The New York Review of Books

What Makes Countries Rich or Poor?

JUNE 7, 2012

Jared Diamond

Why Nations Fail: The Origins of Power, Prosperity, and Poverty
by Daron Acemoglu and James A. Robinson
Crown, 529 pp., $30.00

Gary Knight/VII

Women in Darfur returning from Kutum market to the Fata Borno camp for internally displaced persons under the protection of African Union soldiers, January 2007; photograph by Gary Knight from Questions Without Answers: The World in Pictures by the Photographers of VII. *The book has just been published by Phaidon.*

The fence that divides the city of Nogales is part of a natural experiment in organizing human societies. North of the fence lies the American city of Nogales, Arizona; south of it lies the Mexican city of Nogales, Sonora. On the American side, average income and life expectancy are higher, crime and corruption are lower, health and roads are better, and elections are more democratic. Yet the geographic environment is identical on both sides of the fence, and the ethnic makeup of the human population is similar. The reasons for those differences between the two Nogaleses are the differences between the current political and economic institutions of the US and Mexico.

This example, which introduces *Why Nations Fail* by Daron Acemoglu and

James Robinson, illustrates on a small scale the book's subject. [*] Power, prosperity, and poverty vary greatly around the world. Norway, the world's richest country, is 496 times richer than Burundi, the world's poorest country (average per capita incomes $84,290 and $170 respectively, according to the World Bank). Why? That's a central question of economics.

Different economists have different views about the relative importance of the conditions and factors that make countries richer or poorer. The factors they most discuss are so-called "good institutions," which may be defined as laws and practices that motivate people to work hard, become economically productive, and thereby enrich both themselves and their countries. They are the basis of the Nogales anecdote, and the focus of *Why Nations Fail*. In the authors' words:

> The reason that Nogales, Arizona, is much richer than Nogales, Sonora, is simple: it is because of the very different institutions on the two sides of the border, which create very different incentives for the inhabitants of Nogales, Arizona, versus Nogales, Sonora.

Among the good economic institutions that motivate people to become productive are the protection of their private property rights, predictable enforcement of their contracts, opportunities to invest and retain control of their money, control of inflation, and open exchange of currency. For instance, people are motivated to work hard if they have opportunities to invest their earnings profitably, but not if they have few such opportunities or if their earnings or profits are likely to be confiscated.

The strongest evidence supporting this view comes from natural experiments involving borders: i.e., division of a uniform environment and initially uniform human population by a political border that eventually comes to separate different economic and political institutions, which create differences in wealth. Besides Nogales, examples include the contrasts between North and South Korea and between the former East and West Germany. Many or most economists, including Acemoglu and Robinson, generalize from these examples of bordering countries and deduce that good institutions also explain the differences in wealth between nations that aren't neighbors and that differ greatly in their geographic environments and human populations.

There is no doubt that good institutions are important in determining a country's wealth. But why have some countries ended up with good institutions, while others haven't? The most important factor behind their emergence is the historical duration of centralized government. Until the rise of the world's first states, beginning around 3400 BC, all human societies were bands or tribes or chiefdoms, without any of the complex economic institutions of governments. A long history of government doesn't guarantee good institutions but at least permits them; a short history makes them very unlikely. One can't just suddenly introduce government institutions and expect people to adopt them and to unlearn their long history of tribal organization.

That cruel reality underlies the tragedy of modern nations, such as Papua New Guinea, whose societies were until recently tribal. Oil and mining companies there pay royalties intended for local landowners through village leaders, but the leaders often keep the royalties for themselves. That's because they have internalized their society's practice by which clan leaders pursue their personal interests and their own clan's interests, rather than representing everyone's interests.

The various durations of government around the world are linked to the various durations and productivities of farming that was the prerequisite for the rise of governments. For example, Europe began to acquire highly productive agriculture 9,000 years ago and state government by at least 4,000 years ago, but subequatorial Africa acquired less productive agriculture only between 2,000 and 1,800 years ago and state government even more recently. Those historical differences prove to have huge effects on the modern distribution of wealth. Ola Olsson and Douglas Hibbs showed that, on average, nations in which agriculture arose many millennia ago—e.g., European nations—tend to be richer today than nations with a shorter history of agriculture (e.g., subequatorial African nations), and that this factor explains about half of all the modern national variation in wealth. Valerie Bockstette, Areendam Chanda, and Louis Putterman showed further that, if one compares countries that were equally poor fifty years ago (e.g., South Korea and Ghana), the countries with a long history of state government (e.g., South Korea) have on the average been getting rich faster than those with a short history (e.g., Ghana).

