

Lionel Robbins Lectures,
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Understanding Institutions

Daron Acemoglu
(based on joint work with
Simon Johnson and
James Robinson)

The Argument

- Institutions---organization of society, “rules of the game”--- are a major determinant of economic performance and a key factor in understanding the vast cross-country differences in prosperity.
- Institutions are not exogenous, but there are potential sources of exogenous variation in history.
 - Example: the “natural experiment” of European colonization.
 - Use of history to estimate the causal effect of institutions on growth.
- Institutions are not typically chosen for the good of society, but imposed by groups with political power for their economic consequences.
 - Understanding institutions necessitates understanding the dynamics of political power.
 - Institutional reform possible, but many potential pitfalls;
 - e.g., dealing with the symptoms rather than deep causes.

Plan of the lectures (1)

- Lecture 1: Institutional Causes of Economic Performance.
 - Sources of prosperity.
 - What are institutions? Brief discussion.
 - Sources of cross-country differences in prosperity.
 - Geography versus institutions and the identification problem.
 - Learning from the Korean experiment.
 - The colonial experiment and the Reversal of Fortune.
 - Reassessing geography versus institutions.
 - Are British colonies different?
 - The role of culture.

Plan of the lectures (2)

- Lecture 2: Towards a Theory of Institutions.
 - Different meta-theories: efficiency, history, ideology and social conflict.
 - Economic institutions, political institutions and political power
 - Historical examples:
 1. Land relations in the Dutch East Indies
 2. Early financial development in the U.S. and Mexico
 3. Price regulation in Ghana, Kenya and Colombia
 - Dynamics of political power and political institutions.
 - A theory of institutions.
 - Historical examples:
 1. Atlantic trade and rise of constitutional regimes.
 2. Emergence of mass democracy in Western Europe.

Plan of the lectures (3)

- Lecture 3: Institutions, Prosperity and Change
 - Estimating the causal effect of institutions on income per capita.
 - Making further use of the colonial experience.
 - Reassessing geography, culture and religion.
 - From the long run to the short run: the effect of institutions on volatility, instability and crises.
 - Institutions and policies.
 - Institutional change; putting the theory to work
 - Institutional change; pitfalls:
 - The seesaw effect: dealing with the symptoms not causes.
 - Ignoring internal dynamics.
 - Where to go from here?

Lecture 1: Institutional Causes of Economic Performance

- Plan of Lecture 1:
 - Sources of prosperity.
 - What are institutions? Brief discussion.
 - Sources of cross-country differences in prosperity.
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 - Reassessing geography versus institutions.
 - Are British colonies different?
 - The role of culture.

Sources of prosperity (1)

- Vast differences in prosperity across countries today.
 - Income per capita in sub-Saharan Africa on average $1/20^{\text{th}}$ of U.S. income per capita
 - In Mali, Democratic Republic of the Congo (Zaire), and Ethiopia, $1/35^{\text{th}}$ of U.S. income per capita.
- Why?
- Standard economic answers:
 - 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)

Sources of prosperity (2)

- These are, however, *proximate* causes of differences in prosperity.
 - Why do some countries invest less in physical and human capital?
 - Why do some countries fail to adopt new technologies and to organize production efficiency?
- The answer to these questions is related to the *fundamental* causes of differences in prosperity.
- Potential fundamental causes:
 - Institutions (humanly-devised rules shaping incentives)
 - Geography (exogenous differences of environment)
 - Culture (differences in beliefs, attitudes and preferences)

What are institutions? (1)

- Institutions: the rules of the game in economic, political and social interactions.
 - Institutions determine “social organization”
- North (1990, p. 3):

"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

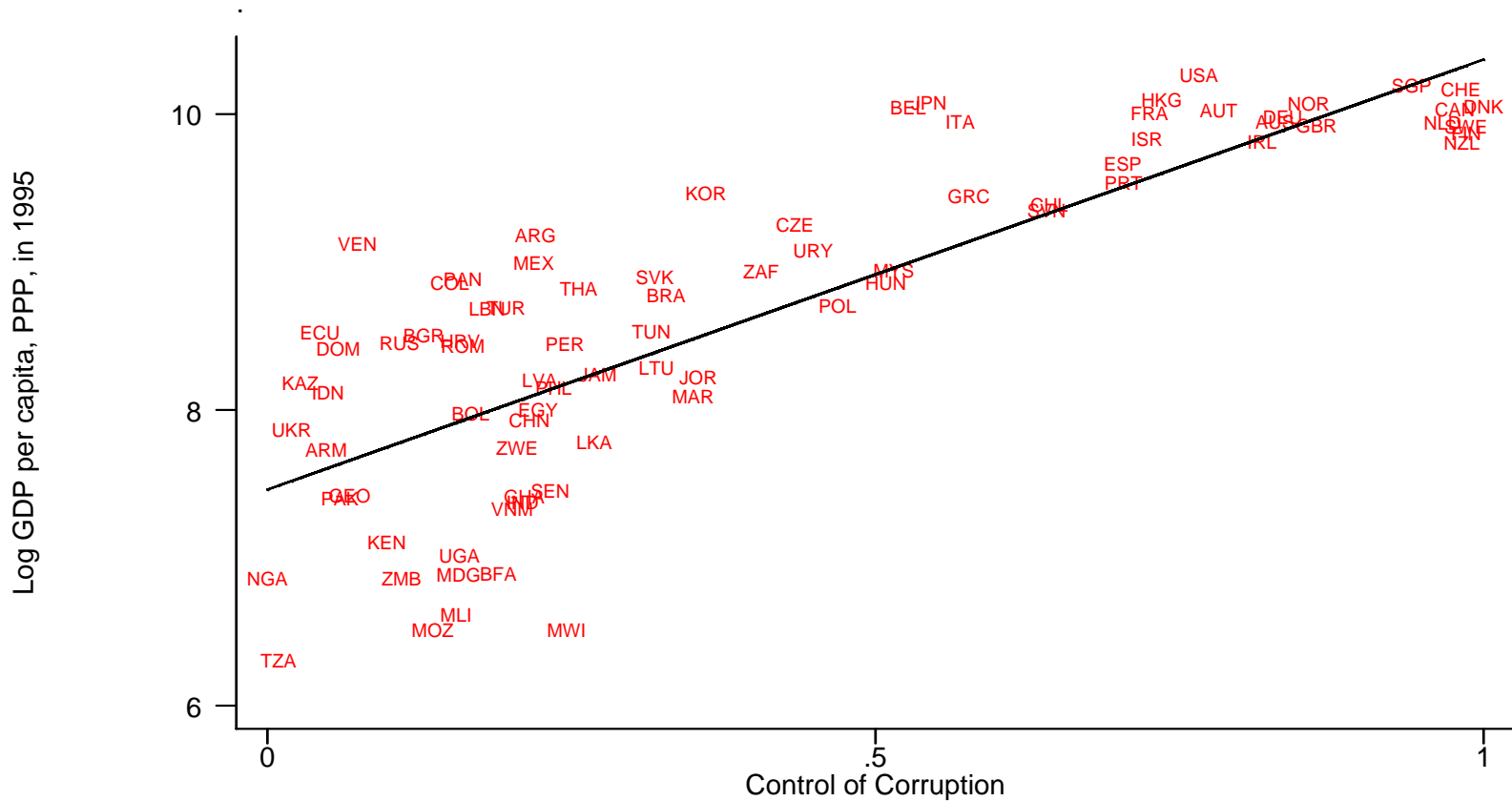
What are institutions? (2)

- A broad cluster including many sub levels:
 - economic institutions: e.g., property rights, contract enforcement, etc.
 - shape economic incentives, contracting possibilities, distribution.
 - political institutions: e.g., form of gov., constraints on politicians and elites, separation of powers, etc.
 - shape political incentives and distribution of political power.
- Important distinction between:
 - Formal institutions: codified rules, e.g. in the constitution
 - Informal institutions: related to how formal institutions are used, to distribution of power, social norms, and equilibrium.
 - Constitutions in U.S. and many Latin American countries similar, but the practice of politics, and constraints on presidents and elites very different.
 - Why? Because distribution of *political power* can be very different even when formal institutions are similar.

Institutional variation

- Big differences in economic and political institutions across countries.
 - Enforcement of property rights.
 - Legal systems.
 - Corruption.
 - Entry barriers.
 - Democracy vs. dictatorship.
 - Constraints on politicians and political elites.
 - Electoral rules in democracy.

Economic institutions and economic performance (2)



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 and ordinary least square (OLS) regressions.

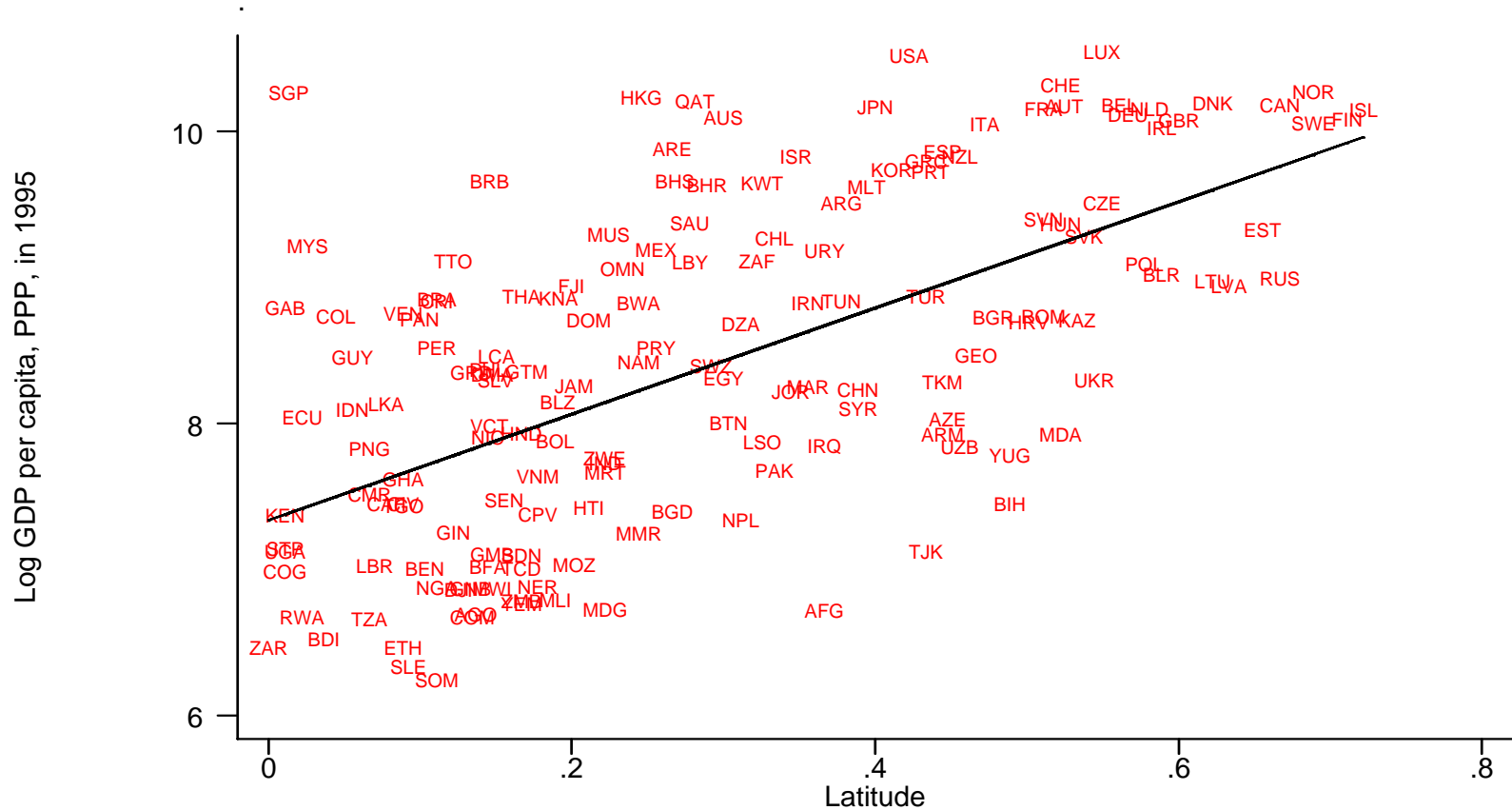
Geography hypothesis: Montesquieu

- 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. Geographical advantages might include access to key natural resources, access to the coastline and sea..., advantageous conditions for agriculture, advantageous conditions for human health."
 - "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"

Montesquieu's story?



Empirical pitfalls of correlations and ordinary least square estimates

- 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.
- Attenuation bias:
 - Measures of institutions very coarse, poorly correspond to conceptual measures, creating “errors in variables” problem.

Need for exogenous variation

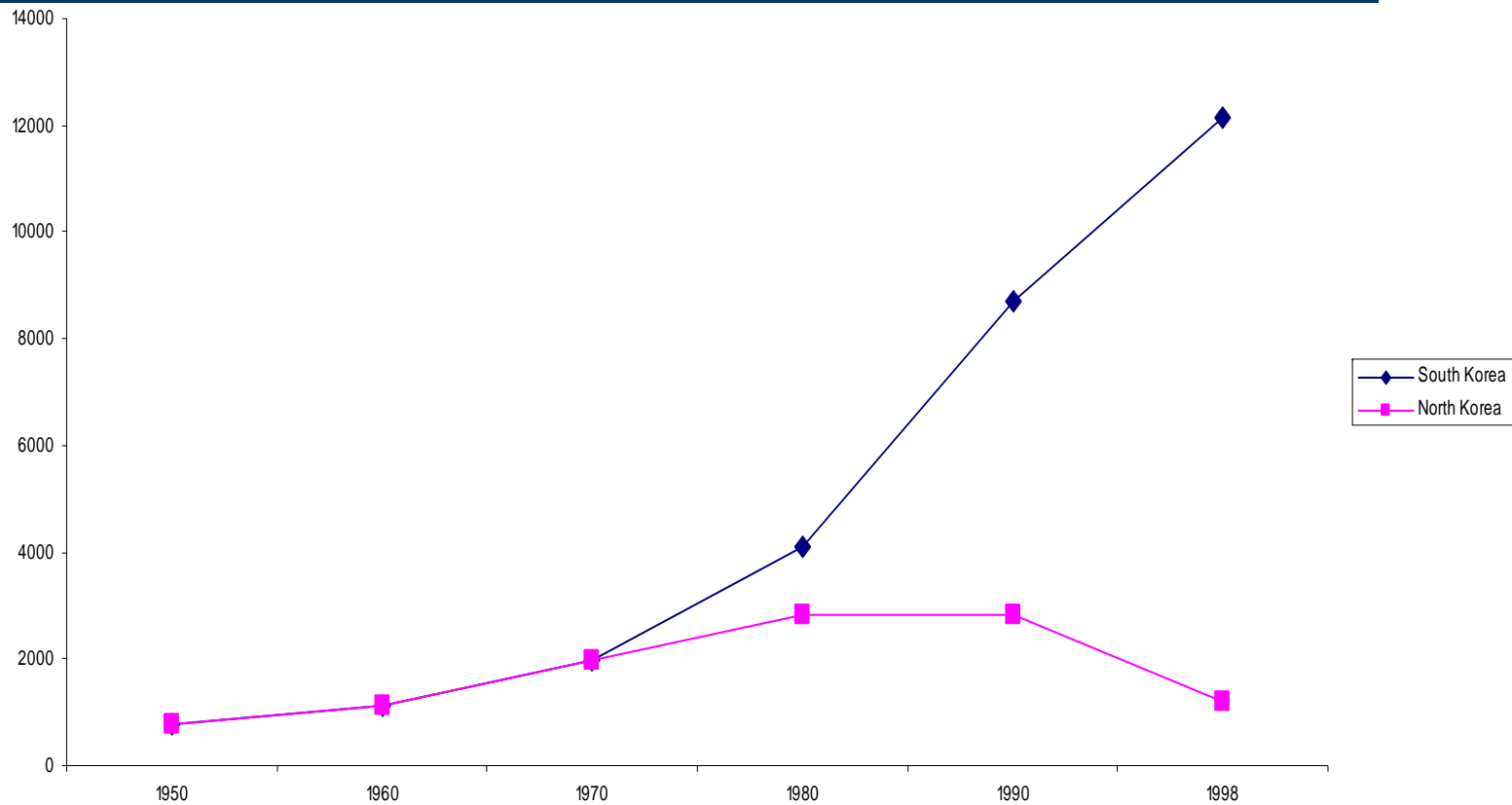
- Exploit “natural experiments” of history, where some societies that are otherwise similar were affected by historical processes leading to institutional divergence.
 - Building towards an “instrument” for institutions (Lecture 3);
 - a source of variation that affects institutions, but has no other effect, independent or working through omitted variables, on income.
- Examples of potential natural experiments of history:
 1. South versus North Korea
 2. European colonization
 3. Chinese experience

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

GDP per capita



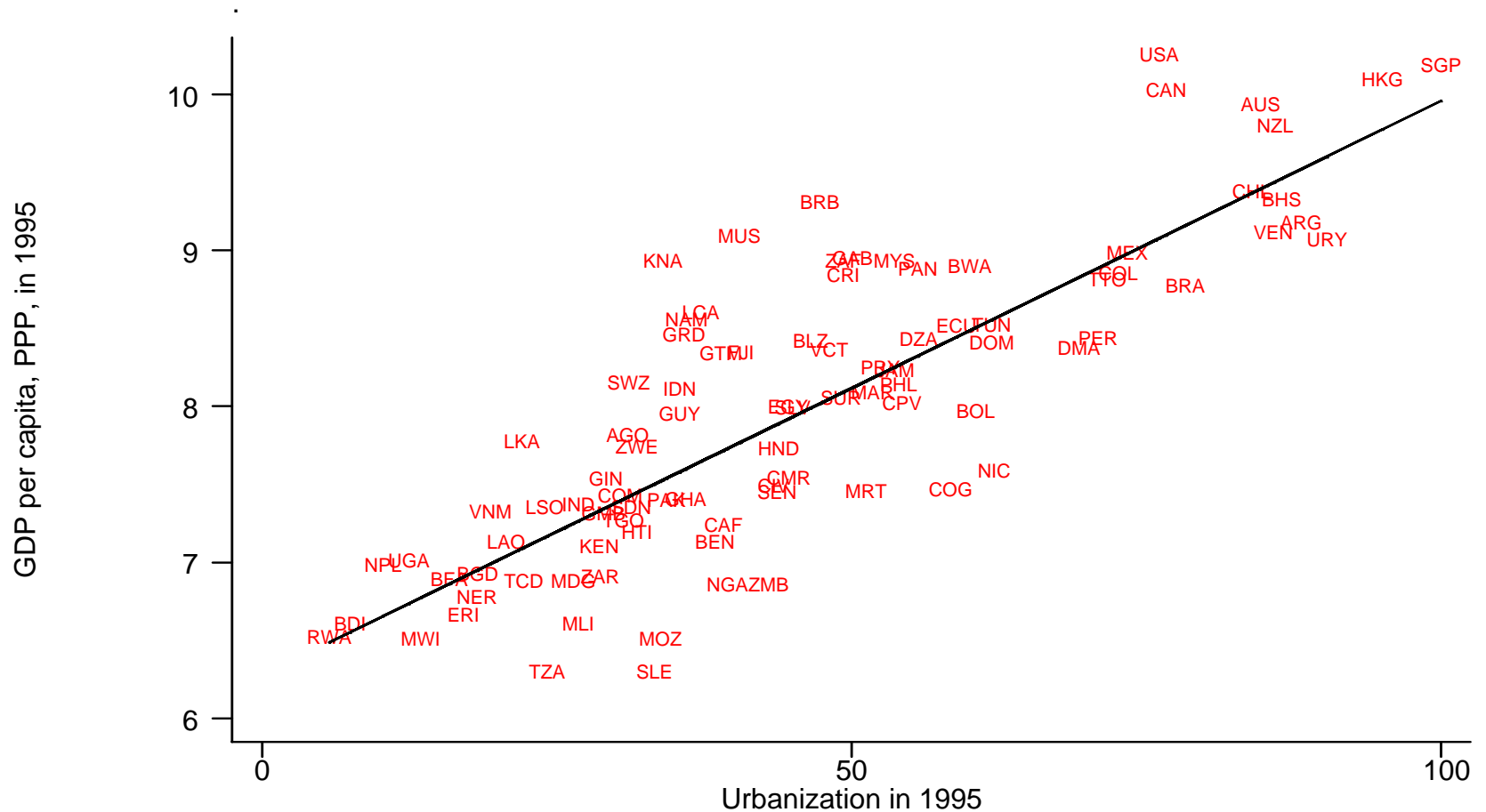
European colonization as a “natural experiment”

- 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*.

