The Key to Economic Growth: Why Some Nations Flourish While Others Fail

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The Failure of Nations

- Vast differences in prosperity across countries today.
  - Income per capita in sub-Saharan Africa on average 1/20th of U.S. income per capita
  - In Mali, Democratic Republic of the Congo (Zaire), and Ethiopia, 1/35th of U.S. income per capita.
- Economic and political turmoil and slow growth in much of Latin America and South Asia.
- Economic crisis around the world today.
- This talk: an institutional interpretation of poverty and prosperity around the world today and of the current economic crisis.

The Wealth of Nations

- Standard economic answers (à la Adam Smith):
  - Physical capital differences (poor countries don't save enough)
  - Human capital differences (poor countries don't invest enough in education and skills)
  - "Technology" differences (poor countries don't invest enough in R&D and technology adoption, and don't organize their production efficiently)
  - Markets (markets don't function in poor countries).

  are proximate causes.
- We need to understand why poor countries don't save enough, don't invest enough, don't develop and use technologies and don't have functioning markets.
- Potential answer: differences in incentives

Sources of modern prosperity: Incentives

- Where do incentives come from?
- Adam Smith:
  - ``little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things.''.
- → Potential answer: institutional differences
- → Institutions: organization of society, “rules of the game”.
- → To understand the wealth of nations, we need to understand institutional differences.

- Also relevant for thinking about current economic problems and issues of risk management.

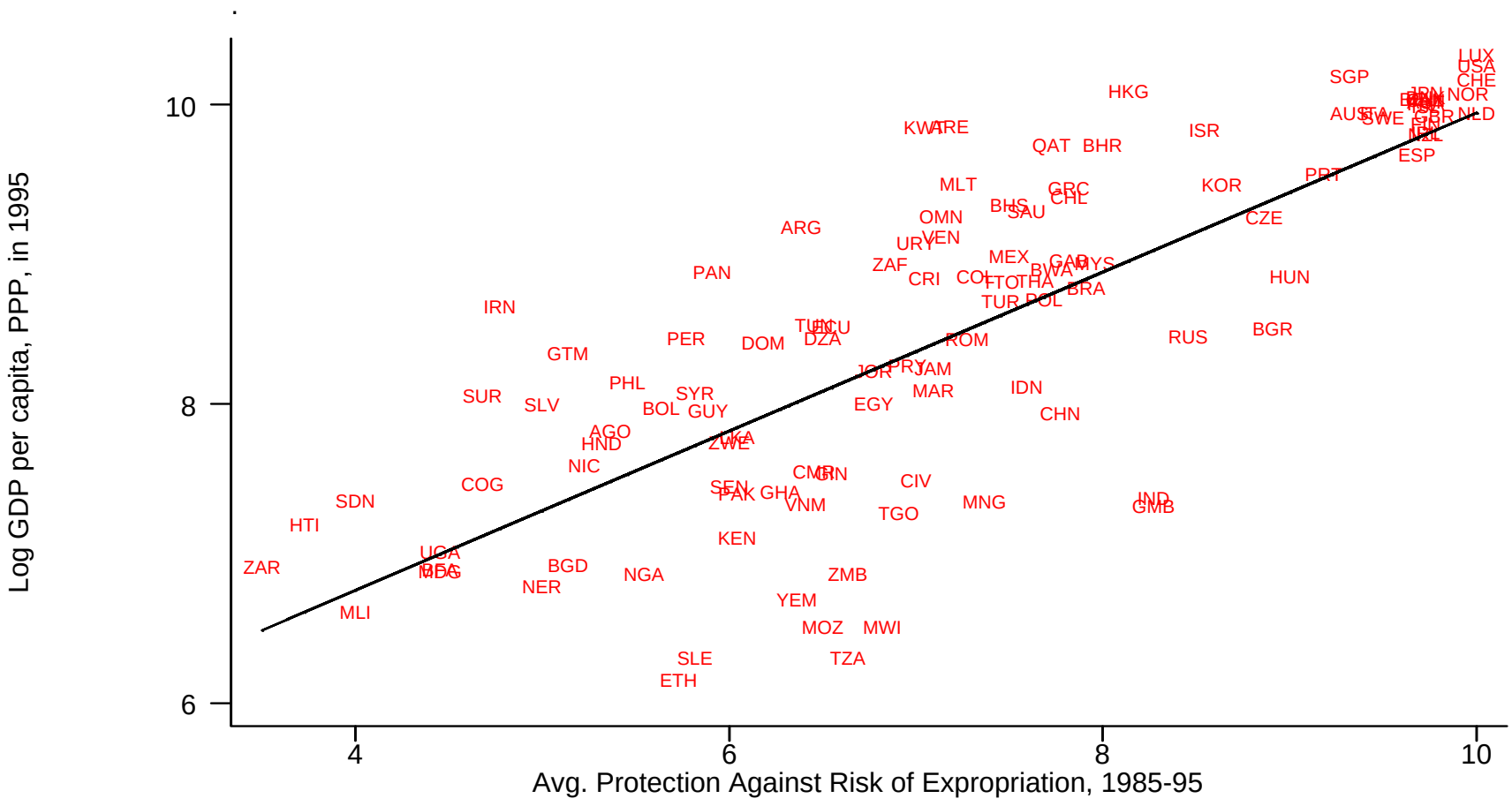
Sources of prosperity

- What lies beneath the proximate causes?
- Potential fundamental causes of differences in prosperity:
  - Institutions (humanly-devised rules shaping incentives)
  - Geography (exogenous differences of environment)
  - Culture (differences in beliefs, attitudes and preferences)