An additional factor behind the origin of the good institutions that I discussed above is termed "the reversal of fortune," and is the subject of Chapter 9 of *Why Nations Fail*. Among non-European countries colonized by Europeans during the last five hundred years, those that were initially richer and more advanced tend paradoxically to be poorer today. That's because, in formerly rich countries with dense native populations, such as Peru, Indonesia, and India, Europeans introduced corrupt "extractive" economic institutions, such as forced labor and confiscation of produce, to drain wealth and labor from the natives. (By extractive economic institutions, Acemoglu and Robinson mean practices and policies “designed to extract incomes and wealth from one subset of society [the masses] to benefit a different subset [the governing elite].”)

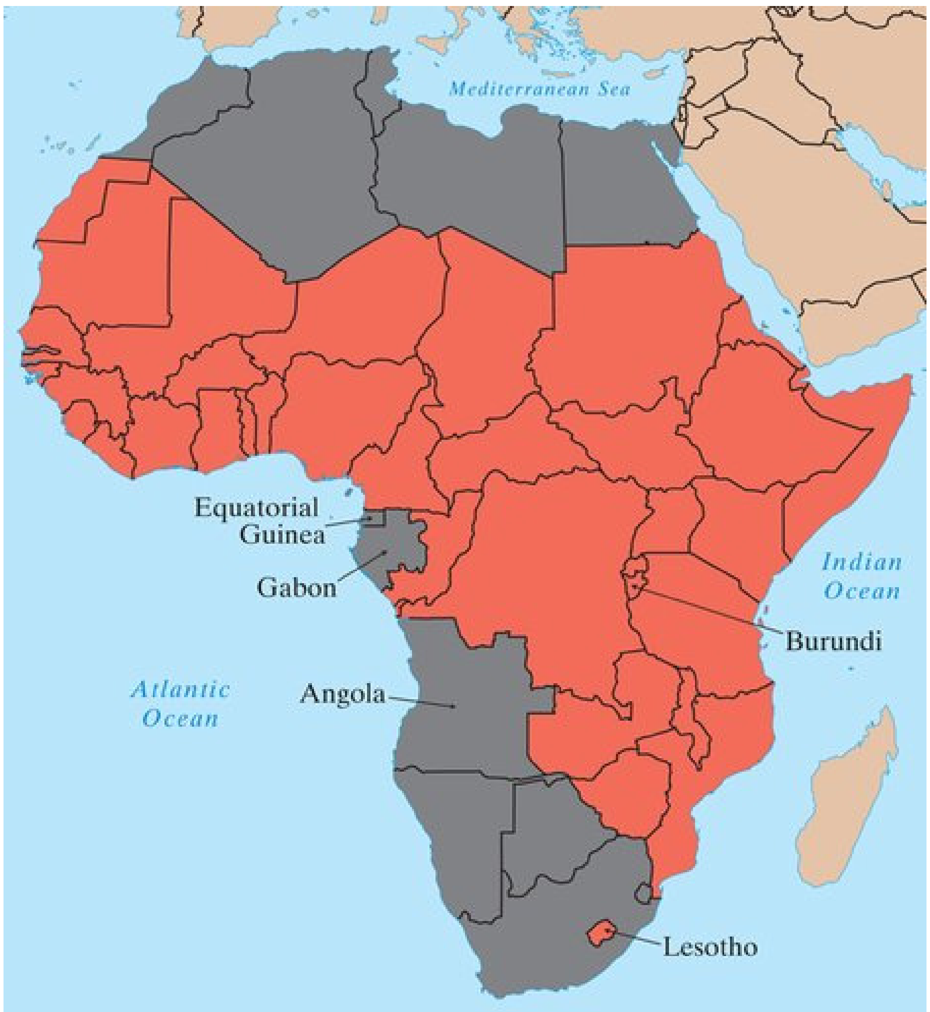
But in formerly poor countries with sparse native populations, such as Costa Rica and Australia, European settlers had to work themselves and developed institutional incentives rewarding work. When the former colonies achieved independence, they variously inherited either the extractive institutions that coerced the masses to produce wealth for dictators and the elite, or else institutions by which the government shared power and gave people incentives to pursue. The extractive institutions retarded economic development, but incentivizing institutions promoted it.