Measuring prosperity before national accounts

- To answer these questions, we need a measure of prosperity before the modern era.
- Urbanization is a good proxy for GDP per capita (Bairoch, Kuznets, de Vries).
- Only societies with agricultural surplus and good transportation network can be urbanized.
- Urbanization is highly correlated with income per capita today and in the past.
- And we can construct data on urbanization in the past (Bairoch, de Vries, Eggimann)
- In addition, use population density as a check.
 - Useful also because related to the causal mechanism in Lecture 2.

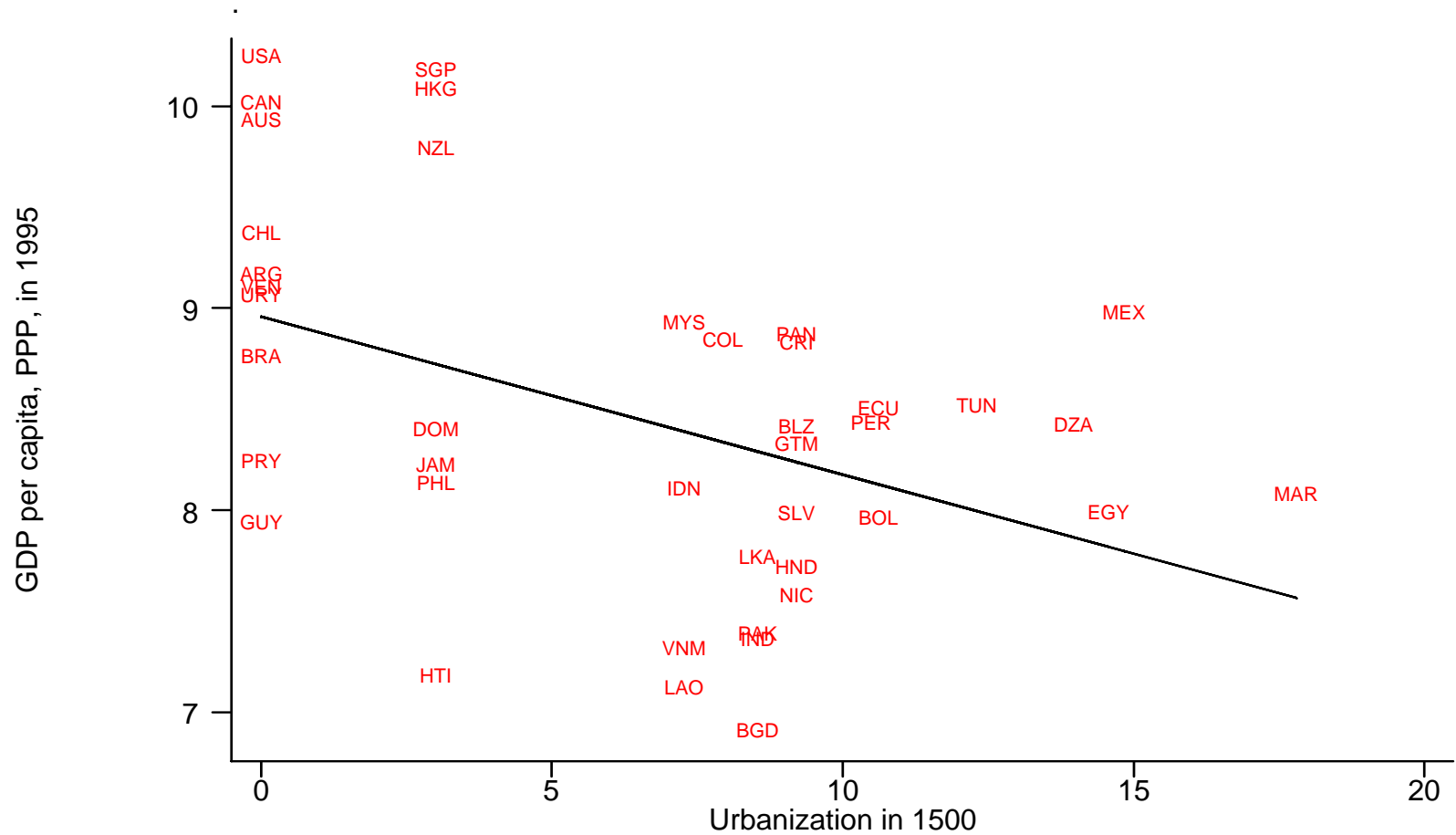
Urbanization and income today



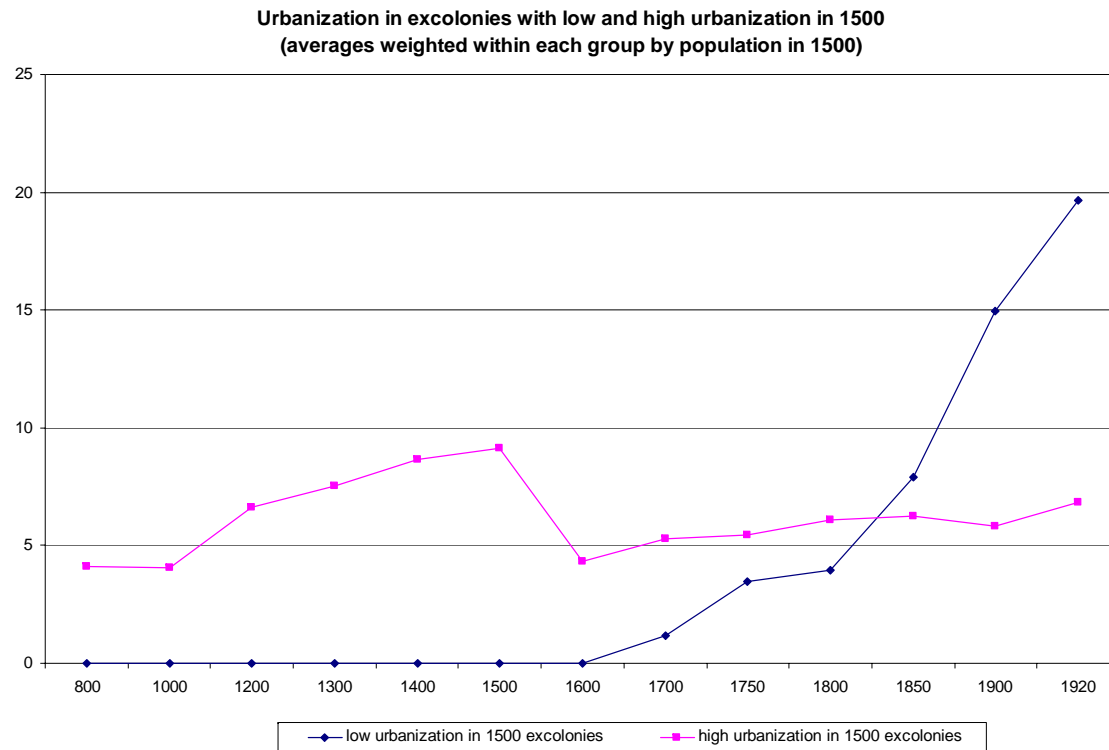
Results: until 1500

- 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)

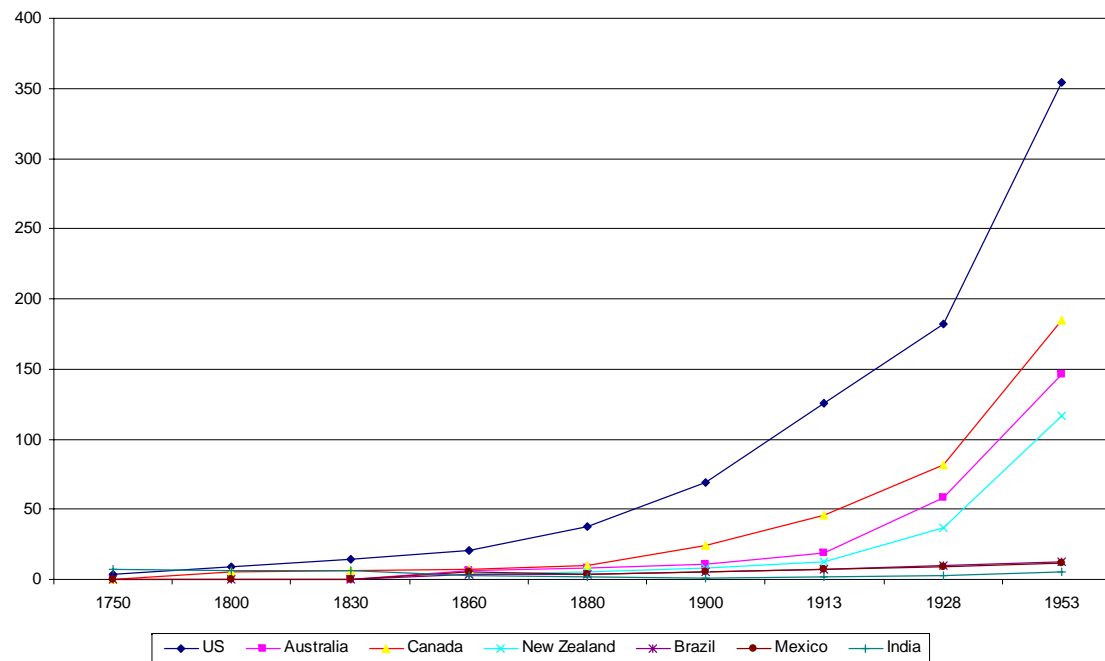


When did the reversal happen?



The nature of the reversal: industrialization

Industrial Production Per Capita, UK in 1900 = 100
(from Bairoch)



What's happening?

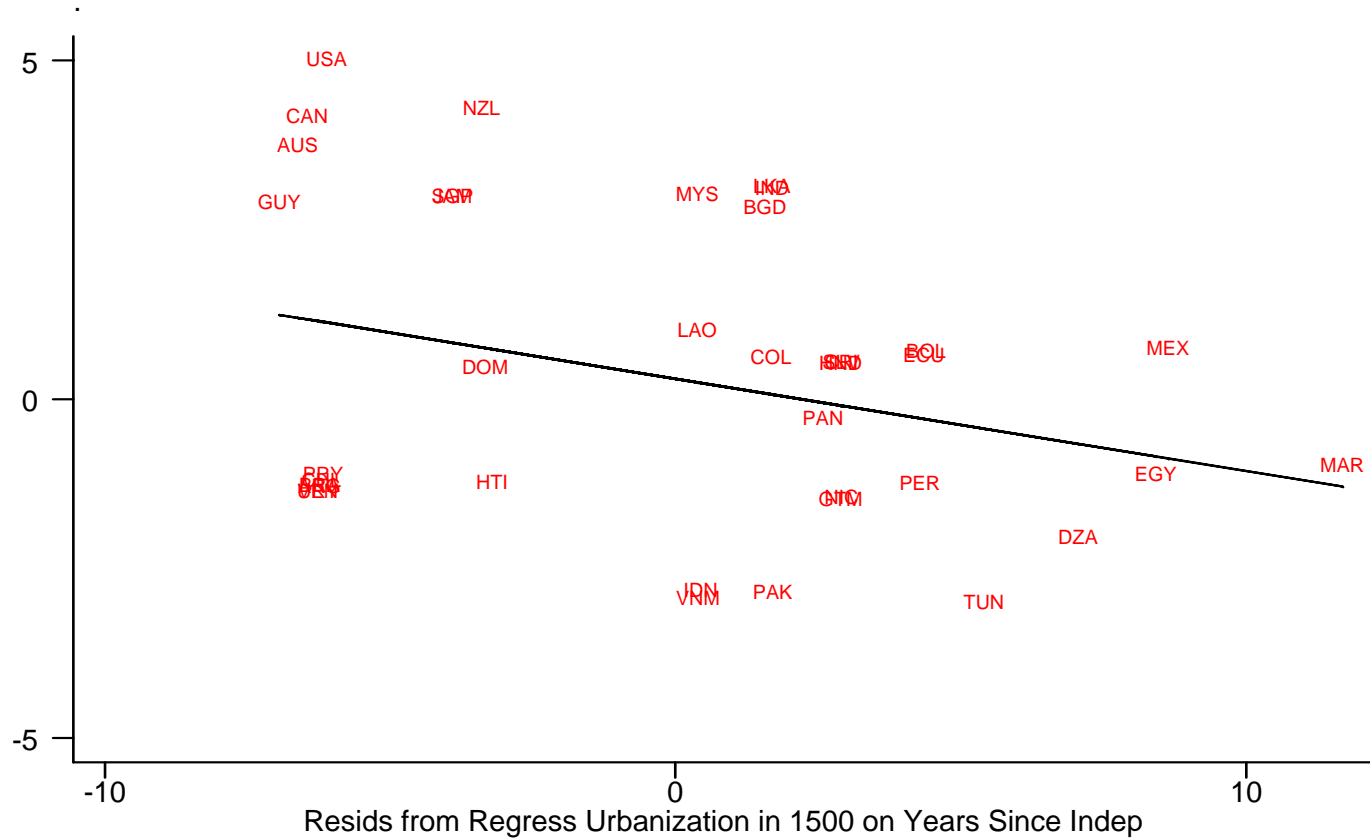
- Former colonies with high urbanization and population density in 1500 have relatively low GDP per capita today, while those with low initial urbanization and population density have generally prospered.
 - But gains in the growing societies not always equally shared. Native Indians and aborigines in 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.

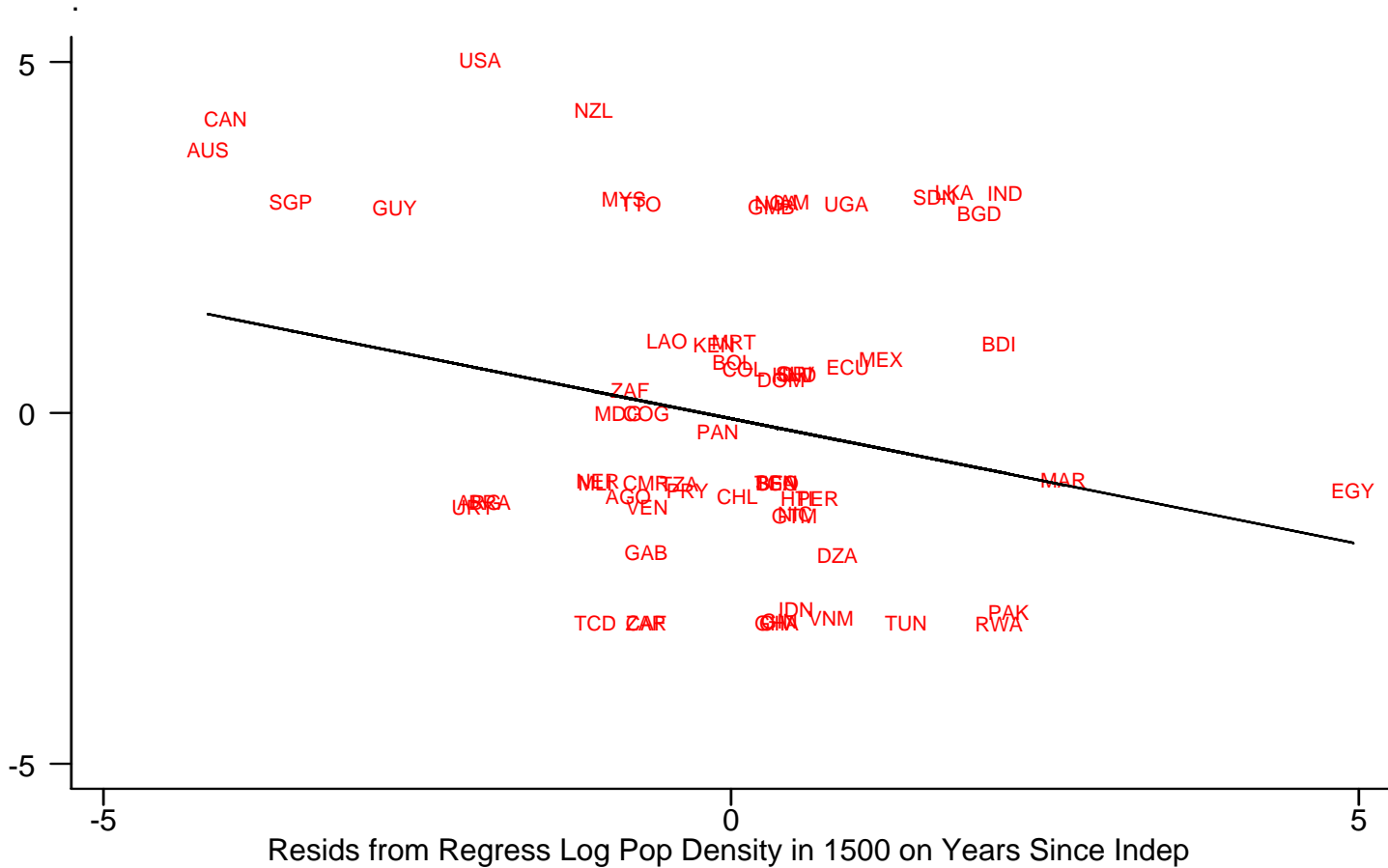
The institutional reversal (1)

Resids Cons. Executive First Year Indep on Years Since Indep



The institutional reversal (2)

Resids Cons. Executive First Year Indep on Years Since Indep



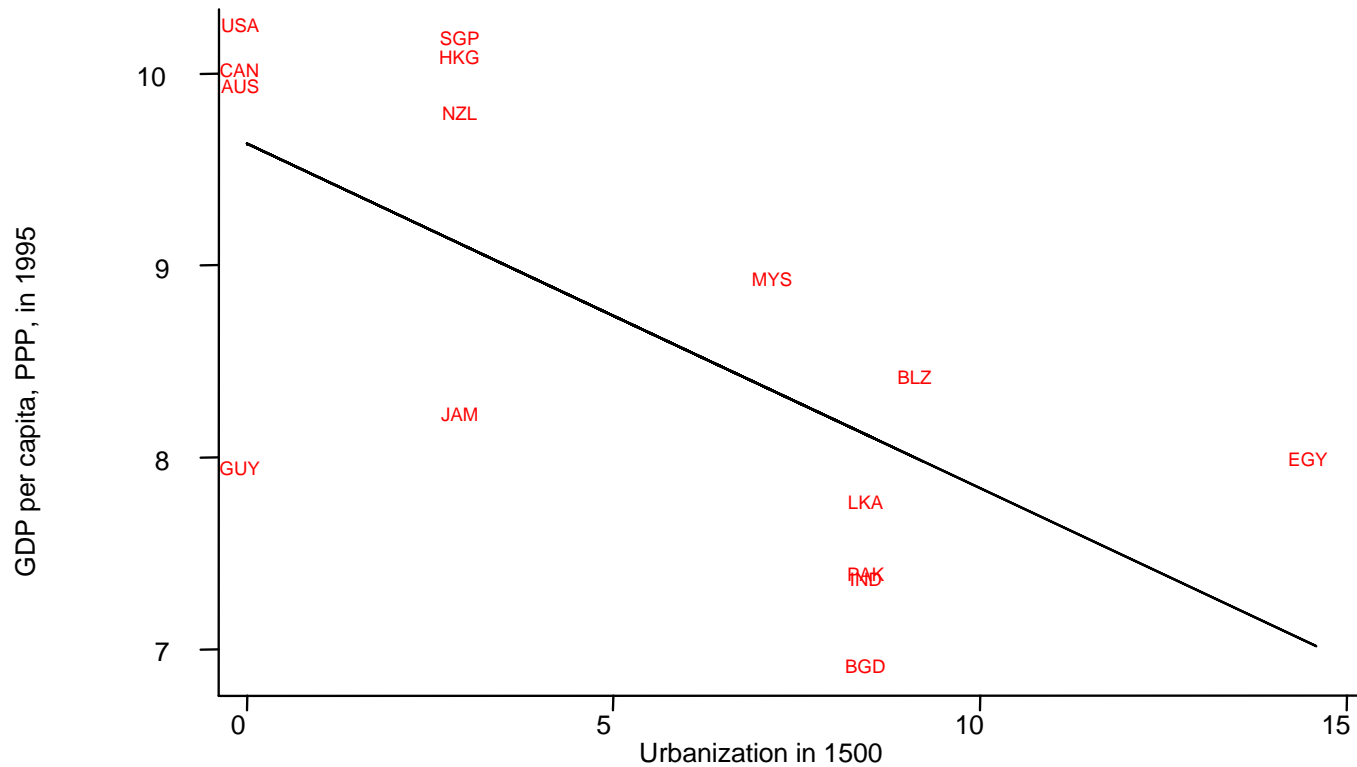
Institutions matter

- 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? Discussed later.