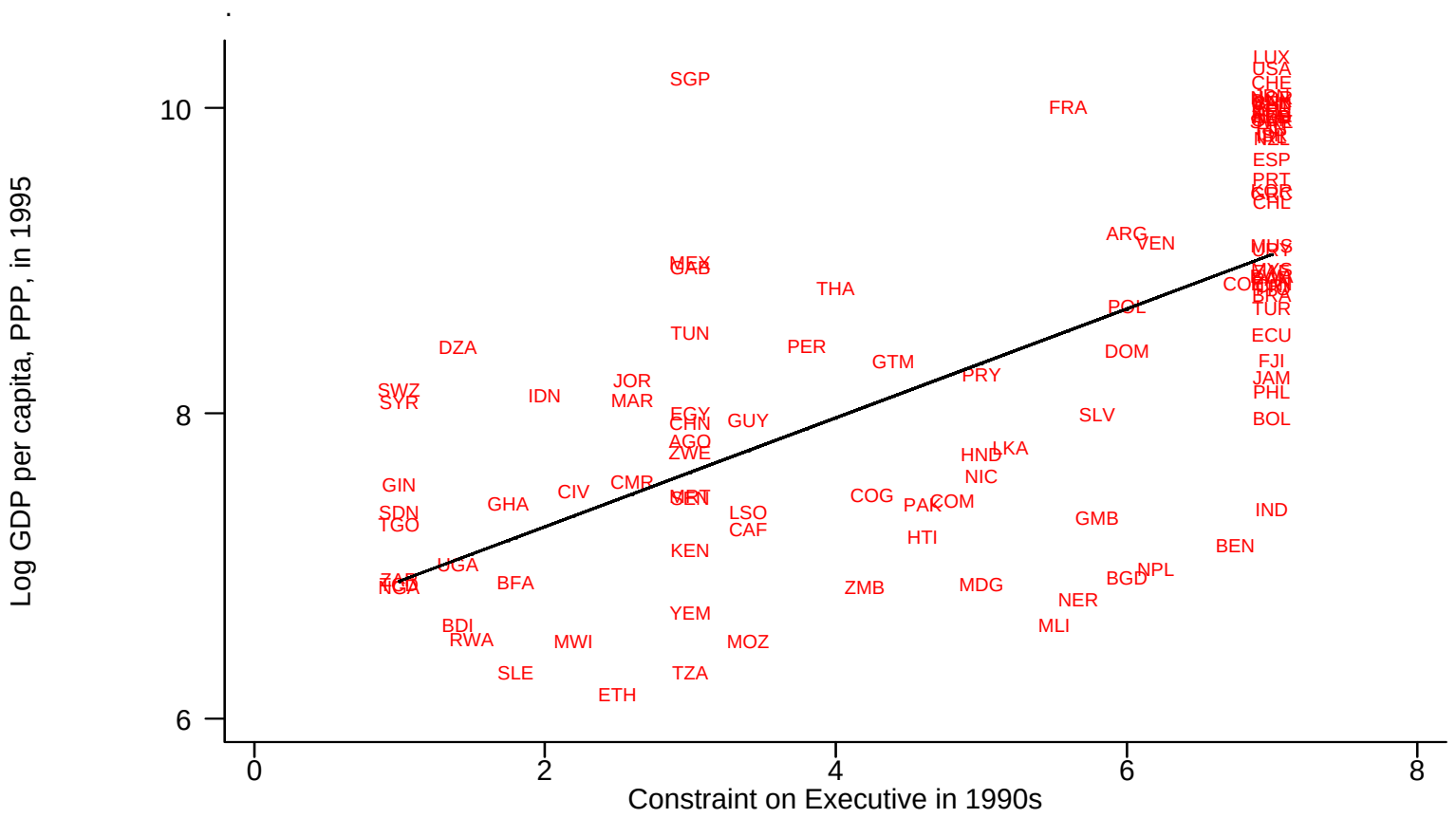
What are institutions?

- Institutions: the rules of the game in economic, political and social interactions.
  - Institutions determine “social organization”
- Douglass North: "Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction.“
- Key point: institutions
  - are humanly devised
  - set constraints
  - shape incentives

Economic institutions and performance



Political institutions and economic performance



But institutions are endogenous

- Institutions could vary because underlying factors differ across countries.
  - Geography, ecology, climate
  - Culture
  - Perhaps other factors?
- Montesquieu's story:
  - Geography determines "human attitudes"
  - Human attitudes determine both economic performance and political system.
  - Institutions potentially influenced by the determinants of income.
- Identification problem:
  - We can learn only a limited amount from correlations.

