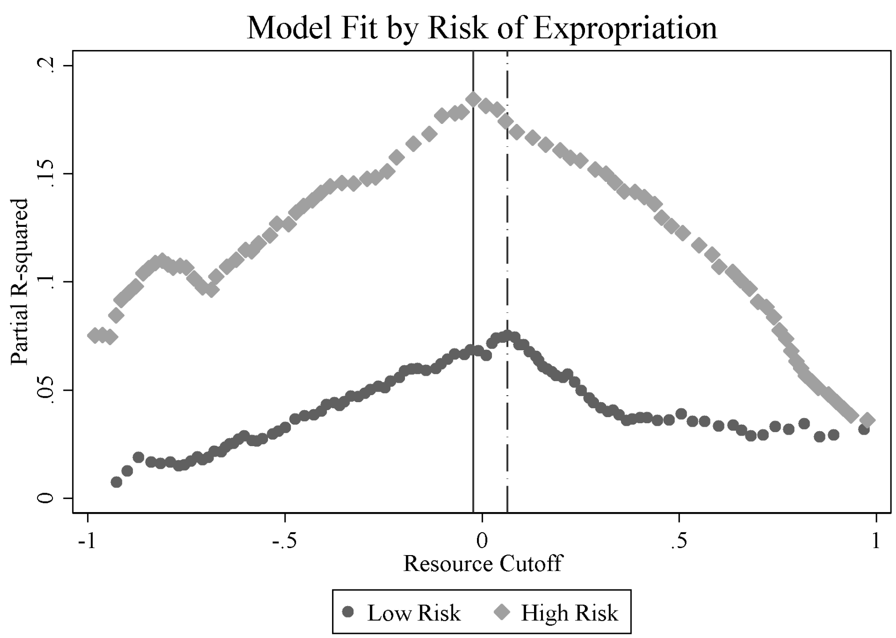


Figure 9: Model Fit and Optimal Cutoff by Risk of Expropriation

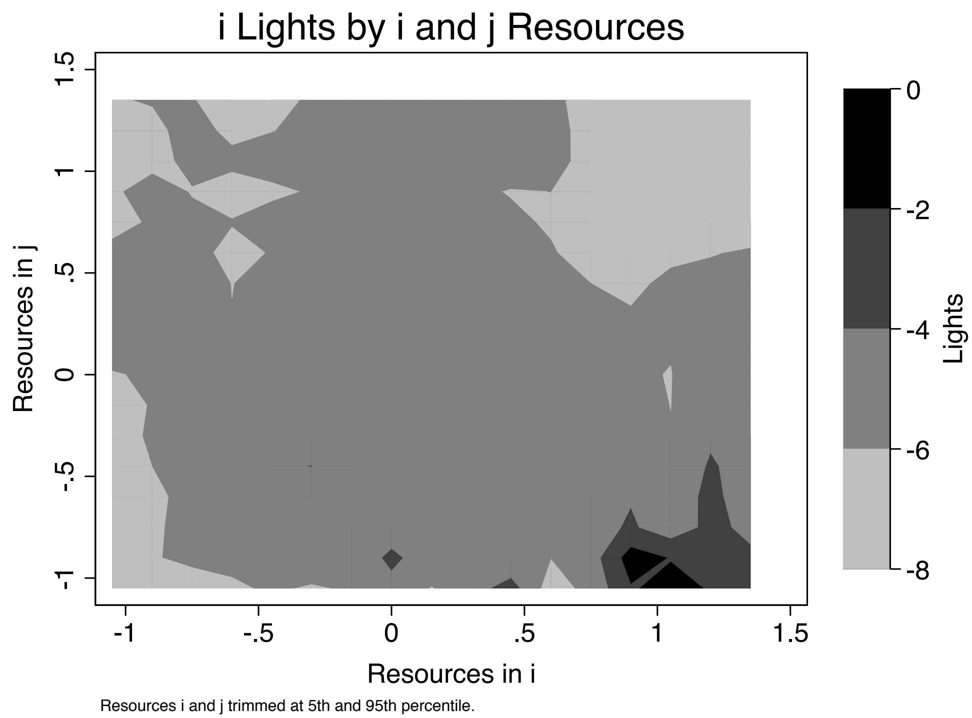


Figure 10: Heat Map of Light-Density by Resources