The remaining factor contributing to good institutions, of which Acemoglu and Robinson mention some examples, involves another paradox, termed “the curse of natural resources.” One might naively expect countries generously endowed with natural resources (such as minerals, oil, and tropical hardwoods) to be richer than countries poorer in natural resources. In fact, the trend is opposite, the result of the many ways in which national dependence on certain types of natural resources (like diamonds and oil) tends to promote bad institutions, such as corruption, civil wars, inflation, and neglect of education.

An example, mentioned in Chapter 12, is the diamond boom in Sierra Leone, which contributed to that nation’s impoverishment. Other examples are Nigeria’s and the Congo’s poverty despite their wealth in oil and minerals respectively. In all three of those cases, selfish dictators or elites found that they themselves could become richer by taking the profits from natural resources for their personal gain, rather than investing the profits for the good of their nation. But some countries with prescient leaders or citizens avoided the curse of natural resources by investing the proceeds in economic development and education. As a result, oil-producing Norway is now the world’s richest country, and oil-producing Trinidad and Tobago now enjoys an income approaching that of Britain, its former colonial ruler.

Those are the main sets of institutional factors promoting power, prosperity, or poverty, and their roots. The other large set consists of geographic factors with direct economic consequences not mediated by institutions. One of those geographic factors leaps out of a map of the world in *Why Nations Fail* that depicts national incomes. On that map, both Africa and the Americas resemble peanut butter sandwiches, with thick cores of poor tropical countries squeezed between two thin slices of richer countries in the north and south temperate zones.

In the New World the two north temperate countries (the US and Canada, average incomes respectively $47,390 and $43,270) and the three south temperate countries (Uruguay, Chile, and Argentina, respectively $10,590, $10,120, and $8,620) are all richer—on the average five times richer—than almost all of the intervening seventeen tropical countries of mainland Central and South America (incomes mostly between $1,110 and $6,970). Similarly, mainland Africa is a sandwich of thirty-seven mostly desperately poor tropical countries, flanked by two thin slices each consisting of five modestly affluent or less desperately poor countries in Africa's north and south temperate zones (see map).



Mike King

Mainland Africa's 'peanut butter sandwich' of national wealth. Tropical African countries constitute a thick core between two thinner slices of countries in the north and south temperate zones. All temperate mainland African countries except landlocked Lesotho in the south have average annual incomes above $2,400 (gray), ranging up to over $12,000. All except three tropical mainland African countries —Equatorial Guinea, Gabon, and Angola— have average incomes below $2,200 (red), ranging down to as low as $170 (Burundi).

While institutions are undoubtedly part of the explanation, they leave much unexplained: some of those richer temperate countries are notorious for their histories of bad institutions (think of Algeria, Argentina, Egypt, and Libya), while some of the tropical countries (e.g., Costa Rica and Tanzania) have had relatively more honest governments. What are the economic disadvantages of a tropical location?

Two major factors contribute to the poverty of tropical countries compared to temperate countries: diseases and agricultural productivity. The tropics are notoriously unhealthy. Tropical diseases differ on average from temperate diseases, in several respects. First, there are far more parasitic diseases (such as elephantiasis and schistosomiasis) in tropical areas, because cold temperate winters kill parasite stages outside our bodies, but tropical parasites can thrive outside our bodies all year long. Second, disease vectors, such as mosquitoes and ticks, are far more diverse in tropical than in temperate areas.

Finally, biological characteristics of the responsible microbes have made it easier to develop vaccines against major infectious diseases of temperate areas than against tropical diseases; we still aren't close to a vaccine against malaria, despite billions of dollars invested. Hence tropical diseases impose a huge burden on economies of tropical countries. At any given moment, much of the population is sick and unable to work efficiently. Many women in tropical areas can't join the workforce because they are constantly nursing and caring for babies conceived as insurance against the expected deaths of some of their older children from malaria.

As for agricultural productivity, it averages lower in tropical than in temperate areas, again for several reasons. First, temperate plants store more energy in parts edible to us humans (such as seeds and tubers) than do tropical plants. Second, diseases borne by insects and other pests reduce crop yields more in the tropics than in the temperate zones, because the pests are more diverse and survive better year-round in tropical than in temperate areas. Third, glaciers repeatedly advanced and retreated over temperate areas, creating young nutrient-rich soils. Tropical lowland areas haven't been glaciated and hence tend to have older soils, leached of their nutrients by rain for thousands of years. (Young fertile volcanic and alluvial soils are exceptions.) Fourth, the higher average rainfall of tropical than of temperate areas results in more nutrients being leached out of the soil by rain.