Geography hypothesis: Montesquieu

- Montesquieu:
  - “The heat of the climate can be so excessive that the body there will be absolutely without strength. So, prostration will pass even to the spirit; no curiosity, no noble enterprise, no generous sentiment; inclinations will all be passive there; laziness there will be happiness,”
  - "People are ... more vigorous in cold climates. The inhabitants of warm countries are, like old men, timorous; the people in cold countries are, like young men, brave".
- Moreover, Montesquieu argues that lazy people tend to be governed by despots, while vigorous people could be governed in democracies; thus hot climates are conducive to authoritarianism and despotism.

Geography hypothesis: modern versions

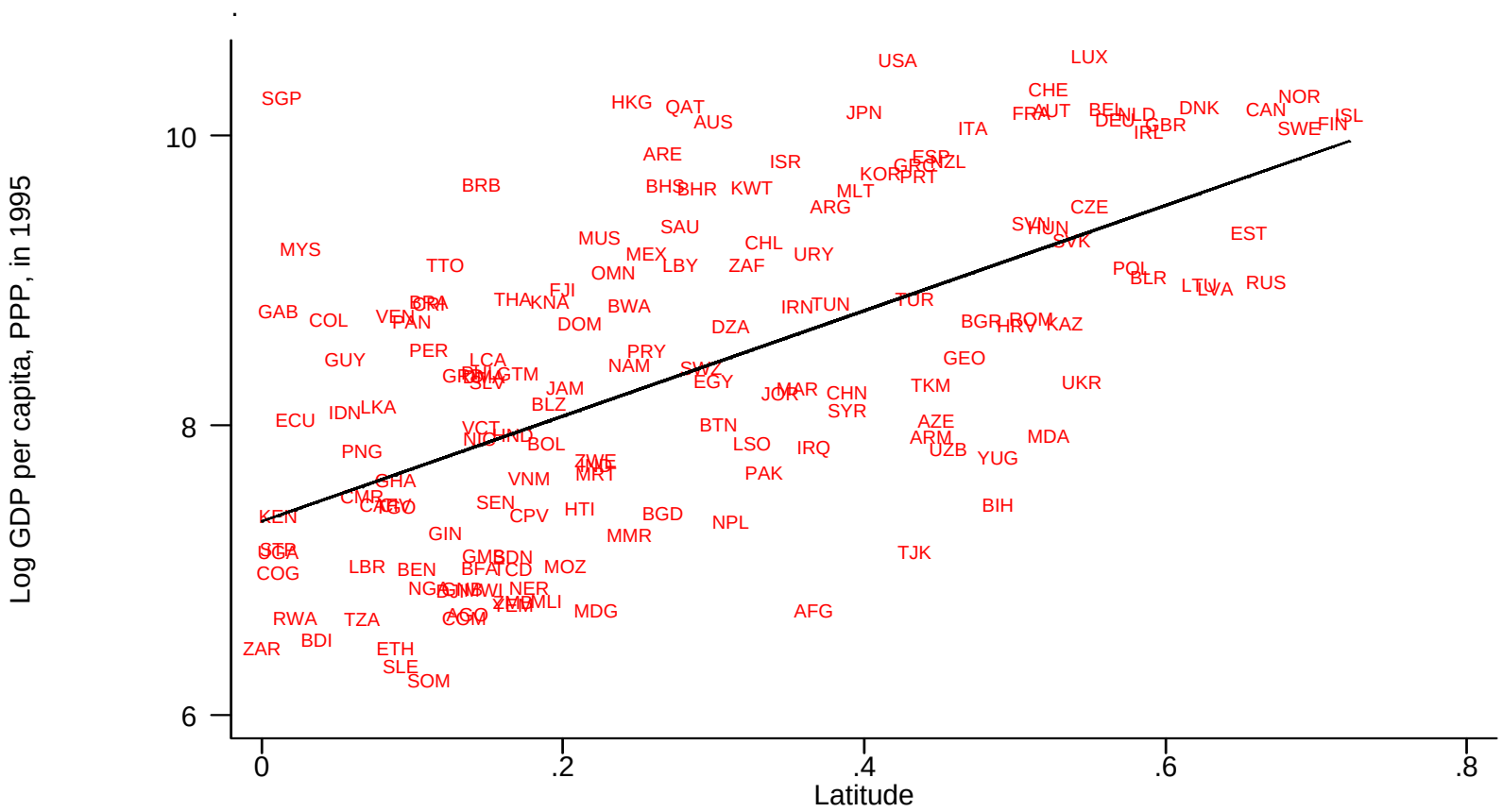
- Jared Diamond:
  - Importance of geographic and ecological differences in agricultural technology and availability of crops and animals.
- Jeff Sachs:
  - "Economies in tropical ecozones are nearly everywhere poor, while those in temperate ecozones are generally rich" because "Certain parts of the world are geographically favored…Tropical agriculture faces several problems that lead to reduced productivity of perennial crops in general and of staple food crops in particular" …
  - "The burden of infectious disease is similarly higher in the tropics than in the temperate zones"