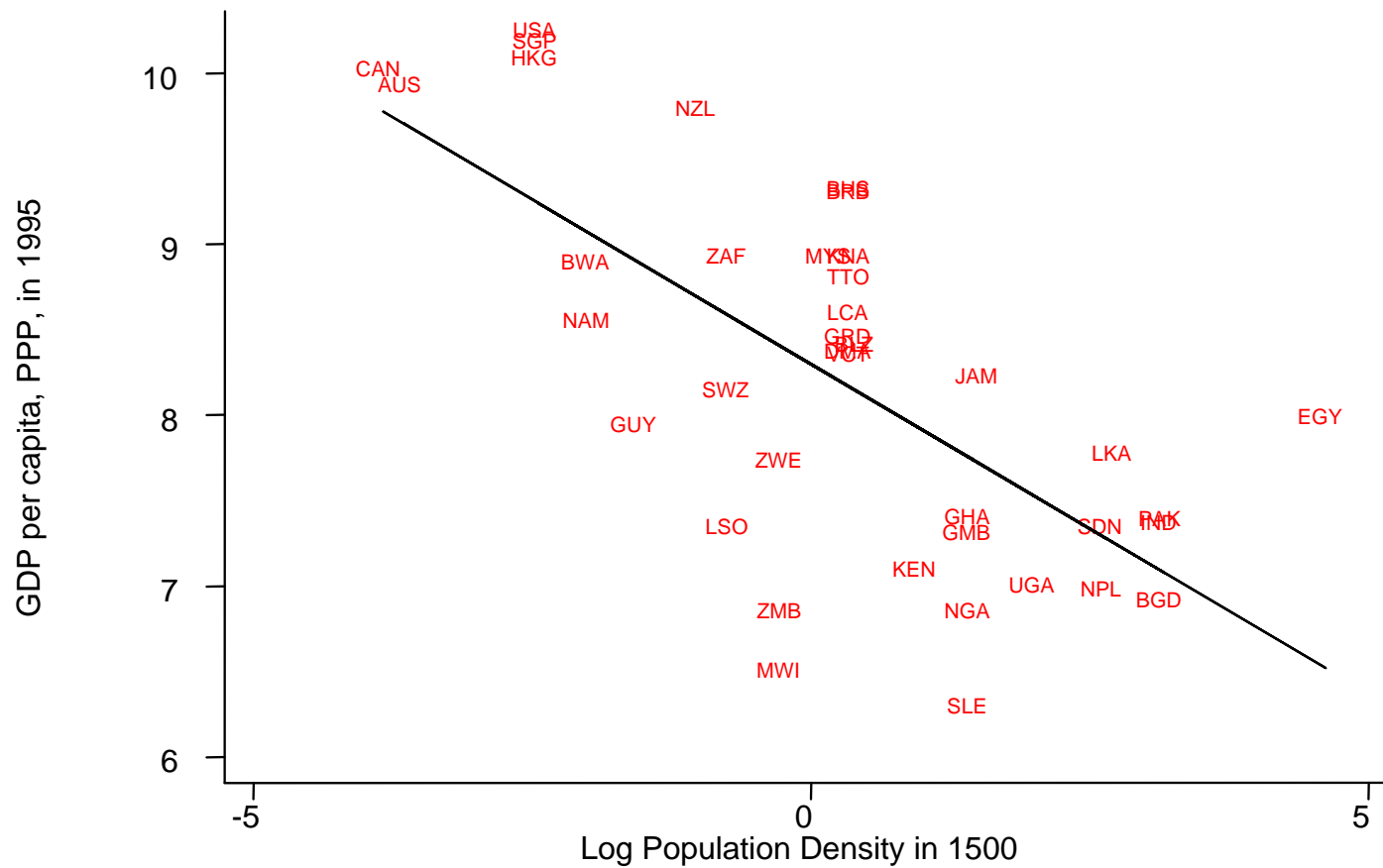
Are British colonies special?

- Popular view going back to Adam Smith and Winston Churchill that British cultural and political influence was beneficial, certainly better than that of Spanish and French influence.
- Does the evidence support this view?
- The answer is no.
 - The patterns shown above are robust to controlling for the identity of colonial power.
 - Similar patterns when we look at only British colonies.

The Reversal among former British colonies (1)



The Reversal among former British colonies (2)



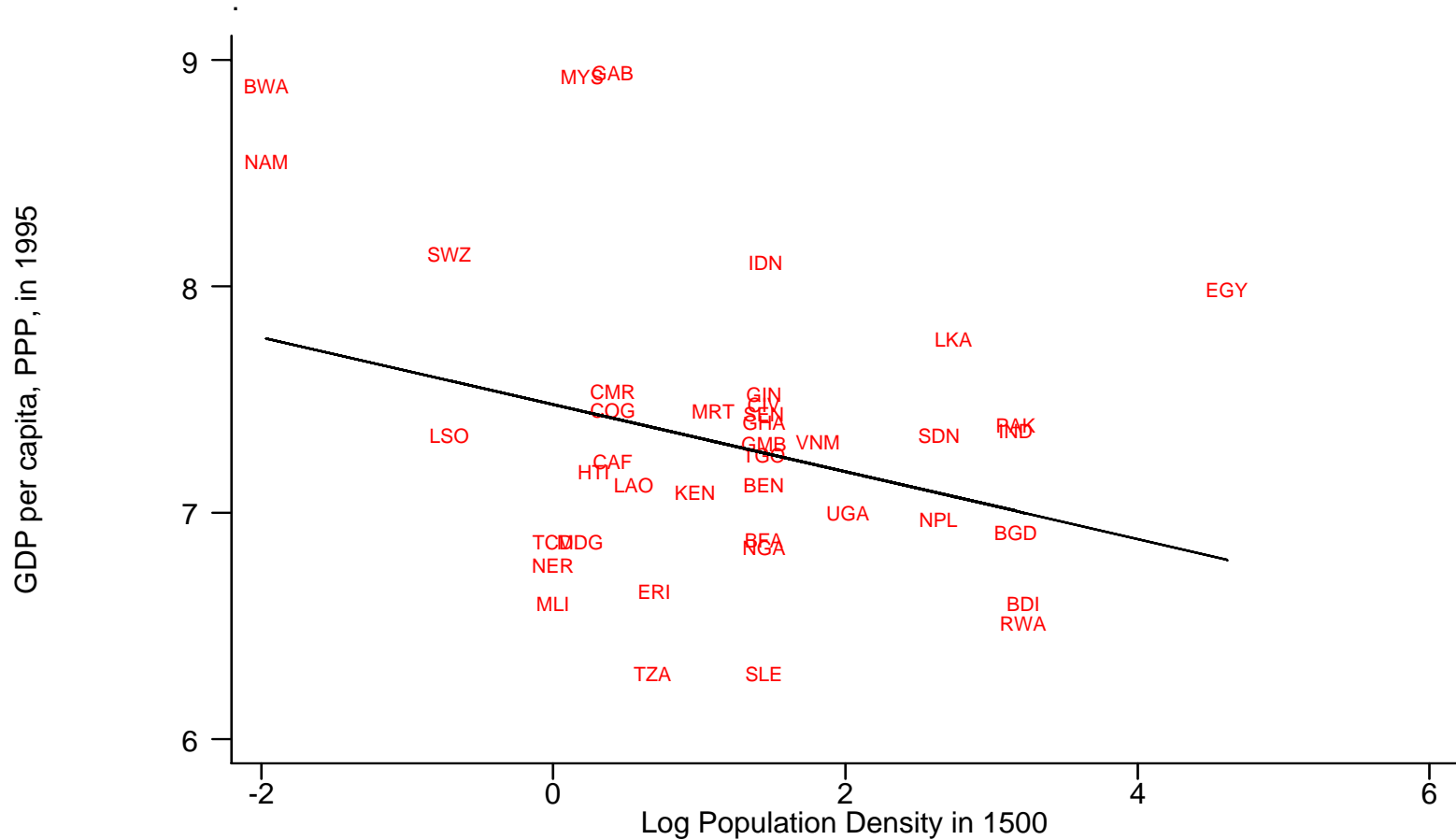
The role of culture (1)

- Can all this be related to culture?
- What is culture?
 - Culture is a relatively fixed characteristic of a group or nation, affecting beliefs and preferences. Example: religion
 - Useful distinction between culture and informal institutions.
 - Informal institutions are related to how society shapes incentives, and are related to equilibrium of a given game (typically defined by formal institutions, distribution of income, political power etc.).
 - Informal institutions are not fixed, and change with economic conditions and distribution of power, though they are typically highly persistent.
- Culture not useful in understanding the Korean divergence
 - North and South were culturally homogeneous.

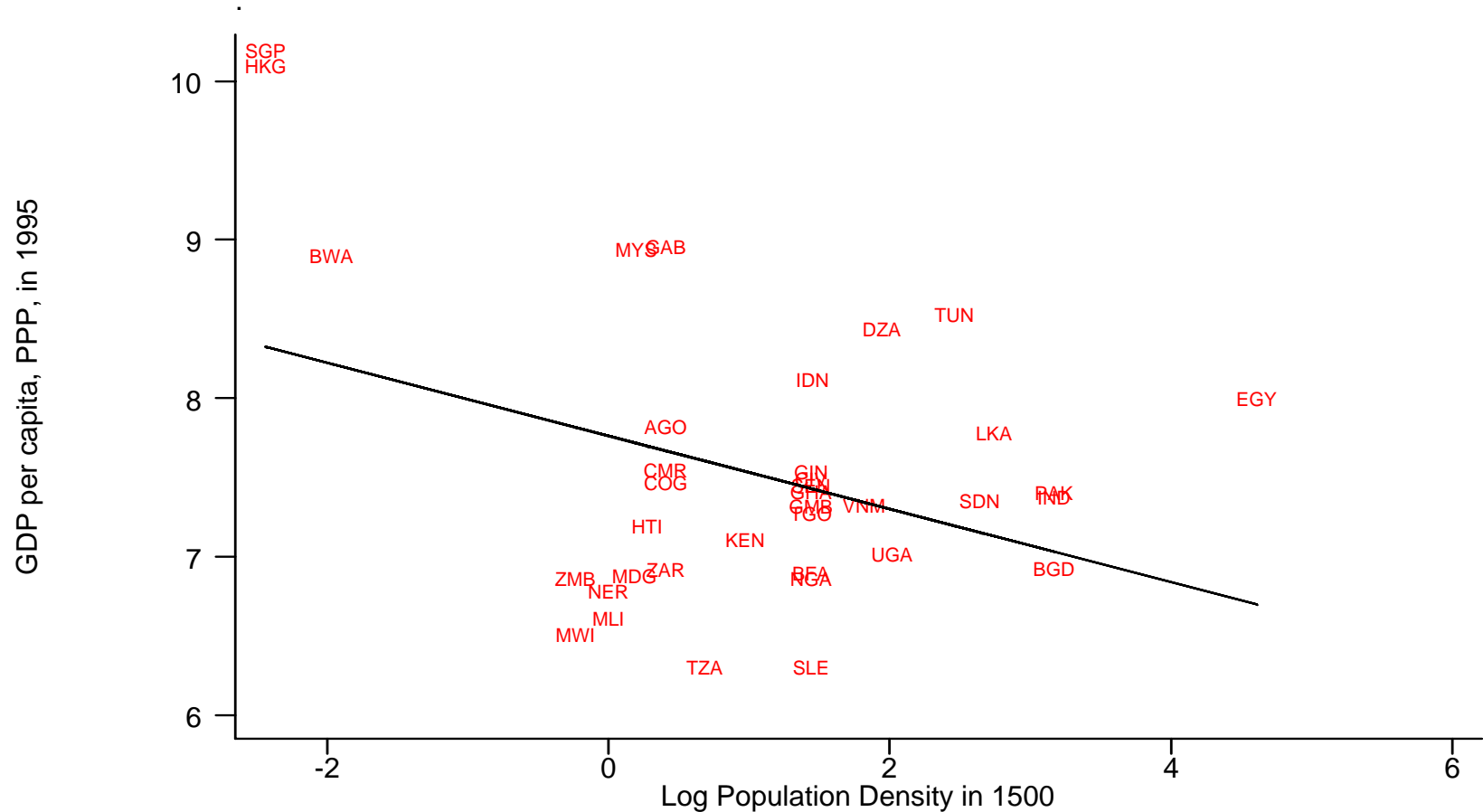
The role of culture (2)

- Possible that the reversal related to culture.
 - But the growth trajectories of British colonies similarly to Spanish, Portuguese and French colonies once we control for differences in local conditions.
 - Moreover, no econometric evidence that religion matters for understanding the reversal or for long-run growth (to be discussed more in Lecture 3)
 - Reversal also not related to the presence of Europeans.
 - Examples of prosperity in Singapore and Hong Kong, where population is now almost entirely non-European, but institutions protect investment.
- Overall, no evidence that European values or culture played a special role.

The Reversal for colonies with less than 1% Europeans in 1900



The Reversal for colonies with less than 1% of European descent in 1975

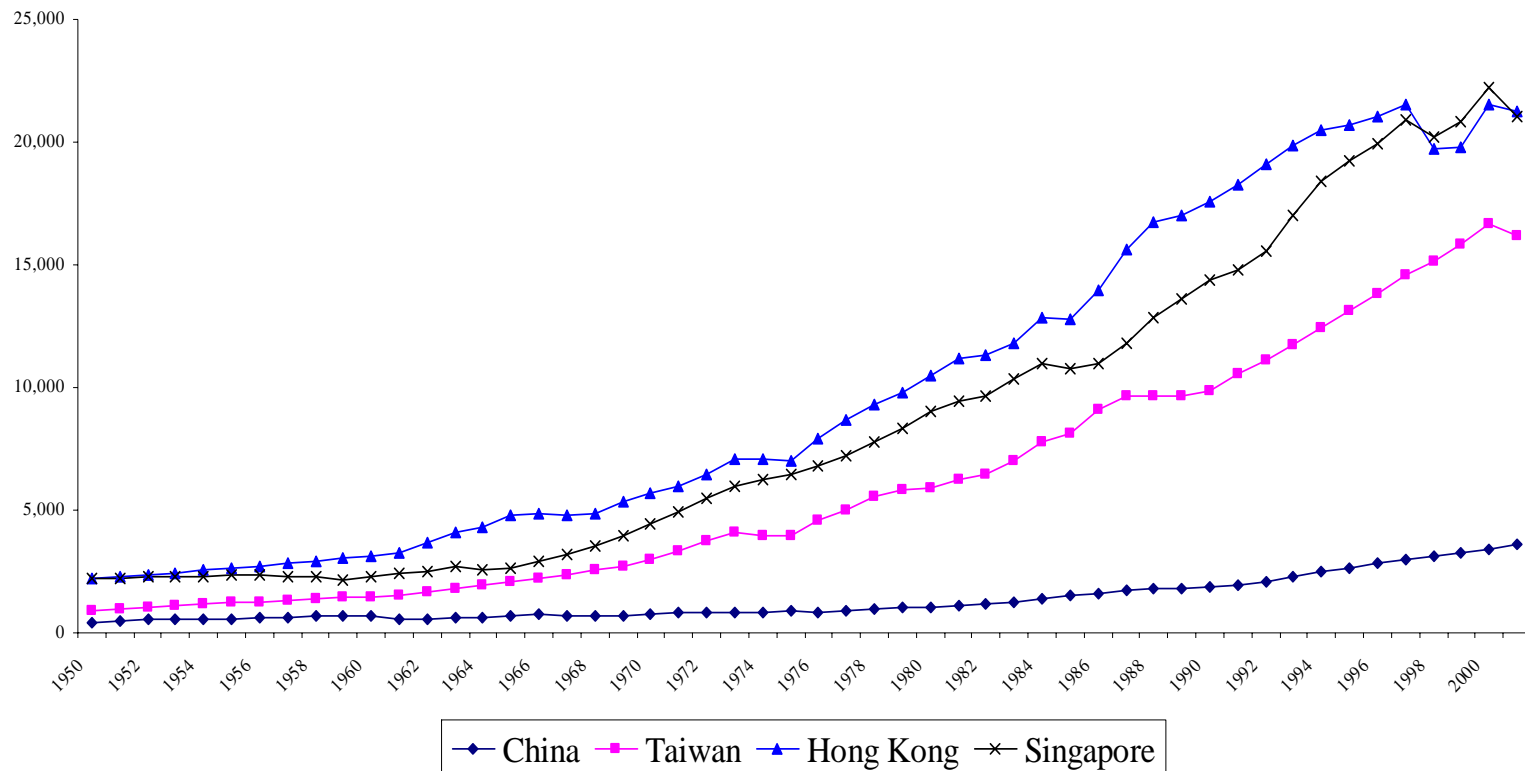


The role of culture (3)

- The Chinese experience informative about the role of culture versus institutions.
 - China, Hong Kong, Singapore and Taiwan many cultural and ethnic similarities.
 - While China adopted state planning and communist political institutions, Hong Kong, Singapore and Taiwan followed a capitalist path with relatively well-enforced property rights.
 - While Hong Kong, Singapore and Taiwan prospered, China stagnated.
 - After the Mao's death and 1978 reforms, especially the introduction of some basic property rights, changes in economic incentives in China, and now very rapid growth rate.

Role of culture (4)

GDP per capita in China, Taiwan, and Hong Kong, 1950-2001



Lecture 2: Towards a Theory of Institutions

- Outline:
 - Recap of Lecture 1.
 - Different meta-theories: efficiency, history, ideology and social conflict.
 - Economic institutions, political institutions and political power
 - Historical examples:
 1. Land relations in the Dutch East Indies
 2. Early financial development in the U.S. and Mexico
 3. Price regulation in Ghana, Kenya and Colombia
 - Dynamics of political power and political institutions.
 - A theory of institutions.
 - Historical examples:
 1. Atlantic trade and emergence of constitutional regimes
 2. Emergence of mass democracy in Western Europe.

Recap of Lecture 1

- Sources of income differences and proximate versus fundamental causes.
- Institutions as humanly-devised rules affecting incentives, potentially determining cross-country differences in prosperity
- But identification problem; we can learn only a limited amount from correlations and OLS regressions.
 - Alternative fundamental determinants: geography, culture.
- Empirical strategy: exploit natural experiments of history.
- The Korean experiment.
- The colonial experiment and the Reversal of Fortune.
- Reassessing geography versus institutions.
 - Little evidence of the primary role of geography, and strong evidence that institutions matter for long-run performance.

Four meta-theories of institutions

1. Efficiency: institutions that are efficient for society (e.g., for aggregate growth or welfare) will be adopted.
2. Ideology: differences in beliefs determine institutions (societies choose radically different institutions because citizens or elites have different beliefs about what's good for economic growth).
 - Perhaps North Korea chose planned economy because its leaders believed it was “better”.
3. History: institutions determined by historical accidents or unusual events, and are unchanging except for random events and further accidents.
 - Legal system today determined by past historical accidents.
4. Social conflict: institutions chosen for their distributional consequences by groups with political power.

Which approach? (1)

- Efficient institutions view: not a useful framework
 - Although, *everything else equal*, there would be a tendency to adopt efficient institutions, *everything else far from equal* in practice.
 - Every set of institutions creates different losers and beneficiaries. Efficient institutions require either the losers to be compensated or the beneficiaries to impose their choice.
 - But in practice, losers generally not compensated ex post, and often can be powerful enough to block institutional change that is beneficial in the aggregate.
 - Empirically, efficient institutions view cannot help us understand why some societies adopt institutions that were disastrous for economic growth.

Which approach? (2)

- Ideology view: not a useful framework by itself either
 - Clearly, beliefs across societies differ, and existing regimes remain in place by gaining some degree of approval.
 - Propaganda and media extremely important for regime survival.
 - But many empirical patterns cannot be explained by ideology.
 - In the Korean case, the original divergence in institutions partly related to ideology, but the persistence of communist system not only because of ideology; those with political power want the continuation of the system that is good for them.
 - For the reversal, same or similar groups of colonists opting for very different sets of institutions in colonies with different local conditions. Clearly not related to their beliefs about what's good for the society as a whole.
 - Example: the Puritan colonies in Massachusetts Bay and Providence Island.