Finally, higher tropical temperatures cause dead leaves and other organic matter falling to the ground to be broken down quickly by microbes and other organisms, releasing their nutrients to be leached away. Hence in temperate areas soil fertility is on average higher, crop losses to pests lower, and agricultural productivity higher than in tropical areas. That's why Argentina in South

America's south temperate zone, despite its conspicuous lack (for most of its history) of the good institutions praised by economists, is the leading food exporter in Latin America, and one of the leading ones in the world.

Thus, geographical latitude acting independently of institutions is an important geographic factor affecting power, prosperity, and poverty. The other important geographic factor is whether an area is accessible to ocean-going ships because it lies either on the sea coast or on a navigable river. It costs roughly seven times more to ship a ton of cargo by land than by sea. That puts landlocked countries at an economic disadvantage, and helps explain why landlocked Bolivia and semilandlocked Paraguay are the poorest countries of South America. It also helps explain why Africa, with no river navigable to the sea for hundreds of miles except the Nile, and with fifteen landlocked nations, is the poorest continent. Eleven of those fifteen landlocked African nations have average incomes of $600 or less; only two countries outside Africa (Afghanistan and Nepal, both also landlocked) are as poor.

The remaining major factor underlying wealth and poverty is the state of the natural environment. All human populations depend to varying degrees on renewable natural resources—especially on forests, water, soils, and seafood. It's tricky to manage such resources sustainably. Countries that excessively deplete their resources—whether inadvertently or intentionally—tend to impoverish themselves, although the difficulty of estimating accurately the costs of resource destruction causes economists to ignore it. It helps explain why notoriously deforested countries—such as Haiti, Rwanda, Burundi, Madagascar, and Nepal—tend to be notoriously poor and politically unstable.

These, then, are the main factors invoked to understand why nations differ in wealth. The factors are multiple and diverse. We all know, from our personal experience, that there isn't one simple answer to the question why each of us becomes richer or poorer: it depends on inheritance, education, ambition, talent, health, personal connections, opportunities, and luck, just to mention some factors. Hence we shouldn't be surprised that the question of why whole societies become richer or poorer also cannot be given one simple answer.

Within this frame, Acemoglu and Robinson focus on institutional factors: initially on economic institutions, and then on the political institutions that create them. In their words, "while economic institutions are critical for determining whether a country is poor or prosperous, it is politics and political institutions that determine what economic institutions a country has." In particular, they stress what they term inclusive economic and political institutions: "Inclusive economic institutions…are those that allow and encourage participation by the great mass of people in economic activities that make best use of their talents and skills and that enable individuals to make the choices they wish." For example, in South Korea but not in North Korea people can get a good education, own property, start a business, sell products and services, accumulate and invest capital, spend money in open markets, take out a mortgage to buy a house, and thereby expect that by working harder they may enjoy a good life.

Such inclusive economic institutions in turn arise from "political institutions that distribute power broadly in society and subject it to constraints…. Instead of being vested in a single individual or a narrow group, [inclusive] political power rests with a broad coalition or a plurality of groups." South Korea recently, and Britain and the US beginning much earlier, do have broad participation of citizens in political decisions; North Korea does not. Inclusive economic and political institutions provide individuals with incentives to increase their economic productivity as they think best. Such inclusive institutions are to be contrasted with absolutist political institutions that narrowly concentrate political power, and with extractive economic institutions that force people to work largely for the benefit of dictators. The ultimate development of inclusive political institutions to date is in modern Scandinavian democracies with universal suffrage and relatively egalitarian societies. However, compared to modern dictatorships (like North Korea) and the absolute monarchies widespread in the past, societies (such as eighteenth-century Britain) in which only a minority of citizens could vote or participate in political decisions still represented a big advance toward inclusiveness.

From this striking dichotomy, the authors draw thought-provoking conclusions. While absolutist regimes with extractive economic institutions can sometimes achieve economic growth, that growth is based on existing technology, and is nonsustainable and prone to collapse; whereas inclusive institutions are required for sustained growth based on technological change. One might naively expect dictators to promote long-term economic growth, because such growth would generate more wealth for them to extract. But their efforts are warped, because what's economically good for individual citizens may be bad for the political elite, and because economic growth may be best promoted by political institutions that would shake the elite's hegemony.

