
Root Causes

A historical approach to assessing the role of institutions in economic development

Daron Acemoglu

TREMENDOUS differences in incomes and standards of living exist today between the rich and the poor countries of the world. Average per capita income in sub-Saharan Africa, for example, is less than one-twentieth that in the United States. Explanations for why the economic fortunes of countries have diverged so much abound. Poor countries, such as those in sub-Saharan Africa, Central America, or South Asia, often lack functioning markets, their populations are poorly educated, and their machinery and technology are outdated or nonexistent. But these are only *proximate* causes of poverty, begging the question of why these places don't have better markets, better human capital, more investments, and better machinery and technology. There must be some *fundamental* causes leading to these outcomes, and via these channels, to dire poverty.

The two main candidates to explain the fundamental causes of differences in prosperity between countries are geography and institutions. The *geography hypothesis*, which has a large following both in the popular imagination and in academia, maintains that the geography, climate, and ecology of a society shape both its technology and the incentives of its inhabitants. It emphasizes forces of nature as a primary factor in the poverty of nations. The alternative, the *institutions hypothesis*, is about human influences. According to this view, some societies have good institutions that encourage investment in machinery, human capital, and better technologies, and, consequently, these countries achieve economic prosperity.

Good institutions have three key characteristics: enforcement of property rights for a broad cross section of society, so that a variety of individuals have incentives to invest and take part in economic life; constraints on the actions of elites, politicians, and other powerful groups, so that these people cannot expropriate the incomes and investments of others or create a highly uneven playing field; and some degree of equal opportunity for

broad segments of society, so that individuals can make investments, especially in human capital, and participate in productive economic activities. These good institutions contrast with conditions in many societies of the world, throughout history and today, where the rule of law is applied selectively; property rights are nonexistent for the vast majority of the population; the elites have unlimited political and economic power; and only a small fraction of citizens have access to education, credit, and production opportunities.

Geography's influence

If you want to believe that geography is the key, look at a world map. Locate the poorest places in the world where per capita incomes are less than one-twentieth those in the United States. You will find almost all of them close to the equator, in very hot regions that experience periodic torrential rains and where, by definition, tropical diseases are widespread.

However, this evidence does not establish that geography is a primary influence on prosperity. It is true there is a *correlation* between geography and prosperity. But correlation does not prove causation. Most important, there are often omitted factors driving the associations we observe in the data.

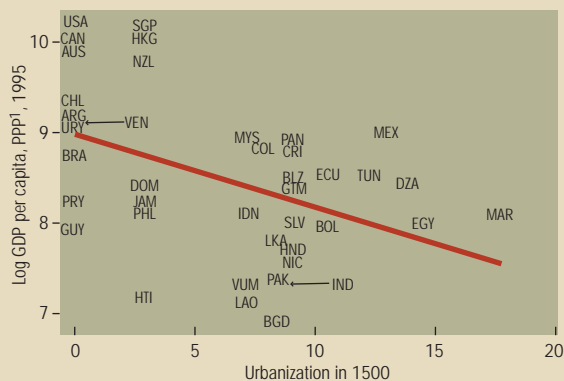
Similarly, if you look around the world, you'll see that almost no wealthy country achieves this position without institutions protecting the property rights of investors and imposing some control over the government and elites. Once again, however, this correlation between institutions and economic development could reflect omitted factors or reverse causality.

To make progress in understanding the relative roles of geographic and institutional factors, we need to find a source of exogenous variation in institutions—in other words, a natural experiment where institutions change for reasons unrelated to potential omitted factors (and geographic factors remain constant, as they almost always do).

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Shifting prosperity

Countries that were rich in 1500 are among the less well off societies today.



Source: Author.

Note: ARG = Argentina, AUS = Australia, BGD = Bangladesh, BLZ = Belize, BOL = Bolivia, BRA = Brazil, CAN = Canada, CHL = Chile, COL = Colombia, CRI = Costa Rica, DOM = Dominican Republic, DZA = Albania, ECU = Ecuador, EGY = Egypt, GTM = Guatemala, GUY = Guyana, JAM = Jamaica, HKG = Hong Kong SAR, HND = Honduras, HTI = Haiti, IDN = Indonesia, IND = India, LAO = Lao People's Democratic Republic, LKA = Sri Lanka, MAR = Morocco, MEX = Mexico, MYS = Malaysia, NIC = Nicaragua, NZL = New Zealand, PAK = Pakistan, PAN = Panama, PER = Peru, PHL = Philippines, PRY = Paraguay, SGP = Singapore, SLV = El Salvador, TUN = Tunisia, URY = Uruguay, USA = United States, VEN = Venezuela, VNM = Vietnam

¹Purchasing power parity.