Culture hypothesis

- Institutions and prosperity may be joint be determined by culture (beliefs, preferences, social norms).
- Max Weber:

  "Montesquieu says of the English that they "had progressed the farthest of all peoples of the world in three important things: in piety, in commerce, and in freedom". Is it not possible that their commercial superiority and their adaptation to free political institutions are connected in some way with that record of piety which Montesquieu ascribes to them?"
- Culture closely related to institutions, but different.
  - Not directly chosen by the society for its consequences
  - Not clear how it changes.

Montesquieu's story?



Empirical pitfalls of correlations

- Montesquieu's story example of omitted variables bias and identification problem.
  - Other omitted factors---human nature, culture, geography---vary across countries and affect economic performance.
  - They also are correlated with or have a causal effect on institutions.
  - Similar problem affects inferences about geography on income; potentially correlated with omitted variables.
- Reverse causality:
  - Income affects institutions.

Need for exogenous variation

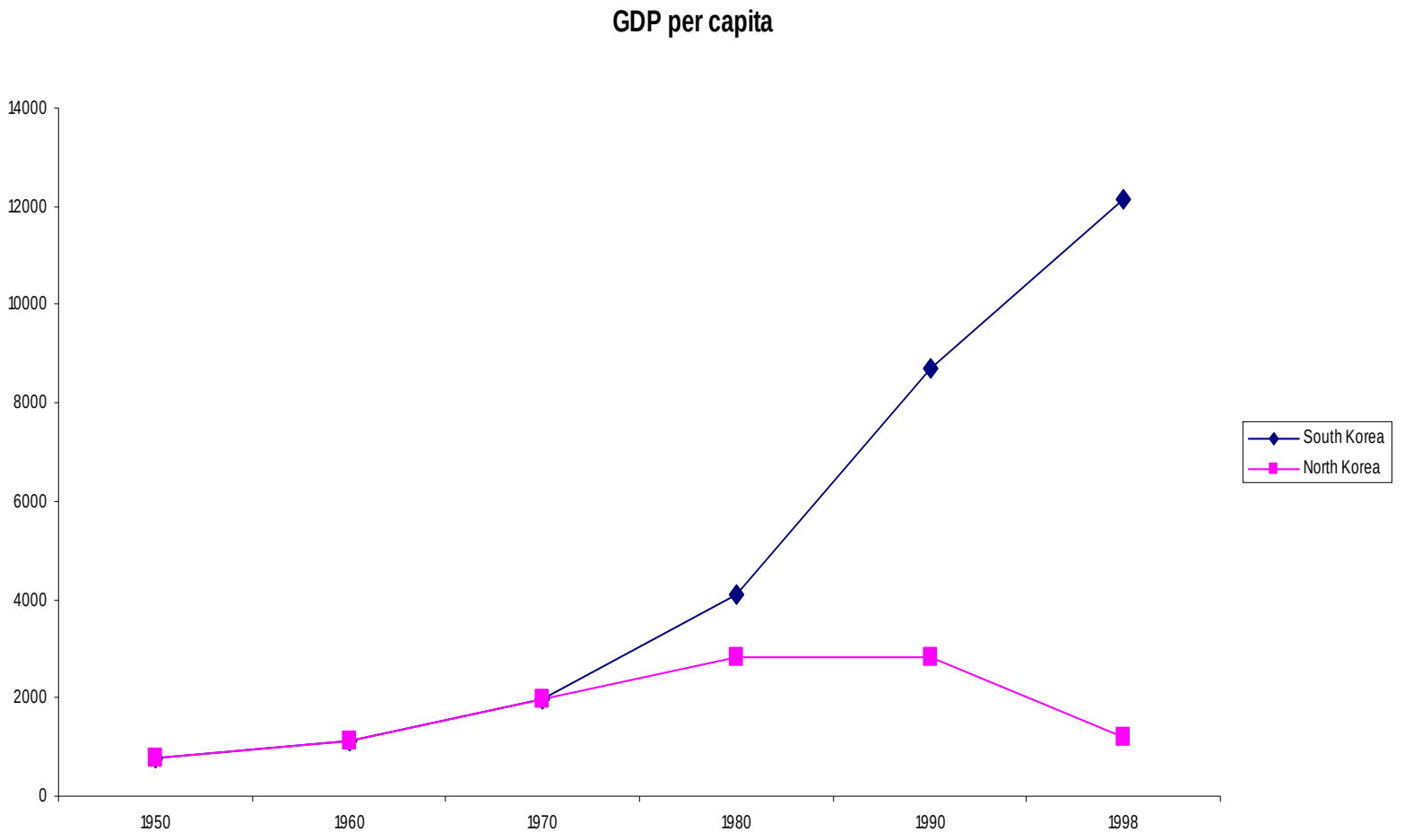
- Exploit "natural experiments" of history, where some societies that are otherwise similar were affected by historical processes leading to institutional divergence.
  - Building towards an "instrument" for institutions;
    - a source of variation that affects institutions, but has no other effect, independent or working through omitted variables, on income.
- Examples of potential natural experiments of history:

1. South versus North Korea
2. European colonization

The Korean experiment

- Korea: economically, culturally and ethnically homogeneous at the end of WWII.
- If anything, the North more industrialized.
- "Exogenous" separation of North and South, with radically different political and economic institutions.
  - Exogenous in the sense that institutional outcomes not related to the economic, cultural or geographic conditions in North and South.
  - Approximating an experiment where similar subjects are "treated" differently.
- Big differences in economic and political institutions.
  - Communism (planned economy) in the North.
  - Capitalism, albeit with government intervention and early on without democracy, in the South.
- Huge differences.

North and South Korea



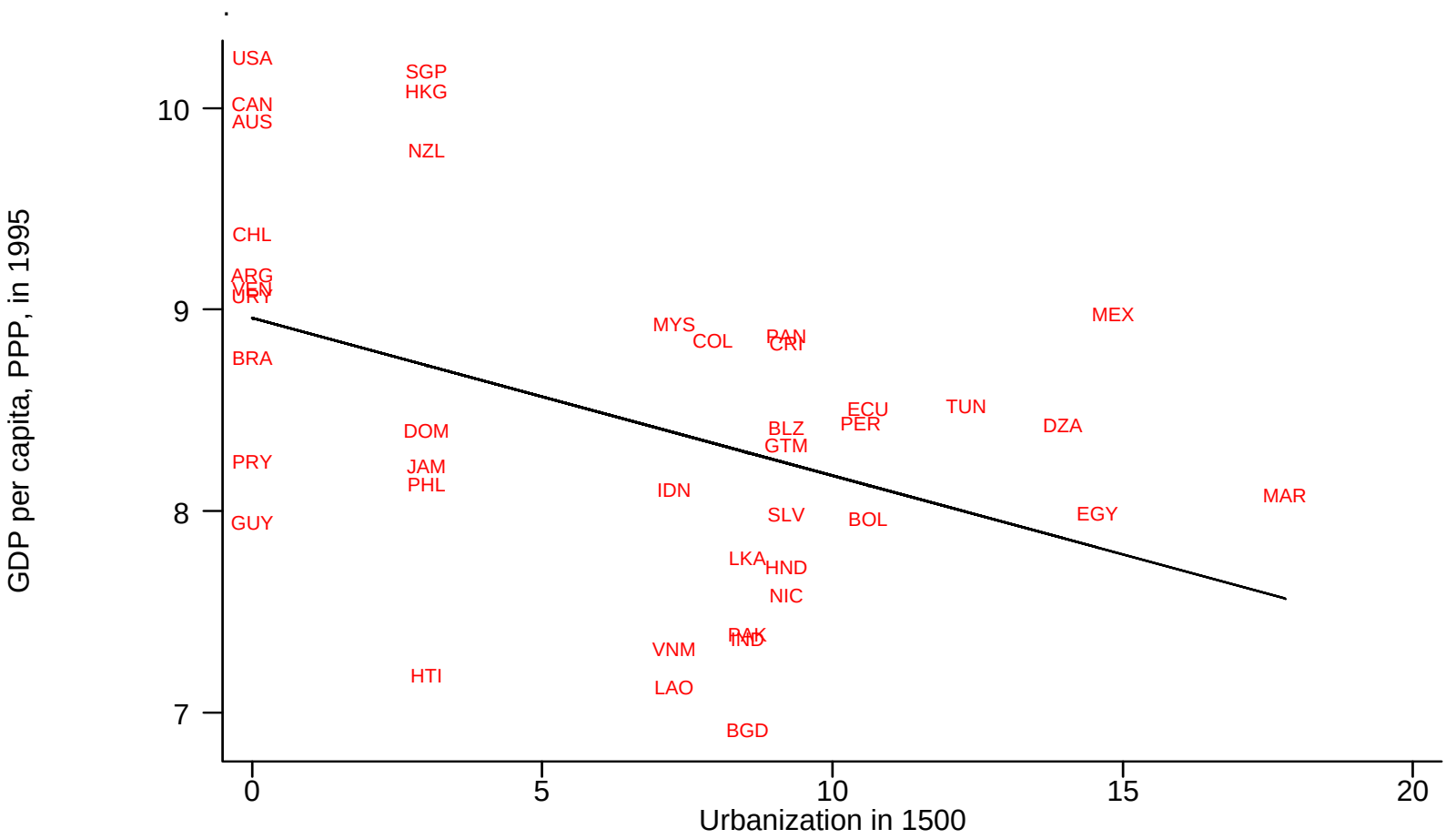
European colonization as a "natural experiment"

- After the discovery of the New World and the rounding of the Cape of Good Hope, Europeans dominated many previously diverse societies, and fundamentally affected their social organizations (institutions).
- Approximating a "natural experiment" because
  - Many factors, including geographic, ecological and climatic ones, constant, while big changes in institutions.
  - Changes in institutions not a direct function of these factors.
  - Analogy to a real experiment where similar subjects have different "treatments".
- Consequences?
- Look at changes in prosperity from before colonization (circa 1500) to today in the former colonies sample.
- Measure of prosperity before the modern era: urbanization rates
  - Supported with information on population density.