Which approach? (3)

- History: ample evidence that institutional choices persist.
- But they are also choices, not simply dictated by history.
- Need to understand why institutions persist, and why, and how, they change.
- Examples:
 - While the communist system persisted in North Korea, it collapsed in Eastern Europe and Russia.
 - Persistence in China until 1978 and change thereafter.
 - Very different institutions in North and South America during the early colonial era and after independence.

Which approach? (4)

- Institutions and social conflict:
- (Economic) Institutions shape incentives and determine the allocation of resources
 - Each set of institutions creates beneficiaries and losers; certain groups obtain high incomes, rents and privileges.
 - Thus “distributional” implications from institutional choices.
 - Preferences over institutions determined by their distributional implications.
 - E.g.: a monopolist would be opposed to a reduction in entry barriers even if these increase aggregate income.
 - Empirically more promising:
 - We can explain inefficient choices, even when their consequences are understood by the key actors.
 - Also we can investigate when institutions will be more or less efficient, that is, “comparative static” exercises.

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 what should be done?)
- 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 to be addressed later;
 - Where does political power come from?
 - What about political institutions?

Sources of inefficiency: commitment problems in politics

- Why doesn't society buy off politically powerful losers?
- Key problem: commitment.
 - Promise of compensation after institutional change not credible.
 - Political power creates commitment problems.
 - Contrast contracting between two private citizens versus political contracting between two parties one of whom holds political power.
 - The two private citizens can write contracts enforced by a third party with enforcement power.
 - In contrast, in politics, the party with political power cannot commit to refrain from hold up; promise of a dictator not to expropriate after investments is not credible.
 - There is also no credible transfer of political power in exchange for future payments; promise of payments to a dictator after he relinquishes power is not credible.

Endogenous (economic) institutions from history

- Examples of economic institutions chosen not because of overall efficiency, or because of ideology, or resulting from historical accidents, but chosen for their economic consequences by groups with political power:
 1. Land relations in the Dutch East Indies
 2. Early financial institutions in the Americas: Mexico vs. United States.
 3. Price regulation in Ghana, Kenya and Colombia.
 4. Back to the colonial experience.

Land relations in Dutch Indies (1)

- Dutch East India Company (V.O.C.) monopolizing the production of valuable spices (nutmeg, cloves and mace) in the Moluccas, in particular, in Ambon and Banda islands.
- Different indigenous organization between the islands.
- van Zanden (1993):
 - “[in Ambon] The Company ... took over the existing feudal structure of raising tribute,” monopolizing supply (excluding the British and Portuguese).
- They also used this feudal structure to increase the output of cloves.

Land relations in Dutch Indies (2)

- In Banda, in contrast, there were many small autonomous city states, but
 - “...There was no hierarchical social and political structure that could impose the will of the V.O.C...”, especially stopping locals from selling nutmeg to the British and the Portuguese.
- The V.O.C. decided to change the economic institutions on Banda, via a radical solution:
 - “Through military action, the V.O.C. killed most of the population in 1621...” and completely reorganized the production of nutmeg and established a slavery system, with the slaves supplied by the V.O.C. and its former employees as planters.

Financial institutions in Mexico and the U.S. (1)

- Big differences in the structure of banking between the U.S. and Mexico in the 19th century, during the critical period of divergence.
- Haber (2001)
 - “Mexico had a series of segmented monopolies that were awarded to a group of insiders. The outcome, circa 1910, could not have been more different: the U.S. had roughly 25,000 banks and a highly competitive market; Mexico had 42 banks, two of which controlled 60 percent of total banking assets, and virtually none of which actually competed with another bank.”
- Adverse consequences for Mexican industry.
 - Lending by monopoly banks to inefficient firms of friends and associates.

Financial institutions in Mexico and the U.S. (2)

- Why?
- Power of insiders and state governments in Mexico, supported by the dictatorship of Porfirio Diaz.
- In 1789, the U.S. structure also similar.
 - Haber: [in the U.S. in late 18th century] “... it was not in the interest of state governments to charter large number of banks and create a competitive market for banking services”
 - Many U.S. politicians, including Alexander Hamilton, wanted to create monopolies.
- But expanding frontier, which caused interstate competition, and universal male suffrage made this system unsustainable.
- Insiders did not have enough political power to impose their preferred institutions, which would have been inefficient for society at large.

Price regulation (1)

- Another form of economic institution: marketing boards regulating agricultural prices.
 - Originally, introduced to prevent large fluctuations in farm revenues
- Bates (1981): very different form of price regulation in LDC agricultural markets.
- Ghana and Zambia: low prices paid to farmers through marketing boards, surplus transferred to politicians or urban groups.
- Kenya and Colombia: much more pro-farmer policies and institutions.

Price regulation (2)

- Why?
- In Ghana and Zambia, but not in Kenya and Colombia, farmers had little political power.
 - In Ghana, cocoa farmers small and unorganized, and also from different ethnic group than the ruling party, while urban groups politically more powerful.
 - In Kenya, larger farmers with greater political power.
 - In Colombia, farmers with greater power through more democratic and competitive politics.
 - Interestingly, during the military regime of the '50s when democratic politics suspended, pricing was set to extract surplus from farmers.

Summary of the three cases

- Institutions not dictated purely by history, but chosen by society.
- Moreover, they are chosen, not for efficiency nor because of differences in beliefs, but for their distributional consequences.
 - Social conflict and political power important.
 - In all cases economic institutions chosen for their consequences, and particularly *the rents* created for the politically powerful groups.
 - In almost all cases, the resulting economic institutions harmful for certain groups, and in many cases harmful for society at large.

Further lessons from the examples

- Key lesson:
political power → economic institutions
- Kenya vs. Ghana suggests a link between economic institutions and political power;
 - Kenyan farmers that were larger and wealthier had political power, while small farmers in Ghana did not.economic institutions → political power
- Mexico vs. U.S. and Colombia vs. Ghana show the influence of political institutions on political power
political institutions → political power
- And we will see below:
political power → political institutions.

Towards a theory of institutions: comparative statics

- When do we expect a society to adopt good institutions?
 1. When those holding political power also will benefit from well enforced property rights (and financial development, free entry, functioning markets etc.)
 2. When there are relatively few resources to be extracted or exploited using political power
 3. When constraints on political power preclude expropriation or the imposition of institutions detrimental to excluded groups.
- Question: why use political power to protect others' property rights?
 - Reputation: protection will generate greater investments and thus greater revenues in the future, but hard to sustain.
 - Oligarchic solution: protect only the rights of the elite, good for investment by the elite, but not for the rest (to be discussed below).

History, ideology and social conflict in the colonial experience

- Those with political power, the “Europeans”, set up different economic institutions in different colonies.
 - Smallholder production in northeastern U.S., slavery in the Caribbean, forced labor in Central America.
- Not historical accident.
 - Europeans did restructure existing institutions, and introduce new institutions in many colonies.
- Not ideology
 - the same British groups, opting for different structures and different colonies; e.g., the U.S. vs. Caribbean, Massachusetts Bay vs. Providence Island.
- 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.

Comparative statics in action in the colonial experience (1)

- Why the institutional reversal?
- “Europeans” monopolizing political power opted for very different institutions in different colonies.
 - In practice, Europeans not a monolithic entity; considerable heterogeneity and conflict, e.g., between Lord Baltimore and indentured servants in Maryland.
- Comp. Stat. 1: more profitable to set up good institutions when Europeans themselves will benefit.
 - Better institutions in places where Europeans settle and become a significant fraction of population (typically places with low initial population density).
- Comp. Stat. 2: more profitable to set up good institutions when little to expropriate.
 - Better institutions in places with low population density and/or fewer resources to extract (i.e., low prosperity, low urbanization).

Comparative statics in action in the colonial experience (2)

- Comp. Stat. 3: better institutions more likely to emerge when there are constraints on political elites.
 - In colonies of settlement (where population density low), lower strata of the settlers, the indentured servants in the U.S. and children of ex-convicts in Australia, put constraints on the use of power by elites and demanded equal treatment and protection before the law; emergence of democracy.
- But Europeans also structured the political institutions differently to support the different economic institutions.
 - More democratic in U.S., repressive in Caribbean, Central America.
- Comp Static 3 again: once political institutions constrain the use of political power, good institutions likely to persist.
- Conversely, when the state structure is highly hierarchical, coercive and without checks and balances, persistent incentives to expropriate and fight to control the state apparatus.

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.

Problems of Oligarchy

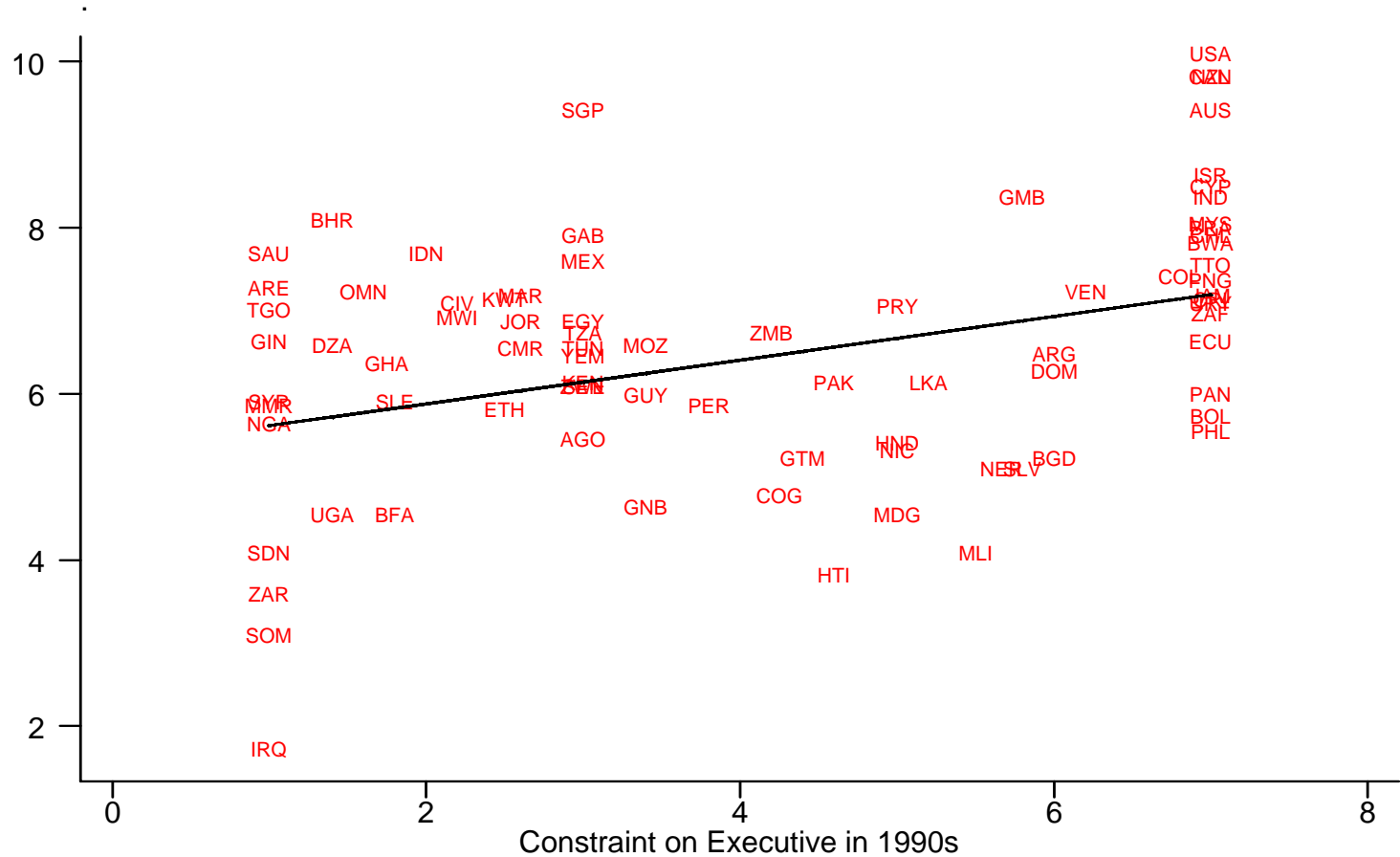
- Oligarchic structures, where the rich dominate politics, may generate investment, because the rich will have incentives to protect their own property rights.
 - However, oligarchy also costly
 - What is there to stop oligarchs from expropriating others, or erecting entry barriers to protect their monopoly positions.
- Costly because it creates a non-level playing field and a potential hold-up problem because power is monopolized by the rich.
 - More efficient producers do not enter and invest enough.
- Problem of institutional reform: how to transition from oligarchy to a democracy?

Hierarchy of institutions

- What about political institutions?
 - Political institutions determine the distribution of political power and regulate its use → sources of political power.
- Association between economic and political institutions
 - E.g., democratic systems emerged in European colonies which were smallholder societies with secure property rights.
 - Coercive states with few constraints emerged in societies with slave production, forced labor and tribute systems.
- This is what theory predicts:
 - If political power is the monopoly of the few, the property rights of the rest cannot be entirely secure.
 - Conversely, if economic institutions lead to unequal distribution of resources, political institutions cannot be democratic.

Economic and political institutions

Average Protection Against Risk of Expropriation, 1985-95



Sources of political power (1)

- Two types of political power:
 - De jure (formal) political power
 - Allocated by political institutions
 - E.g., political power allocated to a party or Prime Minister by an election.
 - De facto political power
 - Determined by economic and military power, or access to extra-legal means
 - E.g., the political power of rebel groups in a Civil War, or of masses who can create social unrest or a revolution.
 - De facto political power typically relies on military superiority or on solving the “collective action problem”.
- Distribution of political power in society determined by the distribution of de jure and de facto political power.

Sources of political power (2)

- The power of the Dutch colonists in Indonesia: de facto, since decided by their military superiority.
- The limits on the power of politicians in the United States and in Colombia was de jure, since the political system legislated the control of politicians by citizens.
- The power of European colonists was originally de facto (e.g., Cortés versus Moctezuma).
 - But turned into de jure power by setting up the coercive and hierarchical political institutions of the colonial system.
 - Why did Europeans want to set up political institutions turning their power from de facto into de jure?

Political institutions and political power

- Political institutions are highly persistent; thus de jure political power is persistent.
- De facto political power, which relies on military superiority and solution to the collective action problem, is by its nature transient.
 - If a group uses its de facto political power to change economic allocations or economic institutions for immediate gain, these changes might be reversed when the distribution of de facto political power changes.
 - If a group uses its de facto political power to change political institutions, then it can secure more durable gains.
 - It therefore makes sense to use de facto power to change political institutions and to regulate the future distribution of de jure political power.

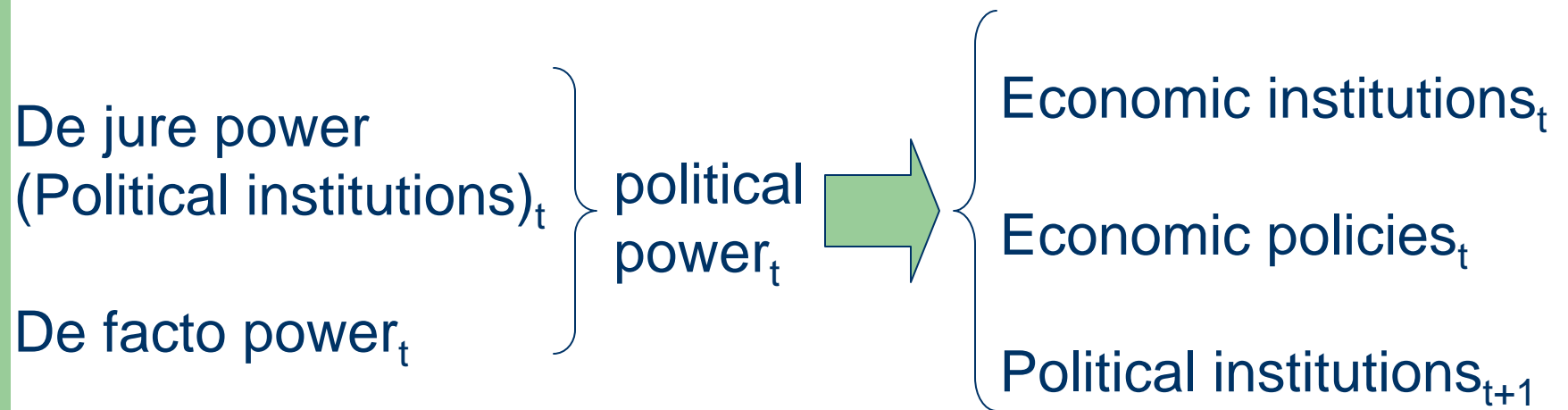
Economic institutions and political power

- The interplay between economic institutions and political power adds to institutional persistence.
 - Political power → economic institutions
 - Economic institutions → distribution of resources
 - Distribution of resources → de facto political power
- A non-level playing field in the economy favors those with political power, which in turn increases their political power further
 - Example: colonialism in the Caribbean;
 - planters monopolized political power, which enabled them to capture the majority of the gains from sugar and other products.
 - The planters' incomes enabled them to dominate military power and control the state → persistence of the system

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.

Dynamic linkages (summary)

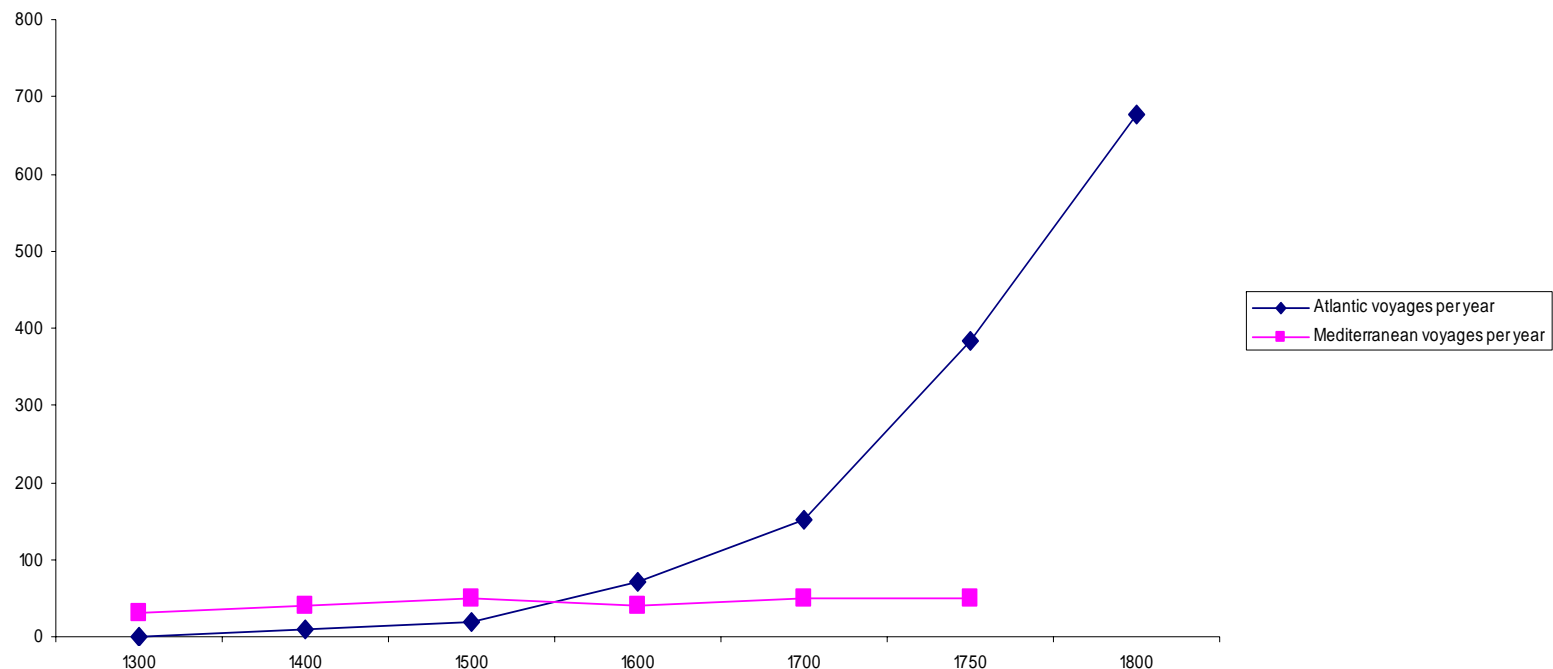


The rise of constitutional regimes: the background

- Major issue in early modern Europe: security of property rights for merchants and control of entry into overseas trade.
- These economic institutions determined by the distribution of political power.
- In absolutist monarchies, less security of property rights and crown monopoly of foreign trade.
- Thus:
political power → economic institutions