The colonization of much of the globe by Europeans starting in the fifteenth century provides such a natural experiment. The colonization experience transformed the institutions in many lands conquered or controlled by Europeans but, by and large, had no effect on their geographies. Therefore, if geography is the key factor determining the economic potential of an area or a country, the places that were rich before the arrival of the Europeans should have remained rich after the colonization experience and, in fact, should still be rich today. In other words, since the key determinant of prosperity remains the same, we should see a high degree of persistence in economic outcomes. If, on the other hand, it is institutions that are central, then those places where good institutions were introduced or developed should be richer than those in which Europeans introduced or maintained extractive institutions to plunder resources or exploit the non-European population.

Historical evidence suggests that Europeans indeed pursued very different colonization strategies, with very different associated institutions, in various colonies. At one extreme, Europeans set up exclusively extractive institutions, exemplified by the Belgian colonization of the Congo, slave plantations in the Caribbean, and forced labor systems in the mines of Central America. These institutions neither protected the property rights of regular citizens nor constrained the power of elites. At the other extreme, Europeans founded a number of colonies where they created settler societies, replicating—and often improving—the European form of

institutions protecting private property. Primary examples of this mode of colonization include Australia, Canada, New Zealand, and the United States. The settlers in these societies also managed to place significant constraints on elites and politicians, even if they had to fight to achieve this objective.

Reversal of fortune

So what happened to economic development after colonization? Did places that were rich before colonization remain rich, as suggested by the geography hypothesis? Or did economic fortunes change systematically as a result of the changes in institutions?

The historical evidence shows no evidence of the persistence suggested by the geography hypothesis. On the contrary, there is a remarkable *reversal of fortune* in economic prosperity. Societies like the Mughals in India and the Aztecs and the Incas in America that were among the richest civilizations in 1500 are among the poorer societies of today. In contrast, countries occupying the territories of the less developed civilizations in North America, New Zealand, and Australia are now much *richer* than those in the lands of the Mughals, the Aztecs, and the Incas. Moreover, the reversal of fortune is not confined to this comparison. Using various proxies for prosperity before modern times, we can show that the reversal is a much more widespread phenomenon. For example, before industrialization, only relatively developed societies could sustain significant urbanization, so urbanization rates are a relatively good proxy for prosperity before European colonization. The chart here shows a strong negative relationship between urbanization rates in 1500 and income per capita today. That is, the former European colonies that are relatively rich today are those that were poor before the Europeans arrived.

This reversal is *prima facie* evidence against the most standard versions of the geography hypothesis discussed above: it cannot be that the climate, ecology, or disease environments of the tropical areas have condemned these countries to poverty today, because these same areas with the same climate, ecology, and disease environment were richer than the temperate areas 500 years ago. Although it is possible that the reversal may be related to geographic factors whose effects on economic prosperity vary over time—for example, certain characteristics that first cause prosperity then condemn nations to poverty—there is no evidence of any such factor or any support for sophisticated geography hypotheses of this sort.

Is the reversal of fortune consistent with the institutions hypothesis? The answer is yes. In fact, once we look at the variation in colonization strategies, we see that the reversal of fortune is exactly what the institutions hypothesis predicts. European colonialism made Europeans the most politically powerful group, with the capability to influence institutions more than any indigenous group was able to at the time. In places where Europeans did not settle and cared little about aggregate output and the welfare of the population, in places

where there was a large population that could be coerced and employed cheaply in mines or in agriculture or simply taxed, in places where there were resources to be extracted, Europeans pursued the strategy of setting up extractive institutions or taking over existing extractive institutions and hierarchical structures. In those colonies, there were no constraints on the power of the elites (which were typically the Europeans themselves and their allies) and no civil or property rights for the majority of the population; in fact, many of them were forced into labor or enslaved. Contrasting with this pattern, in colonies where there

was little to be extracted, where most of the land was empty, where the disease environment was favorable, Europeans settled in large numbers and developed laws and institutions to ensure that they themselves were protected, in both their political and their economic lives. In these colonies, the institutions were therefore much more conducive to investment and economic growth.