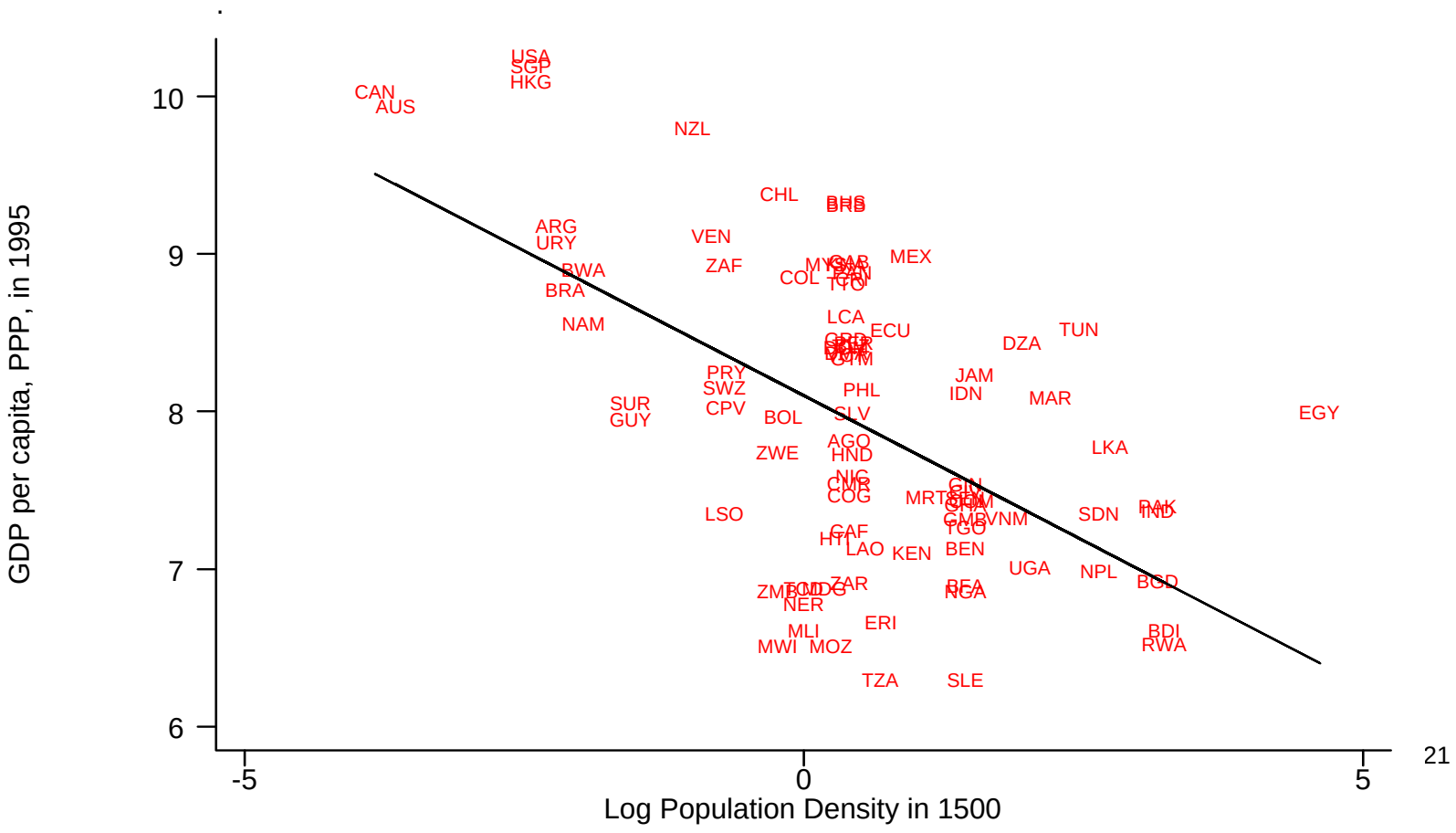
Results: until 1500

- Persistence is the usual state of the world.
  - There is “mean reversion” and rise and decline of nations, and certainly of cities.
  - But countries that are relatively rich at a point in time tend to remain relatively rich.
- The data confirm this persistence.
  - After the initial spread of agriculture, there was remarkable persistence in urbanization and population density.
  - Largely true from 1000 BC to 1500 AD, and also for subperiods.
  - More important, true also in the former colonies sample.