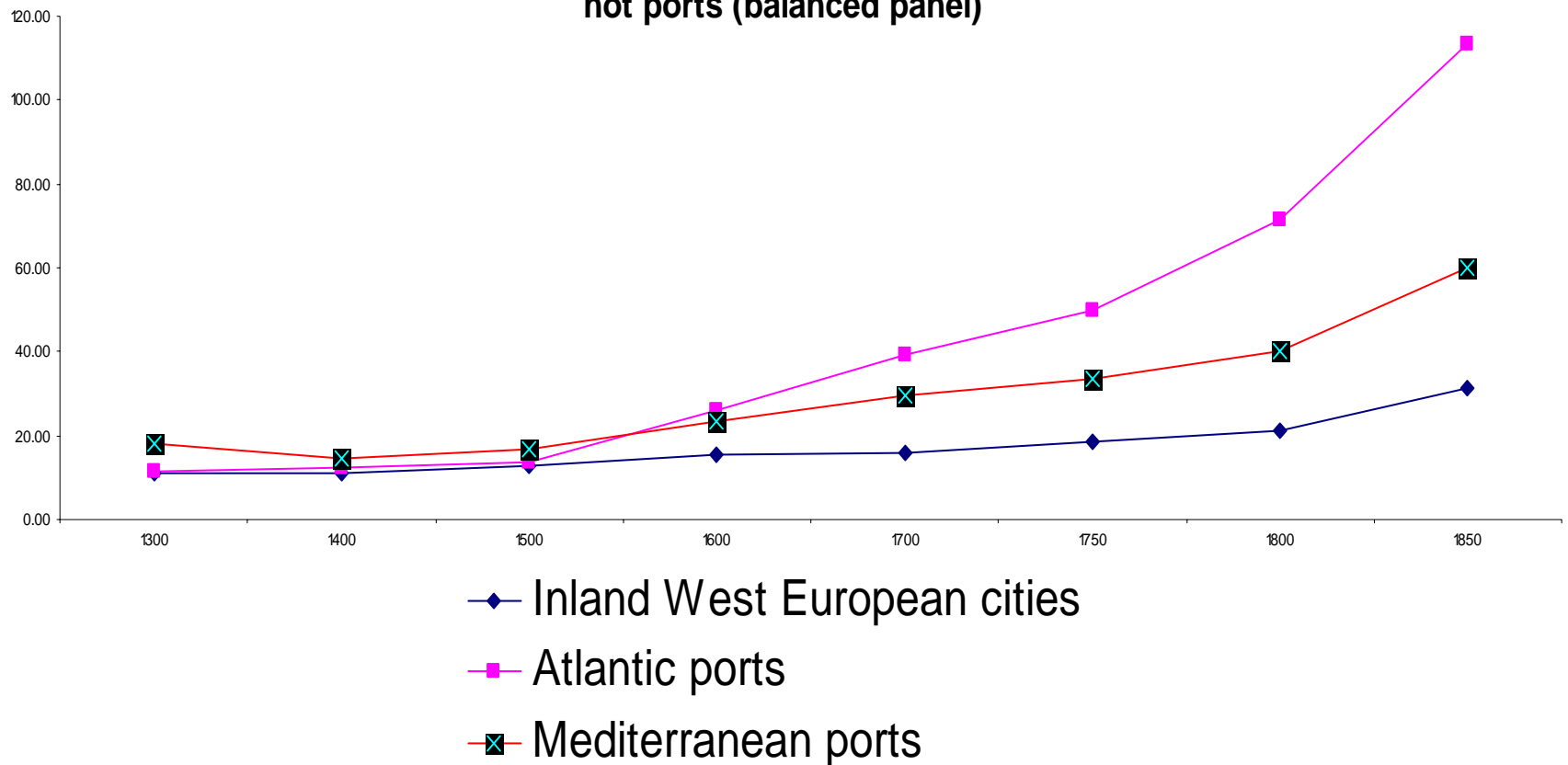
The rise of constitutional regimes: a major shock (1)

Voyages per year: Atlantic Trade (to Americas, African coast and Asia via Cape), and Mediterranean (W.Europe, excluding Britain and Netherlands, to Levant)



The rise of constitutional regimes: a major shock (2)

Average population in Atlantic ports, Mediterranean ports, and West European cities not ports (balanced panel)



The rise of constitutional regimes: the effect of institutions

- Changing environment: opening of trade routes to New World and Asia via the Atlantic.
- Different effects of this new economic opportunity depending on economic and political institutions
 - In countries with access to the Atlantic and with some degree of entry into foreign trade (i.e., Britain and the Netherlands): new groups of merchants enriched.
 - In countries with tight crown monopoly of trade (i.e., Spain, Portugal, France), the monarchy and its allies became the main beneficiaries
 - For countries without access to the Atlantic; no direct benefits and indirect costs through diversion of trade

The rise of constitutional regimes: implications for social conflict

- Social conflict: in Britain and the Netherlands, merchants and segments of landowners demand greater security of property rights, lower taxes and free entry into foreign trade.
 - New merchants' greater economic fortunes increased their political power.
 - Secure victory in the English Civil War and Glorious Revolution, and the Dutch War of Independence.
 - In all three cases, forces against the monarchy led and largely financed by mercantile interests, especially those benefiting from overseas trade.
 - In Spain and Portugal, the monarchy remains strong.

The rise of constitutional regimes: interpretation

- Thus:
 - economic institutions → (economic outcomes →) political power.
 - political power → economic institutions
 - But note the role of de facto political power in determining political and economic institutions.
 - Merchants' political power in the Civil War, in the Glorious Revolution or in the Dutch revolt was not granted by political institutions, but obtained because
 - the “Atlantic shock” improved their economic situation and their greater incomes enabled them to acquire military power and
 - they could coordinate and solve the collective action problem.
 - This was de facto political power, by its nature transient.
 - In fact, merchants and their allies demanded not only changes in economic institutions but changes in political institutions.

The Rise of Europe: changes in political institutions

- Why fight to change political institutions?
- Because they care about the future as well as the present and their de facto political power is transient.
 - Political institutions, by regulating the future allocation of de jure political power, influence future economic institutions, outcomes
- Thus:
 - de facto political power → political institutions
 - political institutions → political power
- These changes consolidate because now merchants and groups in favor of a constrained monarchy are richer and more powerful, thus command both greater de facto and de jure political power
 - In Spain and Portugal, economic institutions implied a different distribution of gains, and therefore the distribution of de facto political power was very different, hence no regime change.

Understanding the emergence of democracy (1)

- Another example of institutional change as a way of regulating the distribution of future de jure political power and consequently economic outcomes.
- In the early 19th century Western Europe: political power in the hands of rich elite.
 - E.g.; in Britain extremely limited franchise with less than 2 percent of the population with the vote.
- Policies and economic institutions looking after the interests of the rich elite.
- Challenge from excluded groups, threat of revolution, making concessions necessary.
 - Industrialization increased power of workers and the poor.
 - Unusual circumstances and solution to collective action problem further increased de facto political power for excluded masses.
 - Social unrest, possible revolution; some response necessary

Understanding the emergence of democracy (2)

- What can the elites do when de facto political power of excluded masses threatens the system?
- Promises of pro-poor policies and changes in economic institutions within the non-democratic system not credible.
 - Standard problem of commitment with political power
 - Credible commitment to future pro-poor policies → change political institutions to increase the political power of the poor, democratization
- Democracy → the poor have more political power than in non-democracy.
- Political institutions, here democracy, also harder to reverse than policies. Thus:
 - temporary de facto political power → change in political institutions → change in future political power → change in policies, economic institutions and outcomes.

Lecture 3: Institutions, Prosperity and Change

- Recap of Lectures 1 and 2.
- Estimating the causal effect of institutions on income per capita.
 - Making further use of the colonial experience.
 - Reassessing geography, culture and religion.
- From the long run to the short run: the effect of institutions on volatility, instability and crises.
- Institutions and policies.
- Institutional change; pitfalls:
 - The seesaw effect: dealing with the symptoms not causes.
 - Ignoring internal dynamics.
- Institutional change; putting the theory to work
- Where to go from here?

Recap of Lecture 1

- Sources of income differences and proximate versus fundamental causes.
- Institutions as humanly-devised rules affecting incentives, potentially determining cross-country differences in prosperity
- But identification problem; we can learn only limited amounts from correlations and OLS regressions.
 - Alternative fundamental determinants: geography, culture.
- Empirical strategy: exploit natural experiments of history.
- Learning from the Korean experiment.
- The colonial experiment and the Reversal of Fortune.
- Reassessing geography versus institutions.
 - Little evidence of the primary role of geography, and strong evidence that institutions matter for long-run performance.

Recap of Lecture 2

- Different meta-theories: efficiency, history, ideology and social conflict.
- Towards the right framework; social conflict, political power
- Historical examples:
 1. Land relations in the Dutch East Indies
 2. Early financial development in the U.S. and Mexico
 3. Price regulation in Ghana, Kenya and Colombia
- Comparative statics and the colonial experience
- Towards a theory of institutions; sources of political power, dynamics of political power and political institutions.
- Historical examples:
 1. Atlantic trade and rise of constitutional regimes
 2. Emergence of mass democracy in Western Europe.

The causal effect of institutions on prosperity

- Evidence so far that institutions important for cross-country differences in prosperity and long-run growth.
 - But what is the magnitude of the effect? How much of differences in prosperity can be explained as a result of institutions?
 - The causal effects of geography and culture?
- We need an empirical framework to estimate causal effect of institutions on economic outcomes.
 - OLS estimation biased; omitted variables, reverse causality and errors-in-variables problem.
 - We need a source of exogenous variation; an instrument for institutions.
 - Instrument: affects institutions, but no direct effect, or effect through other channels, on economic performance.
- History + theory → potential instruments.

Theory in action: back to the colonial experience (1)

- Theory →
 - those with political power more likely to opt for good institutions when they will benefit from property rights and investment opportunities.
 - better institutions more likely when there are constraints on elites.
- The colonial context:
 - Europeans more likely to benefit from good institutions when they are a significant fraction of the population, i.e., when they settle
 - Lower strata of Europeans place constraints on elites when there are significant settlements.

Thus: European settlements → better institutions
- But Europeans settlements are endogenous.
 - They may be more likely to settle if a society has greater resources or more potential for growth.
 - Or less settlements when greater resources; East India Company and Spanish crown limited settlements.

The theory in action: back to the colonial experience (2)

- Look for exogenous variation in European settlements: the disease environment
 - In some colonies, Europeans faced very high death rates because of diseases for which they had no immunity, in particular malaria and yellow fever.
potential mortality of European settlers → settlements → institutions
- Moreover, for many reasons, already discussed above, institutions persist; so
potential mortality of European settlers → settlements → past institutions → current institutions

Empirics: colonial origins of comparative development (1)

- Empirical setup: Two Stage Least-Squares (2SLS)
 - Second stage: $\log \text{ income per capita} = f(\text{current economic institutions})$
 - First stage: $\text{current economic institutions} = g(\text{settler mortality})$
- Data on potential European settler mortality
 - Work by the historian Philip Curtin provides us with mortality rates of soldiers stationed in the colonies in the early 19th century
 - Supplemented by data on mortality of Catholic bishops in Latin America
- Current economic institutions proxied by protection against expropriation risk
 - Useful to bear in mind that history generates variation in a cluster of broad institutions;
 - Protection against expropriation risk proxying for many other sources of institutional variation

Empirics: colonial origins of comparative development (2)

- Is the empirical approach valid?
 - Clearly no reverse causality, mortality rates refer to two centuries ago
 - Is the exclusion restriction of the 2SLS valid?
 - Plausible: yellow fever, malaria and gastrointestinal diseases affecting Europeans had much less effect on native inhabitants, who had acquired and genetic immunity.
 - Mortality rates of local troops very similar in different regions despite very large differences in European mortality rates.

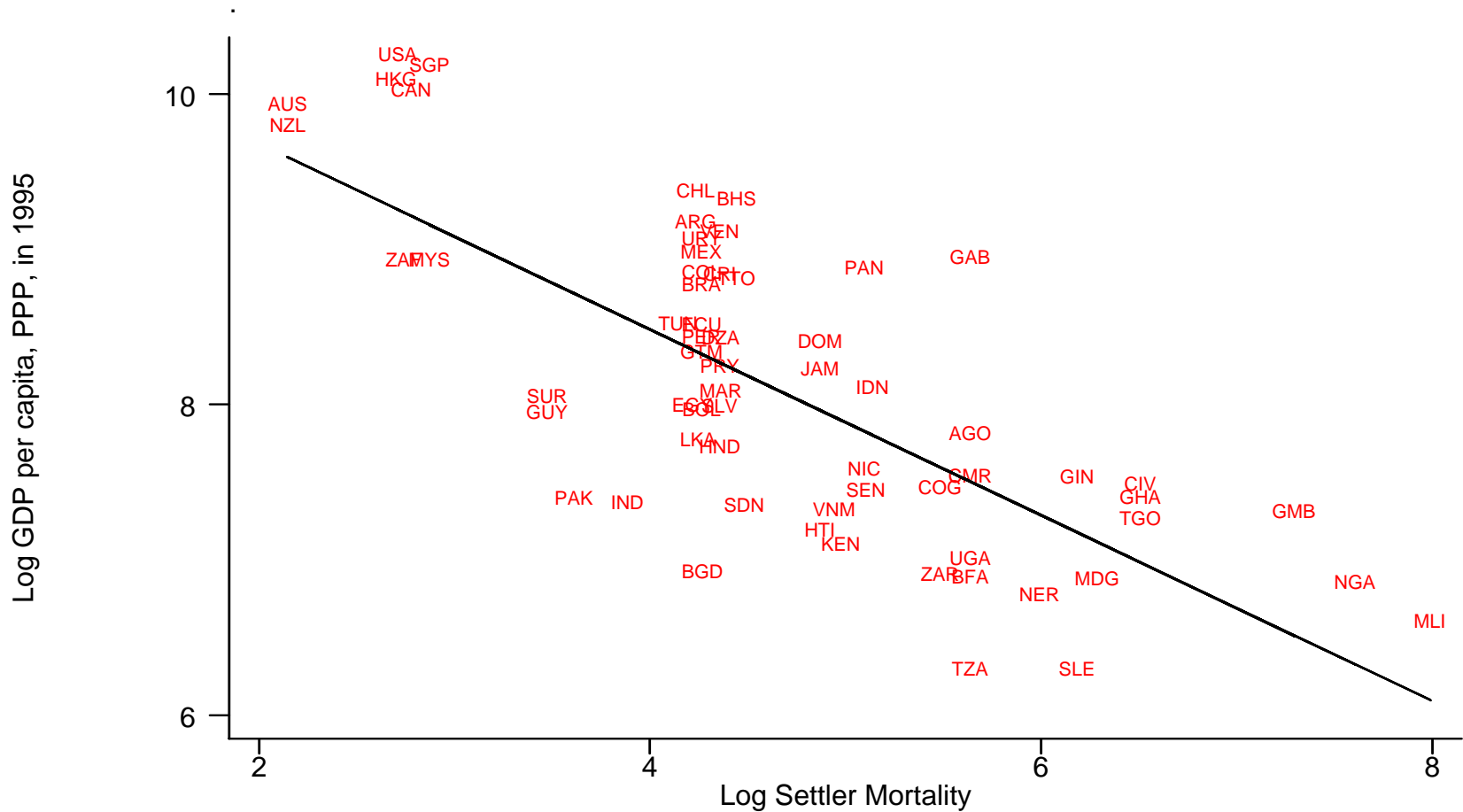
Empirics: colonial origins of comparative development (3)

- Is the empirical approach valid? (continued)
 - Check validity further by controlling for potential sources of direct effect, including latitude, measures of geography, current prevalence of malaria and life expectancy.
 - Use only variation due to yellow fever, which is now mostly eradicated, thus less likely to have direct effect.
 - Use over identification tests to check validity of instrument.
 - Also note that if the instrument is valid, it solves the errors-in-variables problem.
- These checks all support the validity of the approach.
- Note: not estimating the causal effect of being colonized vs. not colonized

Preview of results

- Very large causal effects of institutions on long-run growth.
 - Differences in institutions account for over $\frac{3}{4}$ of the variation in income per capita today (long-run effect)
- Results highly robust.
 - Robust in different subsamples
 - Robust to controlling for continent dummies
 - Robust to controlling for latitude, whether landlocked, temperature, humidity
 - Robust to controlling for current prevalence of malaria and life expectancy
 - Robust when exploiting only yellow fever
 - Overidentification tests supportive.
- Also no evidence of any effect of geography or religion on long run growth

Settler mortality and current institutions



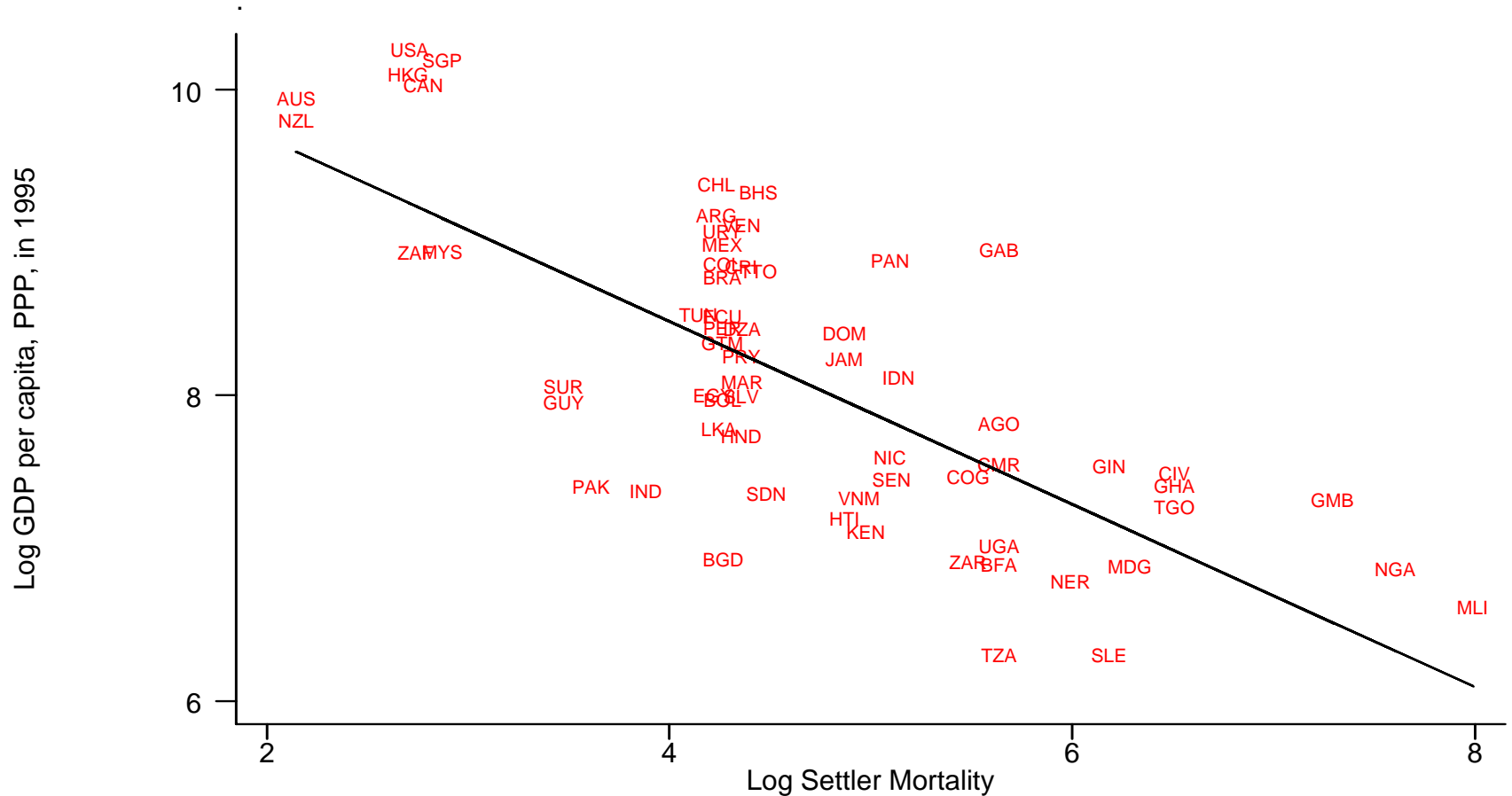
The first stage

First Stage Regressions:

Dependent variable is protection against risk of expropriation

| | All former colonies | All former colonies | All former colonies | Without neo-Europes |
|-----------------------------|---------------------|---------------------|---------------------|---------------------|
| Settler Mortality | -0.61 (0.13) | -0.5 (0.15) | -0.43 (0.19) | -0.37 (0.14) |
| Latitude | | 2.34 (1.37) | | |
| Continent Dummies (p-value) | | | [0.25] | |
| R-Squared | 0.26 | 0.29 | 0.31 | 0.11 |
| Number of Observations | 63 | 63 | 63 | 59 |

The reduced form: settler mortality and income per capita today



The causal effect of institutions: basic 2SLS estimates

Second Stage Regressions:

Dependent variable is log GDP per capita in 1995

| | All former colonies | All former colonies | All former colonies | Without neo- Europes |
|--|------------------------|------------------------|------------------------|-------------------------|
| Protection Against Risk of Expropriation, 1985-95 | 0.99 (0.17) | 1.11 (0.26) | 1.19 (0.39) | 1.43 (0.45) |
| Latitude | | -1.61 (1.57) | | |
| Continent Dummies (p-value) | | | [0.09] | |
| Number of Observations | 63 | 63 | 63 | 59 |

The causal effect of institutions: robustness

Second Stage Regressions: all former colonies
Dependent variable is log GDP per capita in 1995

Instrument is:

| | Log Settler Mortality | Log Settler Mortality | Log Settler Mortality | Log Settler Mortality | Yellow Fever |
|--|--------------------------|--------------------------|--------------------------|--------------------------|----------------|
| Protection Against Risk of Expropriation, 1985-95 | 1.07 (0.27) | 0.98 (0.17) | 0.87 (0.32) | 1.18 (0.84) | 0.82 (0.22) |
| Temperature (p-value) | [0.71] | | | | |
| Humidity (p-value) | | [0.64] | | | |
| Malaria | | | -0.28 (0.59) | | |
| Life Expectancy | | | | -0.014 (0.07) | |
| Number of Observations | 63 | 63 | 62 | 62 | 63 |

The role of geography

- No causal effect of geography.
- How do we think of the correlation between geography (e.g., latitude) and income?
- This is caused by omitted factors;
 - Geography correlated with institutions because of the natural experiment of European colonialism.
 - Tropical areas ended up with worse institutions, because
 - they tended to be richer and more densely-populated circa 1500.
 - they attracted fewer European settlers.
- Also no universal causal effect of geography on institutions.
 - Relationship created in a particular historical juncture.