This evidence does not mean that geography does not matter at all, however. Which places were rich and which were poor before Europeans arrived might have been determined by geographic factors. These geographic factors also likely influenced the institutions that Europeans introduced. For example, the climate and soil quality in the Caribbean made it productive to grow sugar there, encouraging the development of a plantation system based on slavery. What the evidence shows instead is that geography neither condemns a nation to poverty nor guarantees its economic success. If you want to understand why a country is poor today, you have to look at its institutions rather than its geography.

No natural gravitation

If institutions are so important for economic prosperity, why do some societies choose or end up with bad institutions? Moreover, why do these bad institutions persist long after their disastrous consequences are apparent? Is it an accident of history or the result of misconceptions or mistakes by societies or their policymakers? Recent empirical and theoretical research suggests that the answer is no: there are no compelling reasons to think that societies will naturally gravitate toward good institutions. Institutions not only affect the economic prospects of nations but are also central to the distribution of income among individuals and groups in society—in other words, institutions not only affect the size of the social pie, but also how it is distributed.



Dutch settlers arrive on Manhattan Island.

This perspective implies that a potential change from dysfunctional and bad institutions toward better ones that will increase the size of the social pie may nonetheless be blocked when such a change significantly reduces the slice that powerful groups receive from the pie and when they cannot be credibly compensated for this loss. That there is no natural gravitation toward good institutions is illustrated by the attitudes of the landed elites and the emperors in Austria-Hungary and in Russia during the nineteenth century. These elite groups blocked industrialization and even the introduction of railways and protected the old regime because they realized capitalist growth and industrialization would reduce their power and their privileges.

Similarly, European colonists did not set up institutions to benefit society as a whole. They chose good institutions when it was in their interests to do so, when they would be the ones living under the umbrella of these institutions, as in much of the New World. In contrast, they introduced or maintained existing extractive institutions when it was in their interest to extract resources from the non-European populations of the colonies, as in much of Africa, Central America, the Caribbean, and South Asia. Furthermore, these extractive institutions showed no sign of evolving into better institutions, either under European control or once these colonies gained independence. In almost all cases, we can link the persistence of extractive institutions to the fact that, even after independence, the elites in these societies had a lot to lose from institutional reform. Their political power and claim to economic rents rested on the existing extractive institutions, as best illustrated by the Caribbean plantation owners whose wealth directly depended on slavery and extractive institutions. Any reform of the system, however beneficial for the country as a whole, would be a direct threat to the owners.

European colonialism is only one part of the story of the institutions of the former colonies, and many countries that never experienced European colonialism nonetheless suffer from institutional problems (while certain other former European colonies have arguably some of the best institutions in the world today). Nevertheless, the perspective developed in this article applies to these cases as well: institutional problems are important in a variety of instances, and, in most of these, the source of institutional problems and the difficulty of institutional reform lie in the fact that any major change creates winners and losers, and the potential losers are often powerful enough to resist change.

The persistence of institutions and potential resistance to reform do not mean that institutions are unchanging. There is often significant institutional evolution, and even highly dysfunctional institutions can be successfully transformed. For example, Botswana managed to build a functioning democracy after its independence from Britain and become the fastest-growing country in the world. Institutional change will happen either when groups that favor change become powerful enough to impose it on the potential losers, or when societies can strike a bargain with potential losers so as to credibly compensate them after the change

takes place or, perhaps, shield them from the most adverse consequences of these changes. Recognizing the importance of institutions in economic development and the often formidable barriers to beneficial institutional reform is the first step toward significant progress in jump-starting rapid growth in many areas of the world today. ■

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This article draws on the author's joint work with Simon Johnson and James Robinson, in particular, on Daron Acemoglu, Simon Johnson, and James A. Robinson, 2001, "Colonial Origins of Comparative Development: An Empirical Investigation," American Economic Review, Vol. 91 (December), 1369-1401; Daron Acemoglu, Simon Johnson, and James A. Robinson, 2002, "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution," Quarterly Journal of Economics, Vol. CXVII (November), pp. 1231-94; and Daron Acemoglu and James A. Robinson, 2000, "Political Losers as a Barrier to Economic Development," American Economic Review, Vol. 90 (May), pp. 126-44, as well as on Daron Acemoglu, 2003, "Why Not a Political Coase Theorem? Social Conflict, Commitment and Politics," Journal of Comparative Economics, forthcoming.



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