Reversal since 1500 (1)



Reversal since 1500 (2)



What's happening?

- Former colonies with high urbanization and population density in 1500 have relatively low GDP per capita today, while those with low initial urbanization and population density have generally prospered.
  - But gains in the growing societies not always equally shared. Native Indians and aborigines in the New World have all but disappeared.
- (Simple) Geography hypothesis?
  - It cannot be geographical differences; no change in geography.
- Sophisticated geography hypothesis? Certain geographic characteristics that were good in 1500 are now harmful?
  - no evidence to support this view; reversal related to industrialization, and no empirical link between geography and industrialization.

Understanding the patterns from 1500 to 2000

- Reversal related to changes in institutions/social organizations.
- Relatively better institutions “emerged” in places that were previously poor and sparsely settled.
  - E.g., compare the United States vs. the Caribbean or Peru.
- Thus an institutional reversal
  - Richer societies ended up with worse institutions.
  - Europeans introduced relatively good institutions in sparsely-settled and poor places, and introduced or maintained previously-existing bad institutions in densely-settled and rich places.
    - E.g.; slavery in the Caribbean, forced labor in South America, tribute systems in Asia, Africa and South America.
- Institutions have persisted and affected the evolution of income, especially during the era of industrialization
  - why to be discussed more below.

Institutions matter

- Reversal in prosperity resulting from the institutional reversal, combined with persistence in institutions.
  - Countries with “better” institutions prosper, while those with “bad” institutions stagnate or decline.
  - The reversal also emphasizes that the differences are not only between capitalist and communist systems.
  - What matters more is the “type” of capitalism.
- But then why different institutions?
  - And what are “good” and “bad” institutions?
- For now, take good institutions to be those that encourage investment in physical, human capital, and in technology, and bad institutions in the opposite
  - Are the same institutions always good and bad?

But why do institutions differ? Towards a theory of institutions

- If institutions so important for growth, why do they differ across societies?
- Answer: social conflict.
- Economic growth, like everything else, creates winners and losers.
  - E.g.: a monopolist would be opposed to a reduction in entry barriers even if these increase aggregate income.
- Whether growth-promoting institutions will be adopted or not depends on who has political power and on checks and balances.

Institutions and social conflict

- Institutions chosen for their economic consequences.
  - In particular, economic institutions which shape incentives and determine distribution of resources.
- But also taking account of their “distributional implications”
- How does society make decisions in conflictual situations (i.e., when there is no agreement on objectives?)
- Importance of political power
  - Political power: the power to impose or secure social choices against the wishes of other groups.
- Political power → social choices;
- Political power → economic institutions
- Key questions:
  - Where does political power come from?
  - What about political institutions?

Towards a "theory" of institutions

- When do we expect a society to adopt good institutions?
  1. When those holding political power benefit from property rights (and financial development, free entry, etc.)
  2. When there are relatively few resources to be extracted
  3. When constraints on political power create real checks
- Social conflict and political power are key.
  - Europeans monopolized political power and set up institutions for their own benefit, even if not beneficial for the society at large.

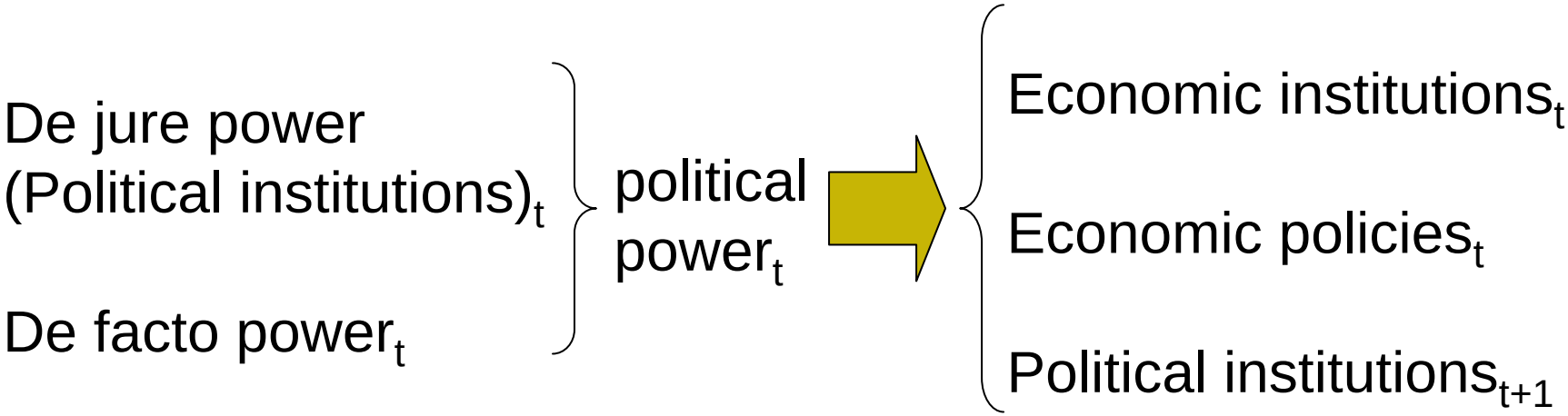
Understanding the timing of the reversal