Revisiting the British effect (1)

- We saw above that
 - there is a reversal of fortune among the British colonies alone
 - the British also introduced institutions to extract resources from the native population and set up plantation complexes.
- But we have not answered the question of whether there is any effect of being colonized by the British versus by the French, Spanish, Portuguese and others.
- The framework here enables us to answer this question once we condition on local conditions:
- No beneficial effect of the British (relative to others):
 - either through different colonization strategy, or
 - through the import of British institutions or culture

Revisiting the British effect (2)

| | Dependent variable is log GDP per capita in 1995 | |
|----------------------------------|--|-----------------|
| | Former Colonies | Former Colonies |
| <i>Second Stage</i> | | |
| Protection Against Expropriation | 1.12 (0.23) | 1.17 (0.22) |
| British Colony Dummy | -0.96 (0.39) | |
| English Legal Origin Dummy | | -1.05 (0.37) |
| <i>First Stage</i> | | |
| Log Settler Mortality | -0.53 (0.14) | -0.53 (0.13) |
| British Colony Dummy | 0.67 (0.35) | |
| English Legal Origin Dummy | | 0.70 (0.34) |
| R-Squared in First Stage | 0.30 | 0.30 |
| Number of Observations | 63 | 63 |

Revisiting the British effect (3)

- British colonies have somewhat better institutions than other European colonies
 - 0.67 higher protection against expropriation
 - 0.67 times 1.12 = 0.75 positive effect on log GDP
- But British colonies also have lower income controlling for institutions
 - - 0.96; negative effect on log GDP
- Overall effect weakly negative.
- Same conclusion for English legal origin vs. French legal origin.

Revisiting culture and religion (1)

- What is the effect of culture?
 - Even though no comprehensive measures of broad cultural differences, evidence not favorable for importance of culture.
 - Proxies for culture: religion, identity of colonizer, presence of Europeans.
- Empirical strategy: look at the effect of religion on long-run economic growth once we take differences in institutions into account (that is, estimate the causal effect of institutions simultaneously).
- Answer: no evidence of any effect of religion (therefore culture) on cross-country differences in income.
 - Also recall that no effect of identity of colonizer or direct effect of presence of Europeans.

Revisiting culture and religion (2)

| | All former colonies | | Dependent variable is log GDP per capita in 1995 Second stage | Dependent variable is institutions First Stage |
|--|--|---|--|---|
| | Dependent variable is log GDP per capita in 1995 Second stage | Dependent variable is institutions First Stage | | |
| Institutions (Protection Against Expropriation) | 0.96 (0.16) | | 1.13 (0.35) | |
| Percent Catholic | 0.006 (0.01) | -0.01 (0.01) | | |
| Percent Muslim | -0.002 (0.01) | -0.002 (0.01) | | |
| Percent "Other" | -0.011 (0.01) | -0.01 (0.01) | | |
| Percent of European Descent in 1975 | | | -0.008 (0.01) | 0.019 (0.006) |
| Log Settler Mortality | | -0.58 (0.14) | | -0.40 (0.15) |
| R-Squared in First Stage | | 0.30 | | 0.35 |
| Number of Observations | 63 | 63 | 63 | 63 |

For religion regressions, base category is percent Protestant.

Unbundling institutions (1)

- Digging into the black box of institutions.
- Political institutions → economic institutions → economic outcomes.
- But which economic institutions?
- Distinguish between:
 1. “Property rights” institutions: protect citizens from various forms of expropriation by elites: e.g., risk of gov. expropriation, entry barriers protecting large firms. (quite closely linked to political institutions).
 2. “Contracting” institutions: determine the terms and ease of contracting between citizens: e.g., legal formalism, judicial efficiency, bankruptcy law (partly, but not entirely!, historical).

Unbundling institutions (2)

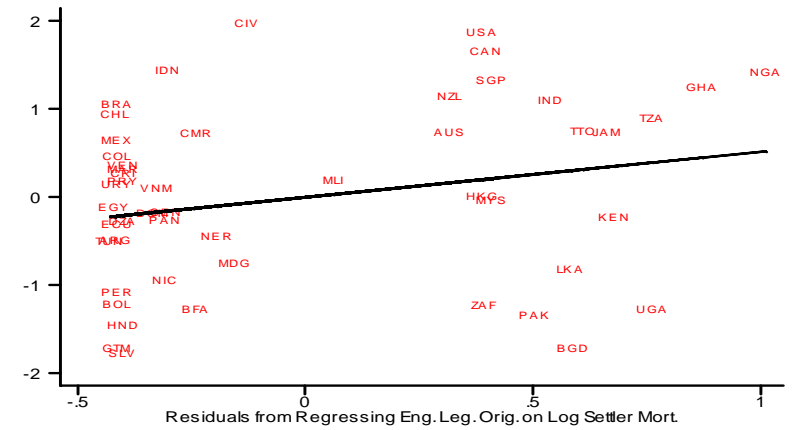
- Property rights institutions more important than contracting institutions for economic growth, investment and financial development.
- Contracting institutions important only for the *form* of financial development (debt vs equity)
 - Conclusion related to the lack of an effect of British colonialism, since contracting institutions vary strongly with English versus French legal origin.
- Plausible: without protection against elite and government expropriation, little that good contracts between citizens can achieve.
 - Perhaps also, when there are relatively mild contractual imperfections, producers and investors can change the terms of contracts, or build trust-based relations

Unbundling institutions (3): first stages

Res. from Regress Av. Protect. Exprop. on Eng. Leg. Orig.



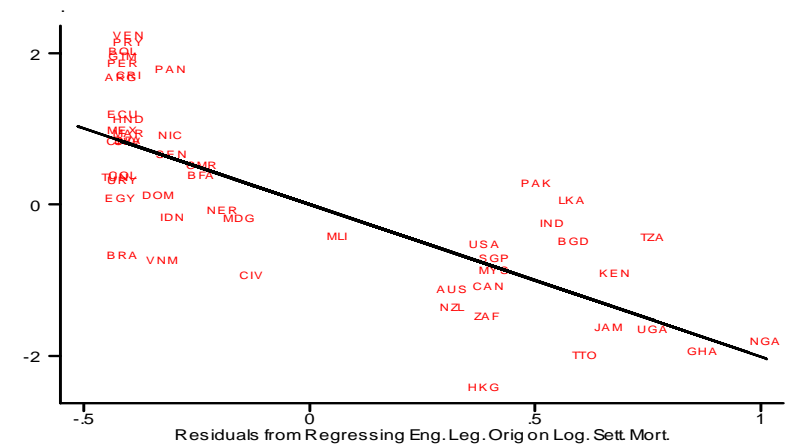
Res. from Regress Av. Protect. Exprop. on Log Settler Mort.



Residuals from Check Measure Formalism on Eng. Legal Orig.

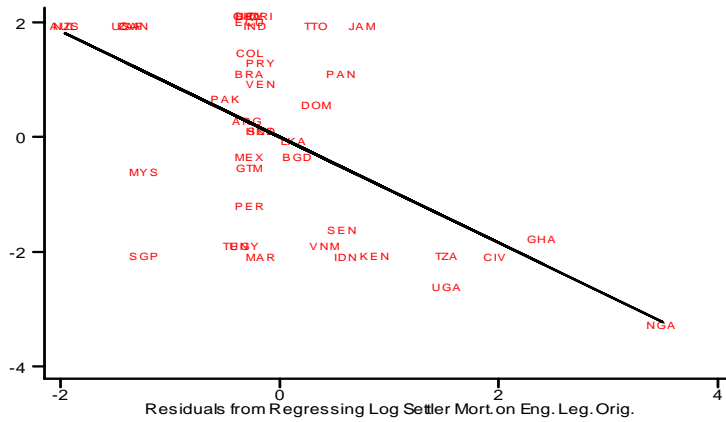


Residuals from Check Measure Formalism on Log Sett. Mort.

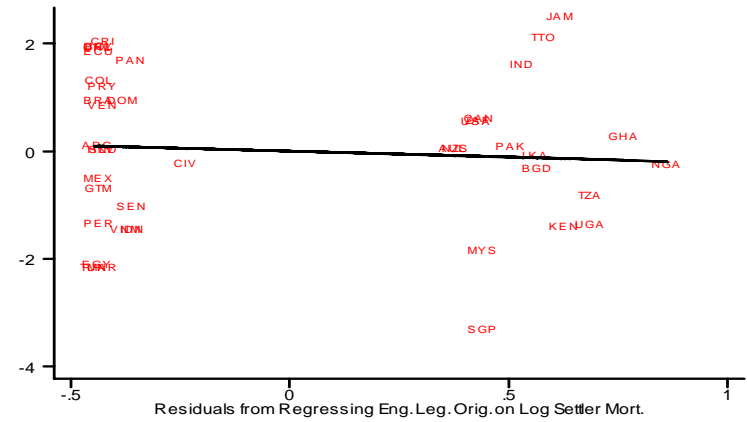


Unbundling institutions (4): first stages

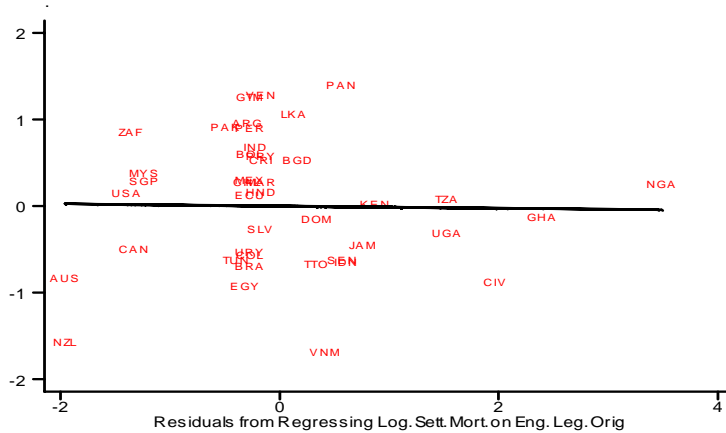
Residuals from Regressing Constraint on Exec on Eng. Leg. Orig



Resid. from Regress Cons. on Exec on Log Settler Mort



Residuals from Eviction Measure Formalism on Eng. Legal Orig.



Residuals from Eviction Measure Formalism on Log Sett. Mort.



Unbundling institutions (5): 2SLS estimates

Second stage regressions: all former colonies

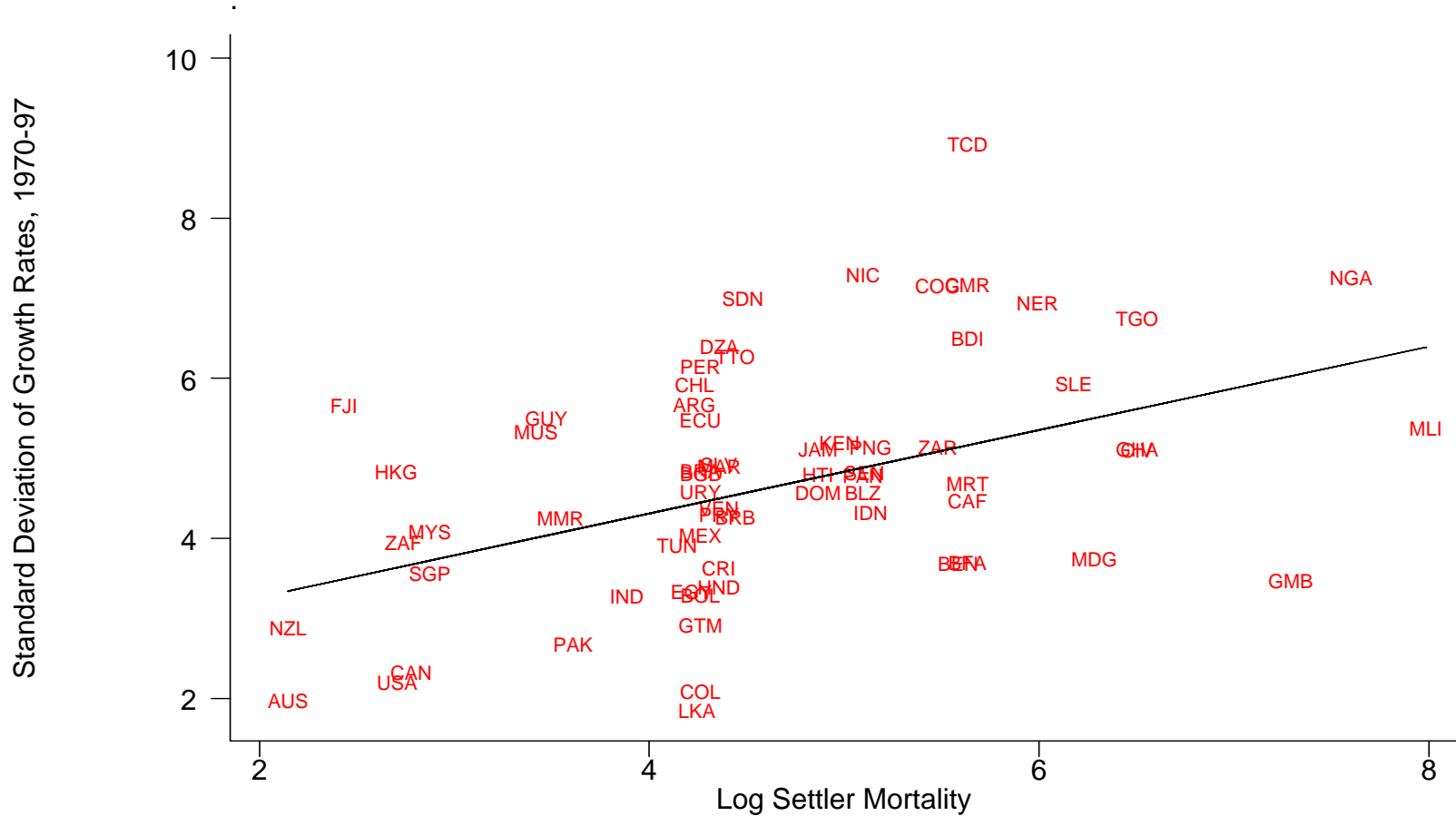
Dependent variable is:

| | GDP per capita | Investment-GDP ratio | Credit-GDP ratio | Stock Market Capitalization |
|--|----------------|----------------------|------------------|-----------------------------|
| Average Protection Against Risk of Expropriation | 1.01 (0.15) | 4.86 (1.05) | 0.28 (0.07) | 0.22 (0.07) |
| Legal Formalism (Check Measure) | 0.37 (0.15) | 0.74 (1.03) | -0.01 (0.07) | -0.10 (0.07) |
| Number of Observations | 50 | 50 | 50 | 49 |

From long-run to the medium-run

- Institutional differences not only important for long-run growth, but also for medium-run outcomes.
 - Postwar economic growth
 - Economic and political instability
 - Crises
- Causal effect of institutions on these outcomes.
- Also opportunity to investigate the channels through which institutions matter.
 - For crises and volatility, is it macroeconomic policies that need to be fixed as suggested by the Washington consensus?
 - Or are distortionary macroeconomic policies symptoms of deeper causes?

Institutions and volatility: the reduced form



The effect of macroeconomic policies: ignoring institutions

OLS regressions

Dependent variable is: Volatility of growth rate, 1970-97

| | Former Colonies | Former Colonies | Former Colonies |
|------------------------|-----------------|-----------------|------------------|
| Government Consumption | 8.09 (3.81) | | |
| Log Inflation | | 0.12 (0.19) | |
| Real Overvaluation | | | 0.028 (0.006) |
| R-Squared | 0.07 | 0.01 | 0.35 |
| Number of Observations | 61 | 61 | 44 |

The effect of macroeconomic policies: symptoms vs. causes

Second stage regressions: all former colonies
 Instrumenting for institutions and macro variables
 Dependent variable is: Volatility of growth rate, 1970-97

| | Former Colonies | Former Colonies | Former Colonies |
|---|-----------------|-----------------|-----------------|
| Institutions (Constraint on Executive) | -0.92 (0.25) | -0.86 (0.22) | -0.62 (0.44) |
| Government Consumption | -5.13 (5.19) | | |
| Log Inflation | | -0.14 (0.42) | |
| Real Overvaluation | | | 0.013 (0.03) |
| Number of Observations | 60 | 48 | 32 |

Interpretation

- Deep institutional problems lead to bad performance
 - Deep institutional problems related to political institutions and distribution of political power as well as to weak property rights.
 - Differences in settler mortality a source of variation in institutions. Institutions are not necessarily purely historical and unchangeable.
- These problems manifest themselves via a variety of channels.
- Bad institutions lead to:
 - weak property rights enforcement
 - non-level playing field
 - political instability as different groups fight to take control of the state
 - worse macroeconomic policies, budget deficit, high inflation, etc.
- Important: these policies are partial causes of bad performance, but they are in turn symptoms of deeper institutional problems.
 - Potential implication: *the seesaw effect*.

The seesaw effect (1)

- Trying to improve incentives and economic performance by dealing with policy symptoms (or even symptomatic economic institutions) might have limited benefits or even backfire.
 - Suppose problems are institutional, and related to politics.
 - Imagine political power in the hands of a small elite exploiting the rest using a variety of instruments, including expropriation, taxation, non-level playing field and inflation.
 - Now take away inflation (make central bank independent), one of two possibilities:
 1. less distortions in the economy or
 2. alternatively, they may start using expropriation, taxation and other extractive means more heavily, leading to even worse performance.

The seesaw effect (2)

- The seesaw effect: pressing on one side of will raise the other.
 - Potential caveat for the Washington consensus (which focuses on macro policy reform)
 - Potential caveat also for policy and institutional reforms more generally.
- When the problem is institutional, related to political institutions and the distribution of political power, dealing with the source of the problem rather than the symptoms more effective
 - but only if possible!
 - and at the moment we know little about how to change deep institutions...