Why Nations Fail offers case studies to illustrate these points: the economic rises and subsequent declines of the Soviet Union and the Ottoman Empire; the resistance of tsarist Russia and the Habsburg Empire to building railroads, out of fear that they would undermine the landed aristocracy's power and foster revolution; and, especially relevant today, the likely future trajectory of Communist China, whose growth prospects appear unlimited to many Western observers—but not to Acemoglu and Robinson, who write that China's growth "is likely to run out of steam."

In their narrow focus on inclusive institutions, however, the authors ignore or dismiss other factors. I mentioned earlier the effects of an area's being landlocked or of environmental damage, factors that they don't discuss. Even within the focus on institutions, the concentration specifically on inclusive institutions causes the authors to give inadequate accounts of the ways that natural resources can be a curse. True, the book provides anecdotes of the resource curse (Sierra Leone cursed by diamonds), and of how the curse was successfully avoided (in Botswana). But the book doesn't explain which resources especially lend themselves to the curse (diamonds yes, iron no) and why. Nor does the book show how some big resource producers like the US and Australia avoid the curse (they are democracies whose economies depend on much else besides resource exports), nor which other resource-dependent countries besides Sierra Leone and Botswana respectively succumbed to or overcame the curse. The chapter on reversal of fortune surprisingly doesn't mention the authors' own interesting findings about how the degree of reversal depends on prior wealth and on health threats to Europeans.

Two major factors that Acemoglu and Robinson do mention, only to dismiss them in a few sentences, are tropical diseases and tropical agricultural productivity:

> Tropical diseases obviously cause much suffering and high rates of infant mortality in Africa, but they are not the reason Africa is poor. Disease is largely a consequence of poverty and of governments being unable or unwilling to undertake the public health measures necessary to eradicate them…. The prime determinant of why agricultural productivity —agricultural output per acre—is so low in many poor countries, particularly in sub-Saharan Africa, has little to do with soil quality. Rather, it is a consequence of the ownership structure of the land and the incentives that are created for farmers by the governments and institutions under which they live.

These sweeping statements, which will astonish anyone knowledgeable about the subjects, brush off two entire fields of science, tropical medicine and agricultural science. As I summarized above, the well-known facts of tropical biology, geology, and climatology saddle tropical countries with much bigger problems than temperate countries.

A second weakness involves the historical origins of what Acemoglu and Robinson identify as inclusive economic and political institutions, with their consequences for wealth. Some countries, such as Britain and Japan, have such institutions, while other countries, such as Ethiopia and the Congo, don't. To explain why, the authors give a just-so story of each country's history, which ends by concluding that that story explains why that country either did or didn't develop good institutions. For instance, Britain adopted inclusive institutions, we are told, as a result of the Glorious Revolution of 1688 and preceding events; and Japan reformed its institutions after 1868; but Ethiopia remained absolutist. Acemoglu and Robinson's view of history is that small effects at critical junctures have long-lasting effects, so it's hard to make predictions. While they don't say so explicitly, this view suggests that good institutions should have cropped up randomly around the world, depending on who happened to decide what at some particular place and time.

But it's obvious that good institutions, and the wealth and power that they spawned, did not crop up randomly. For instance, all Western European countries ended up richer and with better institutions than any tropical African country. Big underlying differences led to this divergence of outcomes. Europe has had a long history (of up to nine thousand years) of agriculture based on the world's most productive crops and domestic animals, both of which were domesticated in and introduced to Europe from the Fertile Crescent, the crescent-shaped region running from the Persian Gulf through southeastern Turkey to Upper Egypt. Agriculture in tropical Africa is only between 1,800 and 5,000 years old and based on less productive domesticated crops and imported animals.

As a result, Europe has had up to four thousand years' experience of government, complex institutions, and growing national identities, compared to a few centuries or less for all of sub-Saharan Africa. Europe has glaciated fertile soils, reliable summer rainfall, and few tropical diseases; tropical Africa has unglaciated and extensively infertile soils, less reliable rainfall, and many tropical diseases. Within Europe, Britain had the further advantages of being an island rarely at risk from foreign armies, and of fronting on the Atlantic Ocean, which became open after 1492 to overseas trade.