- Why did the reversal take place in the 19th century?
- Coercive institutions imposed by Europeans not extremely costly when they dominated the major productive opportunities.
  - E.g., the plantation complex generated investment in sugar production; Barbados, Cuba, Haiti, Jamaica among the richest places in the world at some point between 16th and 19th centuries.
- The major cost of these institutions arises when new opportunities, in this instance in industry and commerce, require investment by new groups and broad-based participation.
  - 19th century was a period of industrialization, and societies with relatively democratic institutions were the ones allowing free-entry by new entrepreneurs.
  - Highlights that the same set of institutions can have very different effects under different circumstances.

A “theory” of institutions

- Economic institutions essential for the prosperity of nations
  - But also benefit different groups and individuals → social conflict
- In the presence of social conflict;
  - political power →economic and political institutions
    - good institutions emerge when they benefit those with political power.
  - political institutions → de jure political power
    - Constraints on elites often conducive to better institutions.
  - de facto political power → political institutions → de jure political power, both today and in the future
    - Toward a theory of institutional change
  - political power → institutions → political power
    - Source of persistence.

Schematic representation



What does this have to do with the current crisis?

- Current crisis inherently related to failure of (financial) institutions.
- Financial institutions central for management of risk and efficient allocation of funds.
  - Major fuel for economic growth and source of comparative advantage for the United States.
- But two problems:
  1. Agency (incentive) and information problems interacting with risk management.
  2. Danger of “financial oligarchies”.

Risk management

- Approach to risk management (implicitly) developed in the late 1990s and early 2000s based on three premises:
  1. Aggregate volatility has largely come to an end (“the great moderation”)
  2. Institution-less markets (with minimum regulation) can curb opportunity behavior.
  3. Reputational concerns of large firms will make them monitor themselves.
- But incentive problems again.

End of volatility?

- Volatility part of the essence of the capitalist system;
  - The creative destruction process.
- Together with creative destruction come micro risks, but also macro risks as large firms fail and there are linkages across firms.
- In fact, additional reasons for high volatility in modern financial markets, potentially necessitating new ideas on the design of (financial) institutions and regulation.
  - Financial and banking crises more common over the past two decades than before.
- Tail risks: Law of large numbers need not not apply because of:
  - Large firms (only one GM, only one AIG)
  - Network effects causing greater interconnectedness (a few firms supplying many)
  - Learning and imitation (similar practices spreading across many firms)

Moral hazard and incentives

- Volatility problems made worse by agency relations
  - Deposit insurance and limited liability creating misaligned incentives.
  - Financial investments delegated to agents who are not the residual bearers of losses and thus may not have incentives to reveal or highlight risks.
  - Consumers, shareholders and citizens not sufficiently informed about complex products (because of standard free rider problem) and cannot provide effective monitoring.
  - Too big and politically too powerful to fail---the new oligarchies.
  - Self-monitoring unlikely to work because of many agency relations within firms and because of the too big to fail concerns.

Institutions, again

- Solution: strengthen the institutional foundations of markets and particularly financial markets
- Institutions always necessary for market transactions (e.g., enforcement of property rights and contracts).
- Regulation as part of institutional foundations
  - FDA creates various inefficiencies in the pharmaceutical market and slows down innovation, but useful as a seal of approval for many uninformed consumers and also perhaps as “speed bump”
- Need for a new framework for “smart” financial regulation.
  - Incorporating network effects, non-transparency of information, and potential incentives for gambling.
  - Avoid competition between regulatory agencies.
  - But counterproductive incentives from regulation also unavoidable.

Lessons for the developing world

- Institutions and incentives essential for encouraging and sustaining economic growth.
  - Important to ensure institutional development
  - Foreign aid, FDI and international trade will have both direct effects and indirect effects through their implications for institutional development
- But which institutions are more important? How to change and strengthen democracy, property rights, contract enforcement, financial markets, civil society?
- Can we expect any guidance from theory to design policies to influence institutions? (Answers very much in the future).

Lessons for the developed world

- Importance of economic, political and legal institutions for continued prosperity.
- Political economy of institutions cannot be ignored even after decades of economic growth.
- Relevant today in the context of:
  - forging a new framework for financial regulation
  - creating the right market structure and incentives for continued innovation
  - ensuring that the institutional structure that was the basis of economic growth is not compromised.

Lessons for the current crisis

- Current crisis related to institutional foundations of the capitalist system
  - Excessive risk-taking and misaligned incentives related to the fact that underlying institutions (at least in the financial sector) did not provide the right incentives.
  - Important distinction between free markets and institution-less markets.
  - Regulation (financial regulation) part of the sound institutional foundations of risk management
  - But this is very different from regulation (imposition of entry barriers, industrial policy) in the trade of goods and services.