Seesaw effect in action: reforms in Colombia (1)

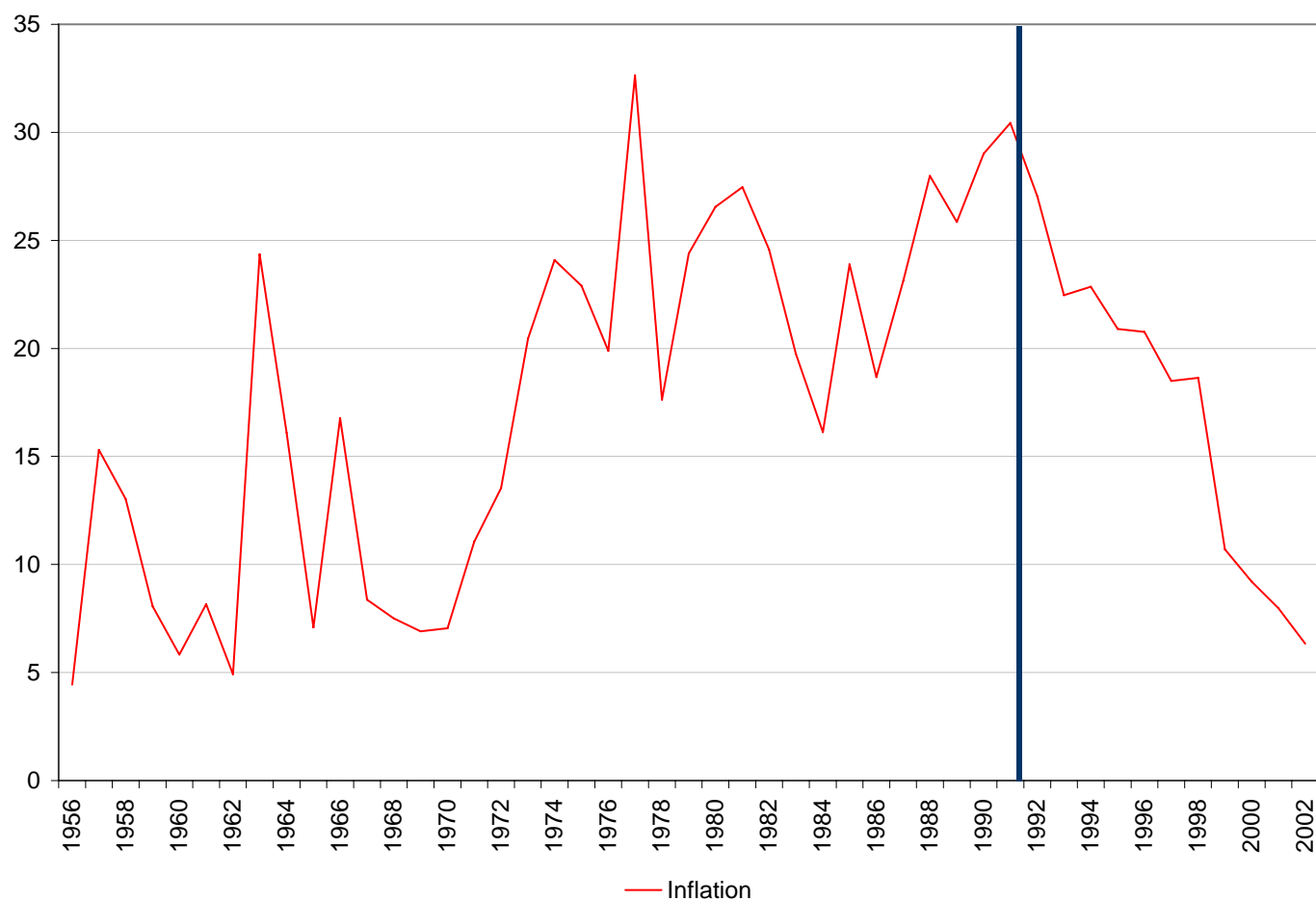
- Colombian democracy re-created in 1958 after 5 years of military rule on basis of rigid power sharing arrangement by Liberal and Conservative parties (the National Front agreement).
- All seats in legislature, bureaucratic appointments split 50-50, parties took turns with presidency.
 - Officially lasted until 1974 but many elements persisted (cabinet bi-partisan until 1986).
- Stopped inter-party conflict, but highly exclusionary and oligarchic.
- 1980's rising social conflict, drug mafias, left-wing guerillas (M-19, FARC, ELN).

Seesaw effect in action: reforms in Colombia (2)

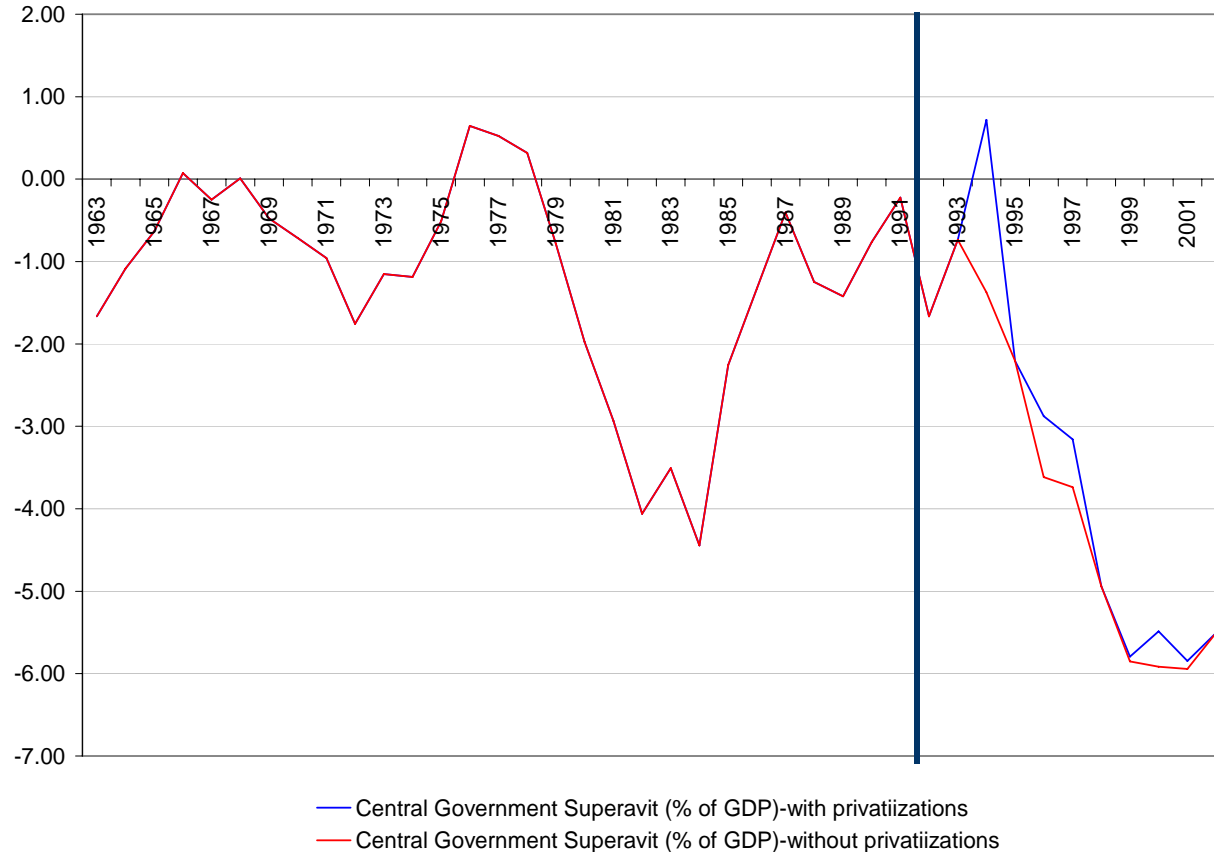
- Colombian Reforms 1988-1992 in response to rising political crisis and assassination of three candidates for president in 1990.
- Economic Reforms:
 - trade liberalization, end of capital controls, financial liberalization, fiscal decentralization, mandated spending on public goods, independence of Central Bank
- Also Political Reforms
 - introduction of Australian ballot, direct election of mayors, Senate elected from nationwide constituency, Constitution re-written in 1991.

Seesaw effect in action: reforms in Colombia (3)

Inflation rate, 1956-2003

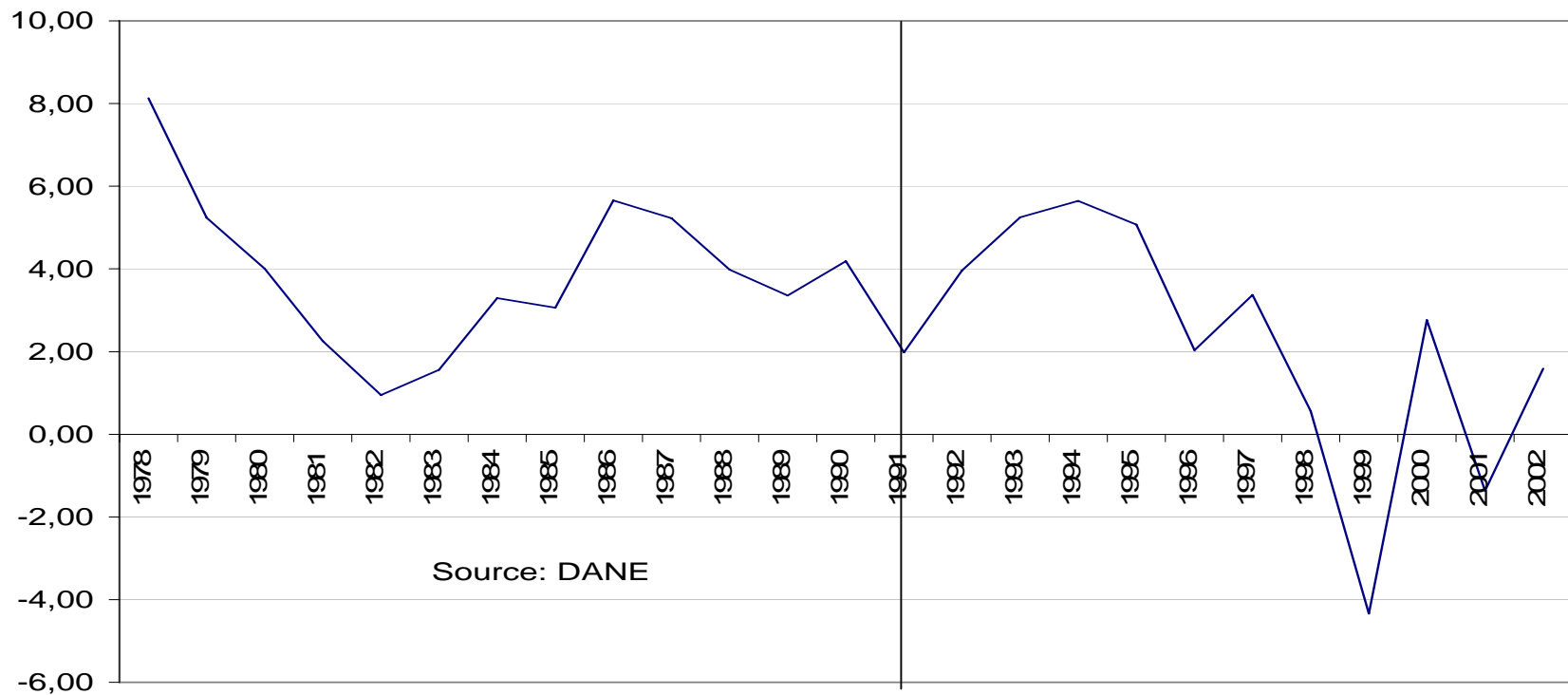


Seesaw effect in action: reforms in Colombia (4) Central Government Surplus % GDP.



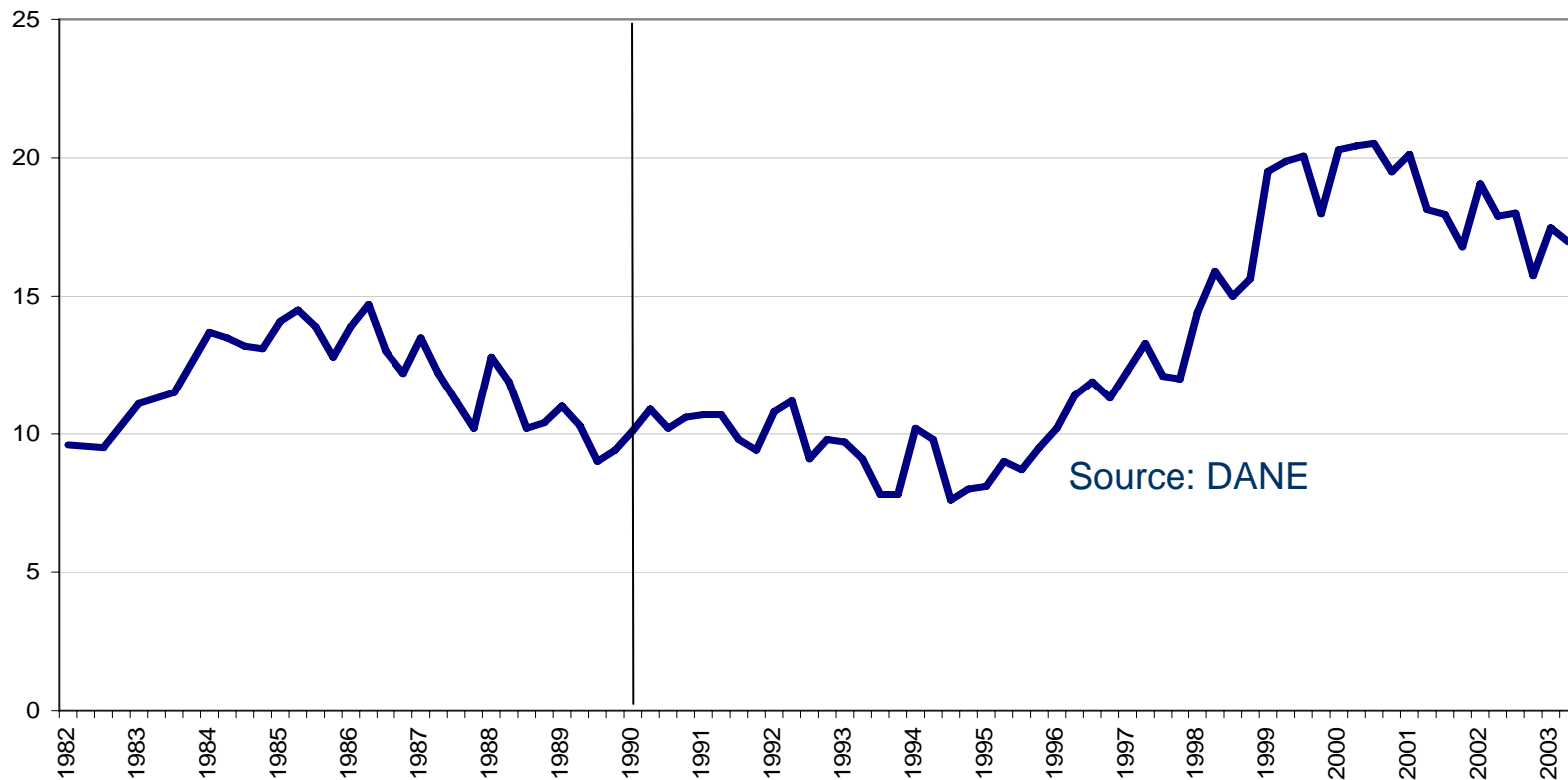
Seesaw effect in action: reforms in Colombia (5)

Real GDP Growth in Colombia (annual % increase), 1978-2002



Seesaw effect in action: reforms in Colombia (6)

Unemployment rate in Colombia, 1986-2003
Urban areas



Seesaw effect in Colombia: Interpretation

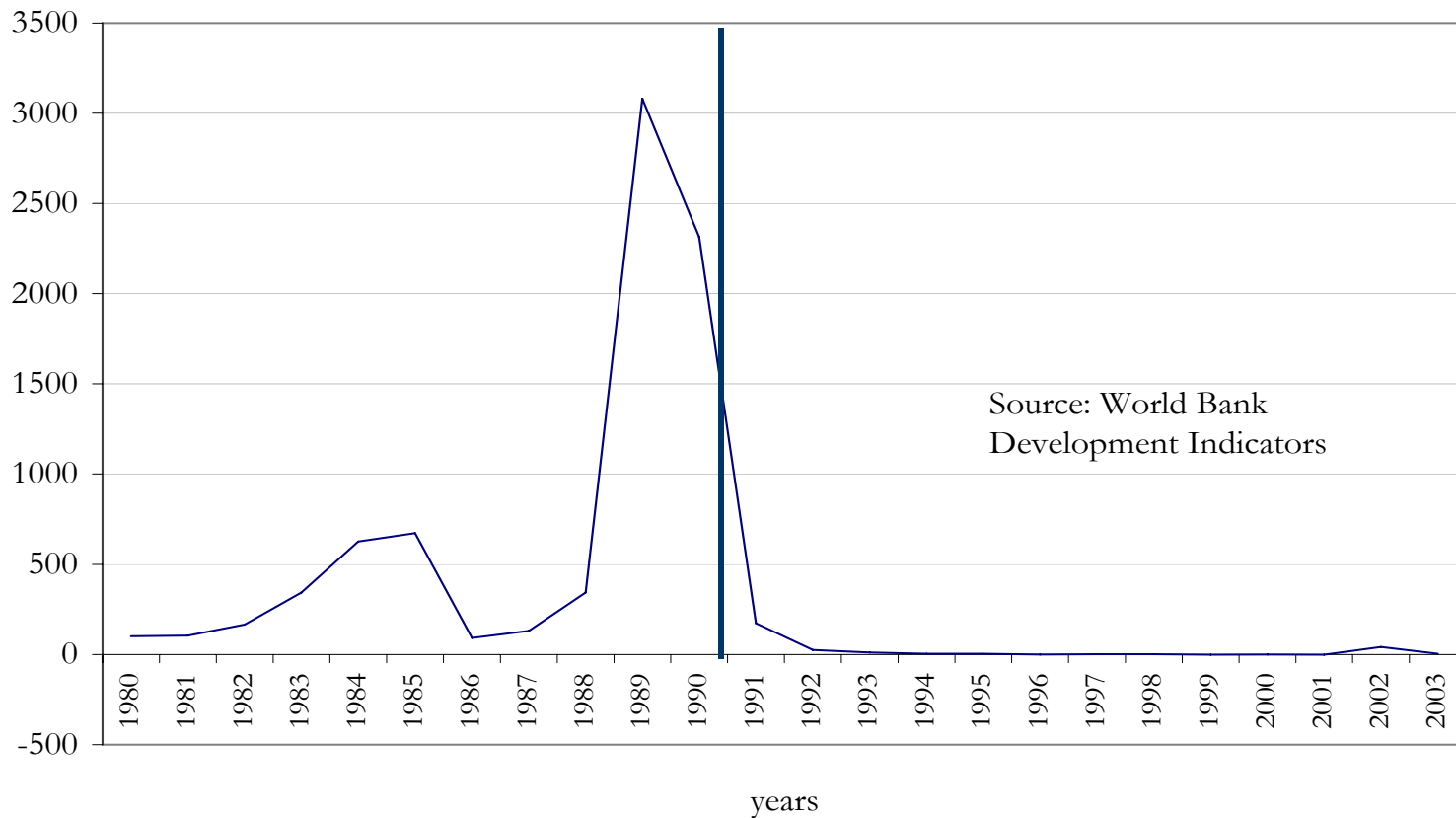
- Deep-seated distributional conflict in Colombian society.
- Since independence search for a stable political order, but one which excluded large segments of society.
 - E.g. National Front, barriers to entry of third party.
- Conflict manifests itself in political instability and in an institutional structure the aim of which is to redistribute rather than promote prosperity.
- Constitution of 1991 – political crisis leads to an assembly designed to represent wide range of preferences,
 - Result: inconsistent claims on the social product, the see-saw.
 - Making the Central Bank independent removes a redistributive instrument which will be substituted with something else in equilibrium. E.g. fiscal problem.

Seesaw effect in action: reforms in Argentina (1)

- Argentina democracy re-created in 1983 after Falklands
- Radical Party defeats Peronists, Raúl Alfonsín president.
- Argentina caught in debt crisis, negative growth, government unsuccessful at coping, by late 1980's hyperinflation develops.
- 1989 election won by Carlos Menem on traditional Peronist platform emphasizing redistribution, protection.
- Once in power Menem embraces pro-market reforms.
- Currency board, liberalization of capital flows and FDI, central bank independence, privatization
- 1995 Menem re-elected, 2001 Crash.