It should be no surprise that countries with those advantages ended up rich and with good institutions, while countries with those disadvantages didn't. The chain of causation leading slowly from productive agriculture to government, state formation, complex institutions, and wealth involved agriculturally driven population explosions and accumulations of food surpluses, leading in turn to the need for centralized decision-making in societies much too populous for decision-making by face-to-face discussions involving all citizens, and the possibility of using the food surpluses to support kings and their bureaucrats. This process unfolded independently, beginning around 3400 BC, in many different parts of the ancient world with productive agriculture, including the Fertile Crescent, Egypt, China, the Indus Valley, Crete, the Valley of Mexico, the Andes, and Polynesian Hawaii.

The remaining weakness is the authors' resort to assertion unsupported or contradicted by facts. An example is their attempt to expand their focus on institutions in order to explain the origins of agriculture. All humans were originally hunter/gatherers who independently became farmers in only about nine small areas scattered around the world. A century of research by botanists and archaeologists has shown that what made those areas exceptional was their wealth of wild plant and animal species suitable for domestication (such as wild wheats and corn).

While the usual pattern was for nomadic hunter/gatherers to become sedentary farmers, there were exceptions: some nomadic hunter/gatherers initially became nomadic farmers (Mexico and lowland New Guinea) while others never became farmers (Aboriginal Australia); some sedentary hunter/gatherers became sedentary farmers (the Fertile Crescent) while others never became farmers (Pacific Northwest Indians); and some sedentary farmers reverted to being nomadic hunter/gatherers (southern Sweden about four thousand years ago).

In their Chapter 5, Acemoglu and Robinson use one of those exceptional patterns (that for the Fertile Crescent) to assert, in the complete absence of evidence, that those particular hunter/gatherers had become sedentary because, for unknown reasons, they happened to develop innovative institutions through a hypothesized political revolution. They assert further that the origins of farming depended on their preferred explanation of institutional innovation, rather than on the local availability of domesticable wild species identified by botanists and archaeologists.

Among arguments to refute that widely shared interpretation, Acemoglu and Robinson redraw in their Map 5 on page 56 the maps on pages 56 and 66 of archaeobotanists Daniel Zohary and Maria Hopf's book *Domestication of Plants in the Old World*, depicting the distributions of wild barley and of one of the two hybrid ancestors of one of the three wheats (which Acemoglu and Robinson misleadingly identify just as "wheat"). They take these maps to mean that "the ancestors of barley and wheat were distributed along a long arc" beyond the Fertile Crescent, hence that the Fertile Crescent's unique role in agriculture's origins "was not determined by the availability of plant and animal species."

What Zohary and Hopf actually showed was that wild emmer wheat is confined to the Fertile Crescent, and that the areas of extensive spread of wild barley and wild einkorn wheat are also confined to the Fertile Crescent, and that the wild ancestors of all the other original Fertile Crescent crops are also confined to or centered on the Fertile Crescent, and hence that the Fertile Crescent was the only area in which local agriculture could have arisen. Acemoglu and Robinson do themselves a disservice by misstating these findings.

My overall assessment of the authors' argument is that inclusive institutions, while not the overwhelming determinant of prosperity that they claim, are an important factor. Perhaps they provide 50 percent of the explanation for national differences in prosperity. That's enough to establish such institutions as one of the major forces in the modern world. *Why Nations Fail* offers an excellent way for any interested reader to learn about them and their consequences. Whereas most writing by academic economists is incomprehensible to the lay public, Acemoglu and Robinson have written this book so that it can be understood and enjoyed by all of us who aren't economists.

Why Nations Fail should be required reading for politicians and anyone concerned with economic development. The authors' discussions of what can and can't be done today to improve conditions in poor countries are thought-provoking and will stimulate debate. Donors and international agencies try to "engineer prosperity" either by foreign aid or by urging poor countries to adopt good economic policies. But there is widespread disappointment with the results of these well-intentioned efforts. Acemoglu and Robinson pithily diagnose the cause of these disappointing outcomes in their final chapter: "Attempting to engineer prosperity without confronting the root cause of the problems—extractive institutions and the politics that keeps them in place—is unlikely to bear fruit."

LETTERS

'Why Nations Fail' August 16, 2012

---

1. *
Full disclosure: I provided a book jacket quote of praise. I co-edited one book

and co-organized two conferences with James Robinson. ↩