

Jared Diamond - Geographic determinism:

- Europe - Asia
- Africa
- North America
- South America
- Australia

Eurasia has ◦ east-west axis

- domesticable animals
 - This leads to disease
- longer history
- cereal

South America vs Europe

- metallurgy - Europe had guns
- Aztec empire was a tributary empire. (Human sacrifice) - Cortes was able to find many local allies.

- Pizarro vs Inca empire. Incans had decent communication. Divine emperor, so subjects were controlled.

- Just had to kill the emperor.

Why didn't Asians take over?

- China was more closed off; had long, single coastline - allowed for a single empire.
- Less competition among states
- at one point, China lost interest in innovation.

Acemoglu, Johnson, Robinson

3 premises

1] Different types of colonization policies.

- extraction
- settling (neo-Europe)

2] What determines policy?

- Mortality rate
- If high mortality, the extraction is better

3] Institutions persist to present day

- costly to change
- higher rents if you are ruling elite
- middle class \Rightarrow protect property rights
- don't want to be expropriated.

64 countries

Income per capita (PPP adj '95) = f (protection expropriation risk, latitude, continent, ...)

- Using OLS, there would be problems establishing causality. Use IV.
- To be highly cited, come up with an easily applied methodology.

$$Y = \alpha_0 + \alpha_1 D + u$$

◦ OLS biased if endogeneity

◦ IVs: $Z_j, j=1, \dots, J$ $Z = (Z_1, \dots, Z_J)$

$$\text{cov}(Z_j, u) = 0, \quad \text{cov}(Z_j, D) \neq 0$$

◦ Then, asymptotically, $\text{plim } \hat{\alpha}_1 = \frac{\text{cov}(Y, Z_i)}{\text{cov}(D, Z_i)} = \alpha_1$

Problems with IV:

1] Weak instruments

2] Valid instruments? 2 priori arguments

3] Need large numbers

4] Essential heterogeneity (Heckman)

◦ under heterogeneity, what are you really estimating with IV?

AJR use settler mortality as an instrument.
◦ another one that works is population density upon settlement.

Few data points. It is almost anecdotal.