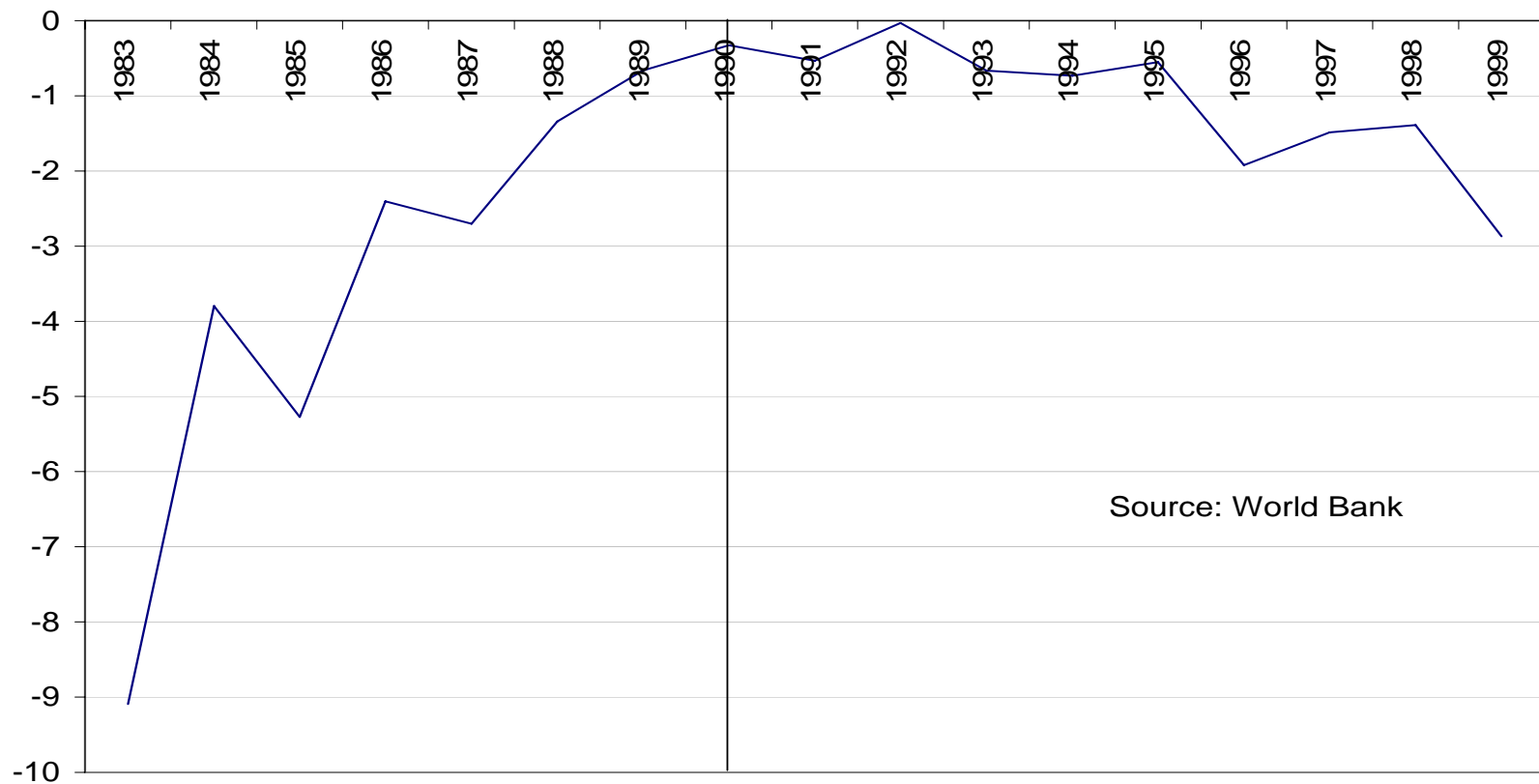
Seesaw effect in action: reforms in Argentina (2)

Inflation in Argentina, consumer prices (annual %)
1980-2003



Seesaw effect in action: reforms in Argentina (3)

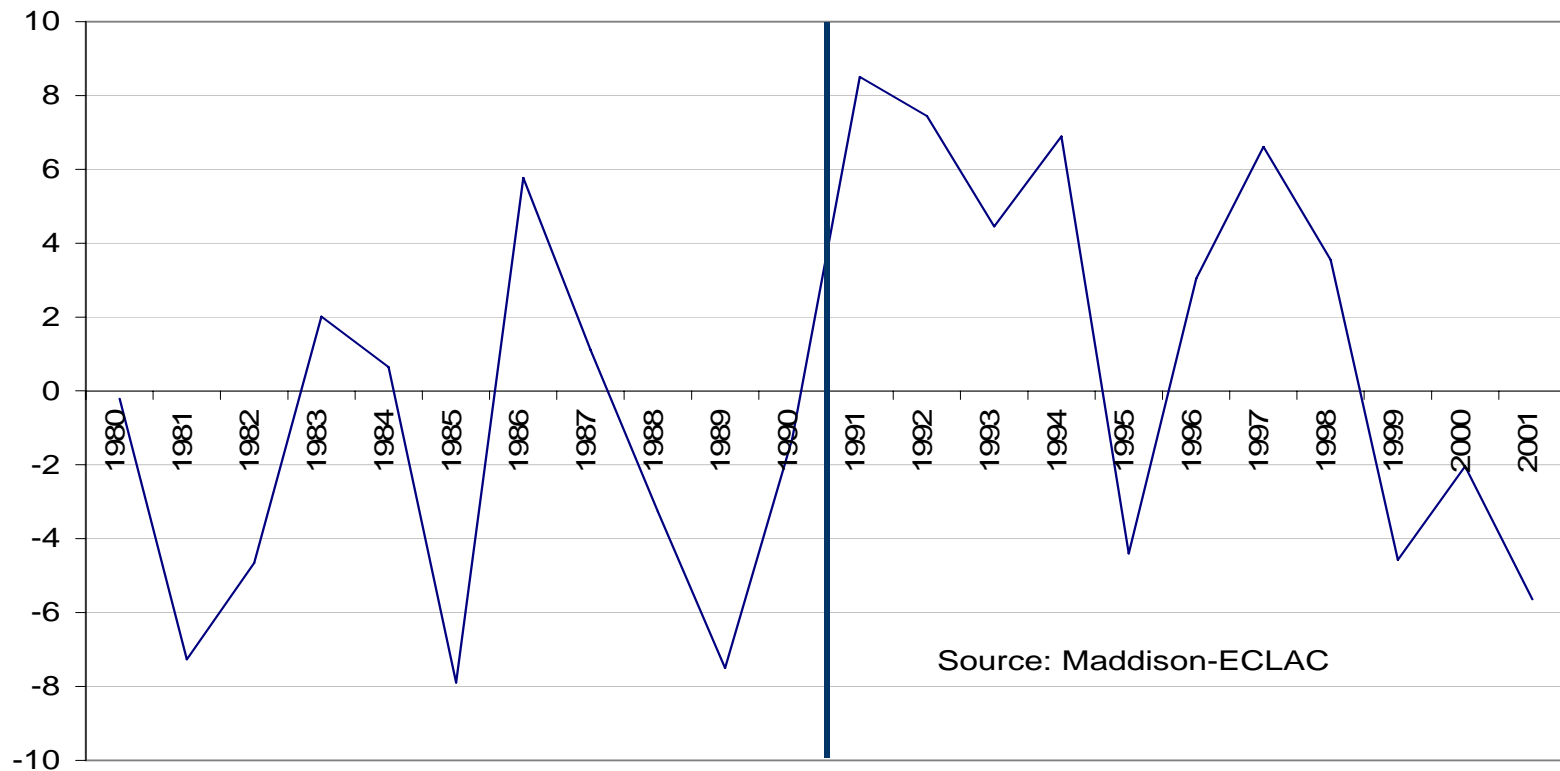
Government Surplus in Argentina, % of GDP



Source: World Bank

Seesaw effect in action: reforms in Argentina (4)

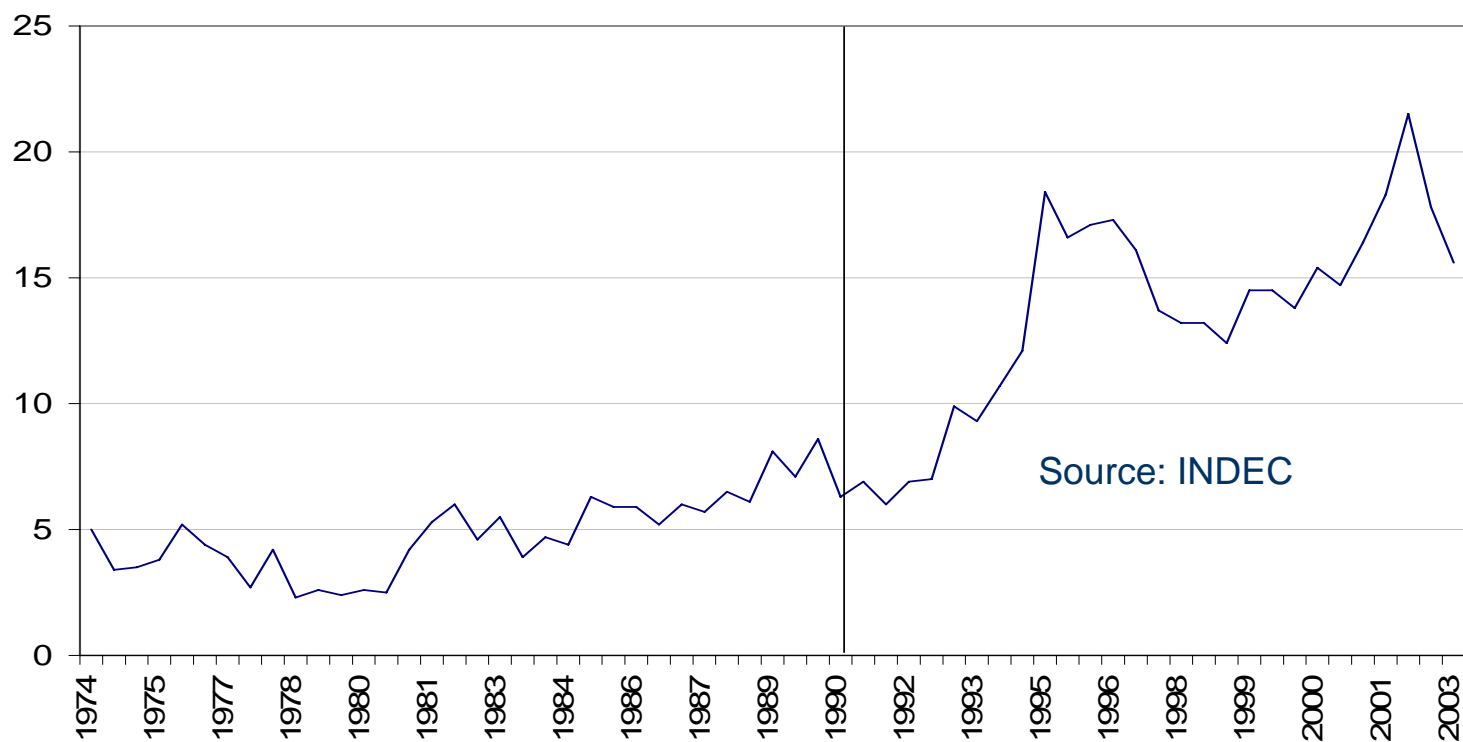
Real per Capita GDP Growth in Argentina, 1980-2001



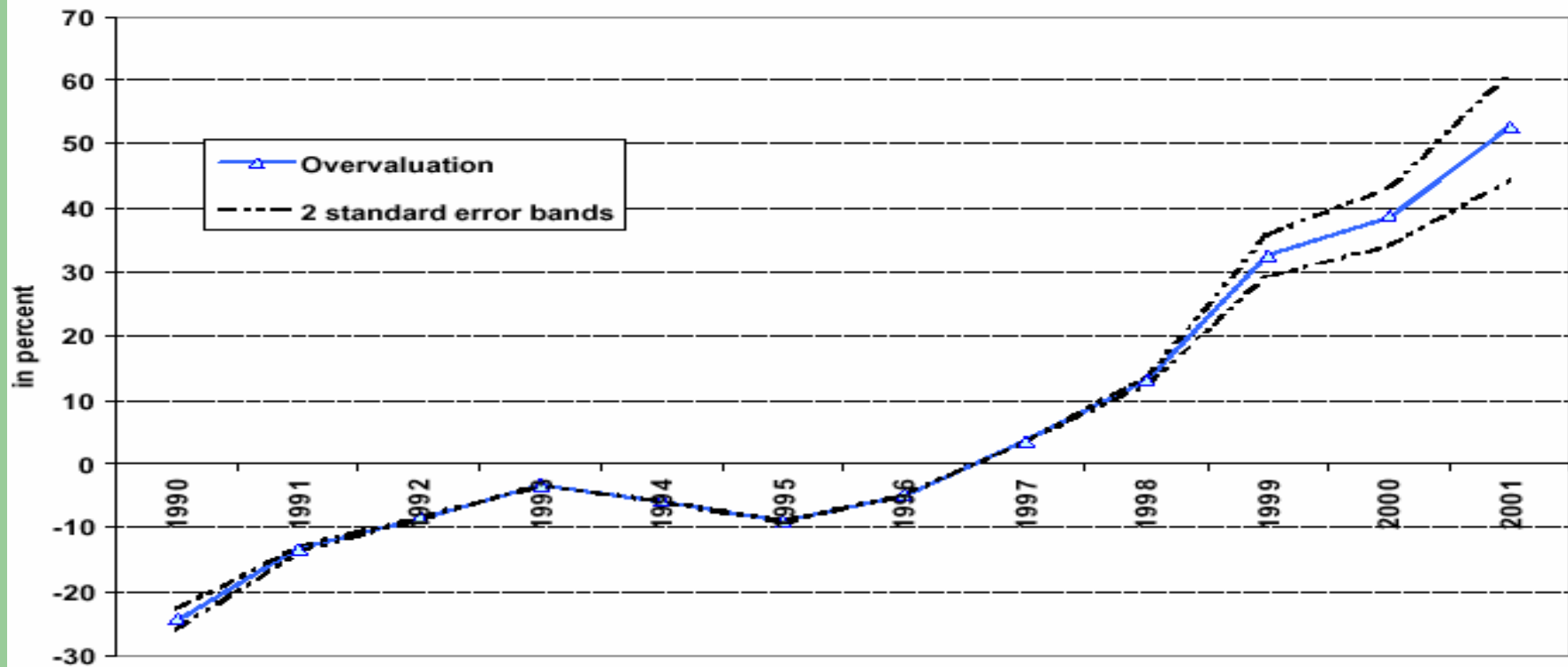
Source: Maddison-ECLAC

Seesaw effect in action: reforms in Argentina (5)

Unemployment rate in Argentina, 1974-2003
Urban areas



Real Overvaluation of the Argentine Peso



Source: Alberola, López and Servén (2003)

The seesaw effect in Argentina: Interpretation

- Deep seated distributional conflict in Argentine society.
 - Since independence search for a stable political order, polarization between Buenos Aires and the interior provinces, between Peronist coalition and the traditional landed elites and the military.
- Conflict manifests itself in political instability and fighting over redistribution
 - E.g. Argentina has the most malapportioned legislature in the world.
- Menem weakens links with workers but strengthens links to interior provinces for support.
- Reforms under Menem removes traditional tools of redistribution, monetary policy, tariffs, industrial subsidies, employment in parastatals.
 - But other instruments remain and are used more heavily
 - No labor market deregulation, privatization to reward supporters, and fiscal problem with large transfers to interior provinces → seesaw effect.

What to do? Reform of deep institutions

- Deep institutions determined in history, but are changeable;
 - Institutions “humanly devised”; in this sense contrast to geography and culture theories.
 - Examples of recent successful institutional change; Botswana, South Korea, partially China, Eastern Europe (shall we mention others?)
- Let us use our theory of institutions; understand institutional persistence and institutional change.
- But two pitfalls:
 1. The seesaw effect; reform only part of institutions, and the rest of the institutions become worse as a consequence. Back to Colombia and Argentina.
 2. Ignoring internal dynamics; attempts at reform backfire because of resistance by potential losers or subversive action by other groups.

Institutional persistence: some things we know

- Institutions are by their nature durable:
 - e.g., democracy more likely tomorrow if today there is democracy than if dictatorship today.
- Bad institutions create bad incentives and self-sustain
 - e.g., an extractive state apparatus will give incentives to political elites to use it for extraction.
- Bad institutions create instability and self-replicate
 - e.g., if controlling the state is a major source of rents, there will be infighting to control the state as in Ghana.
- Bad institutions affect the composition of assets and distribution of income, contributing the persistence:
 - e.g., bad institutions → greater inequality → political power of the rich to sustain bad institutions.

Institutional change (1)

- Towards a theory of institutional change:
 - Recall:
political institutions → economic institutions
 - Thus important to understand change in political institutions
 - Political institutions a way of regulating the allocation of future political power
- Two axes:
 1. Elite-driven versus conflict-driven
 2. Internal versus external

Institutional change (2)

- Elite-driven: when the politically powerful elite wish to change institutions in order to increase its rents/utility.
 - E.g., the U.S. Constitution or the imposition of different systems of land relations in the Dutch East Indies.
- Conflict-driven: when institutional change forced from the non-elites. E.g.:
 1. Rise of democracy because of the threat of revolution.
 2. Rise of constitutional monarchy resulting from the fight between the crown and groups of merchants in Britain and the Netherlands.

Institutional change (3)

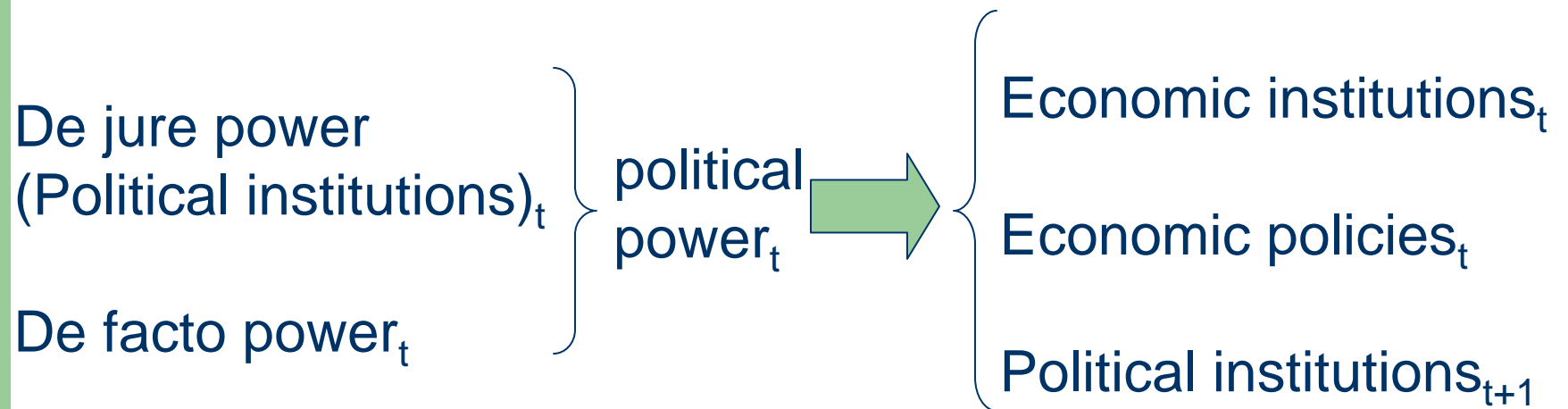
- Internal: because of internal shocks or dynamics.
 - E.g., rise of democracy.
- External: because of external imposition, shocks, or external incentives.
 - E.g., colonial imposition of institutions, Korean response to threat of communism.
 - E.g., EU incentives for East European reform.
- Even with external imposition, internal dynamics are very important → the pitfall of ignoring internal dynamics.

Conclusions (1)

- Institutions matter.
- Although ideology and history influence institutions, in many many cases institutions emerge because of their distributional consequences.
- Although everything else equal more efficient institutions more likely to arise, there will typically be major social conflict over institutions.
- Then the choices benefiting politically powerful groups, not the society as a whole, more likely to emerge.

Conclusions (2)

- Summary: towards a dynamic theory



Conclusions (3)

- Progress towards a useful framework for thinking about institutions and fundamental causes of differences in prosperity across countries.
- Much research left to be done
- Future areas:
 1. Unbundling institutions
 2. Institutional persistence
 3. Institutional change
 4. Policy to influence institutions? (further further in the future!)